The Sizewell C Project

8.5 Transport Assessment Addendum Appendices 7A-10A Part 4 of 5

Revision: 1.0

Applicable Regulation: Regulation 5(2)(q)

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Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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TRANSPORT ASSESSMENT ADDENDUM APPENDICES

Documents included within this issue are as follows:

- Appendix 7A: Sizewell C Traffic Inputs
- Appendix 7B: Shift Patterns
- Appendix 7C: Other Additional Information
- Appendix 7D: Direct Bus Strategy
- Appendix 8A: Strategic Model LMVR Addendum
- Appendix 8B: SZC Traffic Flow Plots
- Appendix 8C: Journey Times Tables and Graphs
- Appendix 8D: Journey Times Variability
- Appendix 8E: Sensitivity Test All HGVs From A12 South
- Appendix 9A: Junction Model Results Summary
- Appendix 9B: Yoxford Vissim Model
- Appendix 9C: A12 Vissim Model
- Appendix 9D: Raw Junction Model Outputs (Continued from Part 3 of 5)
- Appendix 10A: Road Traffic Collisions

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	25.58	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	165	75.10
B - A14 North-West	818	128.00
C - A1156 South-West	1919	80.70
D - A14 South-East	2135	131.50
E - Unnamed Road North-East	2475	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1816	100.000
B - A14 North-West		ONE HOUR	✓	1631	100.000
C - A1156 South-West		ONE HOUR	✓	611	100.000
D - A14 South-East		ONE HOUR	✓	632	100.000
E - Unnamed Road North-East		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1164	278	371	3
	B - A14 North-West	1498	6	117	0	10
	C - A1156 South-West	264	75	0	270	2
	D - A14 South-East	367	0	250	0	14
	E - Unnamed Road North-East	9	51	19	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	6	9	0
	B - A14 North-West	12	67	3	0	0
	C - A1156 South-West	7	7	0	0	0
	D - A14 South-East	9	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	11.55	6.2	30.2	B	1667	2500

B - A14 North-West	0.19	5.72	0.2	0.6	A	1589	183
C - A1156 South-West	0.98	78.48	14.5	56.7	F	560	841
D - A14 South-East	0.97	68.27	12.7	54.7	F	580	870
E - Unnamed Road North-East	0.53	42.86	1.0	4.7	E	76	115

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1367	1367	342	0	1128	314	2455	0.557	1362	479	0.0	1.2	3.280	A
B - A14 North-West	1304	100	25	1128	0	693	979	0.102	100	972	0.0	0.1	4.092	A
C - A1156 South-West	460	460	115	0	0	1208	1088	0.422	457	498	0.0	0.7	5.675	A
D - A14 South-East	476	476	119	0	0	1233	1119	0.425	473	483	0.0	0.7	5.551	A
E - Unnamed Road North-East	63	63	16	0	0	1654	501	0.125	62	22	0.0	0.1	8.200	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1633	1633	408	0	1347	375	2390	0.683	1629	573	1.2	2.1	4.713	A
B - A14 North-West	1557	120	30	1347	0	828	888	0.135	119	1162	0.1	0.2	4.681	A
C - A1156 South-West	549	549	137	0	0	1444	916	0.599	546	595	0.7	1.5	9.644	A
D - A14 South-East	568	568	142	0	0	1475	951	0.597	565	577	0.7	1.4	9.253	A
E - Unnamed Road North-East	75	75	19	0	0	1978	363	0.207	74	27	0.1	0.3	12.474	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2000	2000	500	0	1649	446	2315	0.864	1985	672	2.1	5.9	10.472	B
B - A14 North-West	1907	146	37	1649	0	971	792	0.185	146	1412	0.2	0.2	5.570	A
C - A1156 South-West	672	672	168	0	0	1744	699	0.962	639	716	1.5	9.8	45.981	E
D - A14 South-East	696	696	174	0	0	1796	730	0.954	664	692	1.4	9.3	42.899	E
E - Unnamed Road North-East	92	92	23	0	0	2398	183	0.501	89	32	0.3	0.9	37.333	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2000	2000	500	0	1649	453	2307	0.867	1998	689	5.9	6.2	11.547	B
B - A14 North-West	1907	146	37	1649	0	995	776	0.189	146	1423	0.2	0.2	5.717	A
C - A1156 South-West	672	672	168	0	0	1765	684	0.984	654	726	9.8	14.5	78.484	F
D - A14 South-East	696	696	174	0	0	1809	720	0.966	682	701	9.3	12.7	68.265	F
E - Unnamed Road North-East	92	92	23	0	0	2419	174	0.525	91	33	0.9	1.0	42.855	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1633	1633	408	0	1347	401	2363	0.691	1648	624	6.2	2.3	5.145	A
B - A14 North-West	1557	120	30	1347	0	905	837	0.143	120	1183	0.2	0.2	5.021	A
C - A1156 South-West	549	549	137	0	0	1488	885	0.620	600	618	14.5	1.7	14.917	B
D - A14 South-East	568	568	142	0	0	1494	938	0.605	613	605	12.7	1.6	12.566	B
E - Unnamed Road North-East	75	75	19	0	0	2021	345	0.217	78	28	1.0	0.3	13.638	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1367	1367	342	0	1128	318	2451	0.558	1371	486	2.3	1.3	3.348	A
B - A14 North-West	1304	100	25	1128	0	703	973	0.103	100	979	0.2	0.1	4.128	A
C - A1156 South-West	460	460	115	0	0	1218	1081	0.425	464	502	1.7	0.7	5.866	A
D - A14 South-East	476	476	119	0	0	1242	1112	0.428	479	488	1.6	0.8	5.712	A
E - Unnamed Road North-East	63	63	16	0	0	1666	495	0.127	63	23	0.3	0.1	8.344	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.56	1.14	1.56	1.79			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.72	0.17	0.92	1.39	1.44			N/A	N/A
D - A14 South-East	0.73	0.21	0.93	1.39	1.44			N/A	N/A
E - Unnamed Road North-East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.04	0.40	5.73	10.47			N/A	N/A
B - A14 North-West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A1156 South-West	1.46	0.04	0.42	3.80	6.36			N/A	N/A
D - A14 South-East	1.45	0.04	0.42	3.78	6.32			N/A	N/A
E - Unnamed Road North-East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.85	0.03	0.33	9.48	30.20			N/A	N/A
B - A14 North-West	0.23	0.03	0.26	0.46	0.48			N/A	N/A
C - A1156 South-West	9.79	0.15	4.15	25.71	36.43			N/A	N/A
D - A14 South-East	9.35	0.12	3.49	25.14	36.29			N/A	N/A
E - Unnamed Road North-East	0.93	0.03	0.28	0.93	2.74			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.18	0.03	0.29	6.18	19.07			N/A	N/A
B - A14 North-West	0.23	0.03	0.26	0.48	0.57			N/A	N/A
C - A1156 South-West	14.48	0.15	5.58	39.31	56.74			N/A	N/A

D - A14 South-East	12.72	0.10	3.31	36.13	54.71			N/A	N/A
E - Unnamed Road North-East	1.04	0.04	0.37	2.60	4.66			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.28	0.05	0.67	6.08	9.53			N/A	N/A
B - A14 North-West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A1156 South-West	1.69	0.04	0.36	4.26	8.62			N/A	N/A
D - A14 South-East	1.58	0.04	0.35	3.87	8.08			N/A	N/A
E - Unnamed Road North-East	0.28	0.03	0.27	0.49	0.90			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.03	0.34	3.01	6.41			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.75	0.03	0.28	0.75	2.38			N/A	N/A
D - A14 South-East	0.76	0.03	0.28	0.76	2.61			N/A	N/A
E - Unnamed Road North-East	0.15	0.03	0.26	0.46	0.49			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	7.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	104	75.10
B - A14 North-West	811	128.00
C - A1156 South-West	1620	80.70
D - A14 South-East	1891	131.50
E - Unnamed Road North-East	2225	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1612	100.000
B - A14 North-West		ONE HOUR	✓	1272	100.000
C - A1156 South-West		ONE HOUR	✓	553	100.000
D - A14 South-East		ONE HOUR	✓	596	100.000
E - Unnamed Road North-East		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	987	304	316	3
	B - A14 North-West	1187	4	43	0	38
	C - A1156 South-West	292	80	4	172	4
	D - A14 South-East	363	0	232	0	1
	E - Unnamed Road North-East	6	24	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	10	5	7	33
	B - A14 North-West	8	0	7	0	12
	C - A1156 South-West	2	4	0	0	0
	D - A14 South-East	7	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	5.08	2.5	5.3	A	1479	2218

B - A14 North-West	0.12	5.06	0.1	0.5	A	1164	117
C - A1156 South-West	0.71	14.66	2.4	9.4	B	507	761
D - A14 South-East	0.72	13.82	2.5	9.5	B	547	820
E - Unnamed Road North-East	0.11	11.67	0.1	0.5	B	33	49

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1213	1213	303	0	894	200	2584	0.469	1210	496	0.0	0.9	2.612	A
B - A14 North-West	955	64	16	894	0	632	995	0.064	64	822	0.0	0.1	3.865	A
C - A1156 South-West	416	416	104	0	0	1040	1241	0.335	414	439	0.0	0.5	4.341	A
D - A14 South-East	449	449	112	0	0	1032	1278	0.351	446	369	0.0	0.5	4.319	A
E - Unnamed Road North-East	27	27	7	0	0	1375	665	0.040	27	35	0.0	0.0	5.635	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	1449	362	0	1068	239	2542	0.570	1447	593	0.9	1.3	3.282	A
B - A14 North-West	1140	76	19	1068	0	756	915	0.083	76	983	0.1	0.1	4.291	A
C - A1156 South-West	497	497	124	0	0	1244	1078	0.461	495	525	0.5	0.8	6.163	A
D - A14 South-East	536	536	134	0	0	1235	1125	0.476	534	442	0.5	0.9	6.075	A
E - Unnamed Road North-East	32	32	8	0	0	1644	532	0.060	32	42	0.0	0.1	7.203	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1774	1774	444	0	1307	292	2485	0.714	1770	721	1.3	2.4	5.001	A
B - A14 North-West	1396	93	23	1307	0	920	810	0.115	93	1202	0.1	0.1	5.020	A
C - A1156 South-West	608	608	152	0	0	1519	858	0.709	603	641	0.8	2.3	13.792	B
D - A14 South-East	656	656	164	0	0	1510	918	0.714	650	539	0.9	2.4	13.145	B
E - Unnamed Road North-East	39	39	10	0	0	2010	351	0.112	39	51	0.1	0.1	11.552	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1774	1774	444	0	1307	294	2483	0.715	1774	728	2.4	2.5	5.078	A
B - A14 North-West	1396	93	23	1307	0	928	805	0.116	93	1206	0.1	0.1	5.059	A
C - A1156 South-West	608	608	152	0	0	1526	853	0.713	608	644	2.3	2.4	14.655	B
D - A14 South-East	656	656	164	0	0	1514	915	0.717	656	542	2.4	2.5	13.825	B
E - Unnamed Road North-East	39	39	10	0	0	2016	348	0.113	39	51	0.1	0.1	11.674	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	1449	362	0	1068	242	2539	0.571	1453	602	2.5	1.3	3.329	A
B - A14 North-West	1140	76	19	1068	0	767	908	0.084	76	988	0.1	0.1	4.329	A
C - A1156 South-West	497	497	124	0	0	1253	1071	0.464	503	529	2.4	0.9	6.404	A
D - A14 South-East	536	536	134	0	0	1240	1121	0.478	542	445	2.5	0.9	6.276	A
E - Unnamed Road North-East	32	32	8	0	0	1653	527	0.061	32	42	0.1	0.1	7.272	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1213	1213	303	0	894	201	2583	0.470	1215	500	1.3	0.9	2.637	A
B - A14 North-West	955	64	16	894	0	637	991	0.064	64	826	0.1	0.1	3.882	A
C - A1156 South-West	416	416	104	0	0	1045	1237	0.336	418	442	0.9	0.5	4.403	A
D - A14 South-East	449	449	112	0	0	1037	1274	0.352	450	371	0.9	0.5	4.378	A
E - Unnamed Road North-East	27	27	7	0	0	1381	662	0.041	27	35	0.1	0.0	5.670	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.50	0.50	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.54	0.54	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.05	0.45	3.33	5.30			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.84	0.06	0.64	1.59	2.04			N/A	N/A
D - A14 South-East	0.90	0.06	0.65	1.74	2.41			N/A	N/A
E - Unnamed Road North-East	0.06	0.03	0.26	0.46	0.49			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.45	0.03	0.27	2.45	2.45			N/A	N/A
B - A14 North-West	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.32	0.03	0.29	2.32	9.42			N/A	N/A
D - A14 South-East	2.38	0.03	0.29	2.38	9.54			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.48	0.03	0.26	2.48	2.48			N/A	N/A
B - A14 North-West	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.41	0.03	0.29	2.41	8.56			N/A	N/A

D - A14 South-East	2.46	0.03	0.28	2.46	7.90			N/A	N/A
E - Unnamed Road North-East	0.13	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.13	1.17	2.23	2.85			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.88	0.06	0.64	1.68	2.29			N/A	N/A
D - A14 South-East	0.93	0.06	0.67	1.80	2.52			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.06	0.67	1.70	2.30			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.51	0.04	0.35	1.47	1.75			N/A	N/A
D - A14 South-East	0.55	0.04	0.36	1.07	1.87			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	10.03	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	153	75.10
B - A14 North-West	730	128.00
C - A1156 South-West	1609	80.70
D - A14 South-East	1820	131.50
E - Unnamed Road North-East	2261	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1714	100.000
B - A14 North-West		ONE HOUR	✓	1404	100.000
C - A1156 South-West		ONE HOUR	✓	595	100.000
D - A14 South-East		ONE HOUR	✓	695	100.000
E - Unnamed Road North-East		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1062	244	405	1
	B - A14 North-West	1292	3	89	0	20
	C - A1156 South-West	264	88	0	216	27
	D - A14 South-East	366	0	329	0	0
	E - Unnamed Road North-East	0	18	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	2	2	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	1	0	1	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.26	3.2	6.8	A	1573	2360

B - A14 North-West	0.15	4.97	0.2	0.5	A	1305	154
C - A1156 South-West	0.78	18.77	3.3	15.8	C	546	819
D - A14 South-East	0.83	22.42	4.5	22.9	C	638	957
E - Unnamed Road North-East	0.10	14.67	0.1	0.5	B	22	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1291	1291	323	0	973	266	2598	0.497	1287	473	0.0	1.0	2.738	A
B - A14 North-West	1071	84	21	973	0	655	1055	0.080	84	879	0.0	0.1	3.708	A
C - A1156 South-West	448	448	112	0	0	1088	1245	0.360	446	501	0.0	0.6	4.492	A
D - A14 South-East	523	523	131	0	0	1068	1299	0.403	521	467	0.0	0.7	4.606	A
E - Unnamed Road North-East	18	18	5	0	0	1516	596	0.031	18	36	0.0	0.0	6.233	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	1541	385	0	1162	318	2540	0.607	1539	566	1.0	1.5	3.587	A
B - A14 North-West	1279	101	25	1162	0	783	968	0.104	101	1051	0.1	0.1	4.151	A
C - A1156 South-West	535	535	134	0	0	1301	1076	0.497	533	599	0.6	1.0	6.605	A
D - A14 South-East	625	625	156	0	0	1278	1141	0.548	623	558	0.7	1.2	6.922	A
E - Unnamed Road North-East	22	22	6	0	0	1814	460	0.048	22	43	0.0	0.0	8.219	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1887	1887	472	0	1423	387	2465	0.766	1881	685	1.5	3.2	6.093	A
B - A14 North-West	1566	123	31	1423	0	949	856	0.144	123	1284	0.1	0.2	4.913	A
C - A1156 South-West	655	655	164	0	0	1586	852	0.769	647	728	1.0	3.1	16.897	C
D - A14 South-East	765	765	191	0	0	1562	926	0.827	753	680	1.2	4.2	19.643	C
E - Unnamed Road North-East	27	27	7	0	0	2215	277	0.097	27	52	0.0	0.1	14.394	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1887	1887	472	0	1423	390	2462	0.767	1887	694	3.2	3.2	6.261	A
B - A14 North-West	1566	123	31	1423	0	961	847	0.146	123	1289	0.2	0.2	4.971	A
C - A1156 South-West	655	655	164	0	0	1596	844	0.776	654	735	3.1	3.3	18.774	C
D - A14 South-East	765	765	191	0	0	1567	922	0.830	764	685	4.2	4.5	22.425	C
E - Unnamed Road North-East	27	27	7	0	0	2225	272	0.099	27	53	0.1	0.1	14.666	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	1541	385	0	1162	323	2535	0.608	1548	579	3.2	1.6	3.668	A
B - A14 North-West	1279	101	25	1162	0	800	956	0.105	101	1059	0.2	0.1	4.211	A
C - A1156 South-West	535	535	134	0	0	1315	1066	0.502	544	608	3.3	1.0	7.013	A
D - A14 South-East	625	625	156	0	0	1285	1135	0.550	638	564	4.5	1.2	7.425	A
E - Unnamed Road North-East	22	22	6	0	0	1827	454	0.048	22	43	0.1	0.1	8.342	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1291	1291	323	0	973	268	2595	0.497	1293	477	1.6	1.0	2.770	A
B - A14 North-West	1071	84	21	973	0	661	1051	0.080	84	883	0.1	0.1	3.725	A
C - A1156 South-West	448	448	112	0	0	1095	1240	0.361	450	504	1.0	0.6	4.569	A
D - A14 South-East	523	523	131	0	0	1073	1295	0.404	525	470	1.2	0.7	4.690	A
E - Unnamed Road North-East	18	18	5	0	0	1525	592	0.031	19	36	0.1	0.0	6.279	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.56	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.67	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.42	4.00	6.84			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.97	0.05	0.52	2.03	2.99			N/A	N/A
D - A14 South-East	1.19	0.05	0.46	2.89	4.52			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.18	0.03	0.28	3.18	6.02			N/A	N/A
B - A14 North-West	0.17	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.08	0.03	0.32	4.93	15.76			N/A	N/A
D - A14 South-East	4.23	0.04	0.36	9.93	22.93			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.23	0.03	0.27	3.23	3.23			N/A	N/A
B - A14 North-West	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	3.29	0.03	0.30	3.29	14.36			N/A	N/A

D - A14 South-East	4.54	0.03	0.32	6.17	22.31			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.57	0.09	1.13	3.23	4.41			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	1.02	0.05	0.48	2.31	3.47			N/A	N/A
D - A14 South-East	1.25	0.04	0.43	3.14	5.10			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.05	0.46	2.30	3.52			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.57	0.03	0.33	1.22	2.44			N/A	N/A
D - A14 South-East	0.68	0.03	0.31	1.34	3.26			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	38	75.10
B - A14 North-West	229	128.00
C - A1156 South-West	893	80.70
D - A14 South-East	811	131.50
E - Unnamed Road North-East	1003	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	911	100.000
B - A14 North-West		ONE HOUR	✓	586	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	248	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	630	77	202	1
	B - A14 North-West	564	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	157	0	80	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	1.99	0.6	2.6	A	836	1253

B - A14 North-West	0.02	3.44	0.0	0.5	A	433	30
C - A1156 South-West	0.03	2.70	0.0	0.5	A	35	53
D - A14 South-East	0.18	2.86	0.2	0.5	A	227	341
E - Unnamed Road North-East	0.03	3.83	0.0	0.5	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	685	685	171	0	425	26	2831	0.242	684	147	0.0	0.3	1.677	A
B - A14 North-West	355	16	4	425	0	157	1112	0.015	16	499	0.0	0.0	3.284	A
C - A1156 South-West	29	29	7	0	0	627	1641	0.018	29	120	0.0	0.0	2.231	A
D - A14 South-East	187	187	47	0	0	561	1784	0.105	186	153	0.0	0.1	2.253	A
E - Unnamed Road North-East	22	22	5	0	0	692	1198	0.018	22	18	0.0	0.0	3.059	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	819	819	205	0	507	31	2824	0.290	818	176	0.3	0.4	1.794	A
B - A14 North-West	424	19	5	507	0	188	1094	0.018	19	597	0.0	0.0	3.347	A
C - A1156 South-West	34	34	9	0	0	750	1530	0.022	34	143	0.0	0.0	2.407	A
D - A14 South-East	223	223	56	0	0	671	1678	0.133	223	183	0.1	0.2	2.473	A
E - Unnamed Road North-East	26	26	7	0	0	827	1102	0.024	26	22	0.0	0.0	3.344	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1002	1002	251	0	621	38	2814	0.356	1002	216	0.4	0.6	1.986	A
B - A14 North-West	520	24	6	621	0	230	1071	0.022	24	730	0.0	0.0	3.438	A
C - A1156 South-West	42	42	11	0	0	918	1376	0.031	42	176	0.0	0.0	2.697	A
D - A14 South-East	273	273	68	0	0	821	1532	0.178	273	224	0.2	0.2	2.858	A
E - Unnamed Road North-East	32	32	8	0	0	1013	971	0.033	32	27	0.0	0.0	3.833	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1002	1002	251	0	621	38	2814	0.356	1002	216	0.6	0.6	1.986	A
B - A14 North-West	520	24	6	621	0	230	1070	0.022	24	731	0.0	0.0	3.438	A
C - A1156 South-West	42	42	11	0	0	919	1376	0.031	42	176	0.0	0.0	2.698	A
D - A14 South-East	273	273	68	0	0	822	1532	0.178	273	224	0.2	0.2	2.859	A
E - Unnamed Road North-East	32	32	8	0	0	1013	971	0.033	32	27	0.0	0.0	3.835	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	819	819	205	0	507	31	2824	0.290	819	176	0.6	0.4	1.795	A
B - A14 North-West	424	19	5	507	0	188	1094	0.018	19	597	0.0	0.0	3.350	A
C - A1156 South-West	34	34	9	0	0	751	1529	0.022	34	144	0.0	0.0	2.410	A
D - A14 South-East	223	223	56	0	0	671	1677	0.133	223	183	0.2	0.2	2.475	A
E - Unnamed Road North-East	26	26	7	0	0	828	1102	0.024	26	22	0.0	0.0	3.346	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	685	685	171	0	425	26	2831	0.242	686	148	0.4	0.3	1.678	A
B - A14 North-West	355	16	4	425	0	157	1112	0.015	16	500	0.0	0.0	3.288	A
C - A1156 South-West	29	29	7	0	0	629	1640	0.018	29	120	0.0	0.0	2.234	A
D - A14 South-East	187	187	47	0	0	562	1783	0.105	187	153	0.2	0.1	2.257	A
E - Unnamed Road North-East	22	22	5	0	0	693	1197	0.018	22	18	0.0	0.0	3.065	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.03	0.25	0.55	0.55			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D - A14 South-East	0.22	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.03	0.30	1.41	2.59			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A

D - A14 South-East	0.22	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	5.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	628	128.00
C - A1156 South-West	1721	80.70
D - A14 South-East	1656	131.50
E - Unnamed Road North-East	1931	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1559	100.000
B - A14 North-West		ONE HOUR	✓	1332	100.000
C - A1156 South-West		ONE HOUR	✓	310	100.000
D - A14 South-East		ONE HOUR	✓	557	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1094	193	268	4
	B - A14 North-West	1239	2	60	0	32
	C - A1156 South-West	162	52	0	91	6
	D - A14 South-East	338	3	202	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	2	12	0	5	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.29	2.0	4.1	A	1430	2145

B - A14 North-West	0.11	4.20	0.1	0.5	A	1203	129
C - A1156 South-West	0.45	8.68	0.8	3.9	A	285	427
D - A14 South-East	0.68	12.46	2.1	6.4	B	511	767
E - Unnamed Road North-East	0.14	10.98	0.2	0.5	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1173	1173	293	0	933	154	2639	0.445	1170	376	0.0	0.8	2.445	A
B - A14 North-West	987	70	18	933	0	460	1102	0.064	70	897	0.0	0.1	3.490	A
C - A1156 South-West	233	233	58	0	0	1124	1139	0.205	232	343	0.0	0.3	3.965	A
D - A14 South-East	420	420	105	0	0	1050	1292	0.325	418	270	0.0	0.5	4.107	A
E - Unnamed Road North-East	38	38	9	0	0	1282	691	0.055	38	42	0.0	0.1	5.506	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1401	1401	350	0	1114	184	2604	0.538	1400	450	0.8	1.2	2.984	A
B - A14 North-West	1178	84	21	1114	0	550	1043	0.081	84	1073	0.1	0.1	3.755	A
C - A1156 South-West	279	279	70	0	0	1345	978	0.285	278	411	0.3	0.4	5.138	A
D - A14 South-East	501	501	125	0	0	1256	1128	0.444	500	323	0.5	0.8	5.718	A
E - Unnamed Road North-East	45	45	11	0	0	1533	562	0.080	45	50	0.1	0.1	6.966	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1716	1716	429	0	1364	225	2557	0.671	1713	549	1.2	2.0	4.248	A
B - A14 North-West	1443	103	26	1364	0	671	964	0.107	103	1312	0.1	0.1	4.182	A
C - A1156 South-West	341	341	85	0	0	1643	760	0.449	340	502	0.4	0.8	8.536	A
D - A14 South-East	614	614	153	0	0	1536	904	0.679	609	395	0.8	2.0	11.982	B
E - Unnamed Road North-East	55	55	14	0	0	1876	385	0.143	55	61	0.1	0.2	10.895	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1716	1716	429	0	1364	226	2556	0.671	1716	552	2.0	2.0	4.286	A
B - A14 North-West	1443	103	26	1364	0	675	961	0.107	103	1315	0.1	0.1	4.196	A
C - A1156 South-West	341	341	85	0	0	1649	756	0.452	341	504	0.8	0.8	8.683	A
D - A14 South-East	614	614	153	0	0	1539	902	0.680	613	396	2.0	2.1	12.461	B
E - Unnamed Road North-East	55	55	14	0	0	1880	383	0.144	55	62	0.2	0.2	10.981	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1401	1401	350	0	1114	185	2603	0.538	1404	455	2.0	1.2	3.013	A
B - A14 North-West	1178	84	21	1114	0	556	1039	0.081	84	1077	0.1	0.1	3.771	A
C - A1156 South-West	279	279	70	0	0	1352	973	0.287	280	414	0.8	0.4	5.213	A
D - A14 South-East	501	501	125	0	0	1260	1124	0.446	506	324	2.1	0.8	5.870	A
E - Unnamed Road North-East	45	45	11	0	0	1539	559	0.081	45	51	0.2	0.1	7.016	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1173	1173	293	0	933	155	2638	0.445	1175	379	1.2	0.8	2.463	A
B - A14 North-West	987	70	18	933	0	463	1099	0.064	70	901	0.1	0.1	3.498	A
C - A1156 South-West	233	233	58	0	0	1130	1135	0.206	234	345	0.4	0.3	3.998	A
D - A14 South-East	420	420	105	0	0	1054	1289	0.326	421	271	0.8	0.5	4.155	A
E - Unnamed Road North-East	38	38	9	0	0	1287	688	0.055	38	42	0.1	0.1	5.536	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - A14 South-East	0.48	0.00	0.00	0.48	0.48			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.05	0.49	2.74	4.10			N/A	N/A
B - A14 North-West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A1156 South-West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
D - A14 South-East	0.79	0.06	0.67	1.34	1.81			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.03	0.26	2.01	2.01			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.80	0.03	0.26	0.80	0.80			N/A	N/A
D - A14 South-East	2.03	0.03	0.28	2.03	6.27			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.03	0.03	0.26	2.03	2.03			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.82	0.03	0.30	1.04	3.87			N/A	N/A

D - A14 South-East	2.08	0.03	0.28	2.08	6.38			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.25	1.12	1.69	1.92			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
D - A14 South-East	0.81	0.06	0.71	1.37	1.82			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.07	0.78	1.11	1.62			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.26	0.03	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.49	0.04	0.37	1.39	1.41			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	27.61	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	168	75.10
B - A14 North-West	888	128.00
C - A1156 South-West	1941	80.70
D - A14 South-East	2164	131.50
E - Unnamed Road North-East	2497	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1934	100.000
B - A14 North-West		ONE HOUR	✓	1632	100.000
C - A1156 South-West		ONE HOUR	✓	486	100.000
D - A14 South-East		ONE HOUR	✓	642	100.000
E - Unnamed Road North-East		ONE HOUR	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1194	360	377	4
	B - A14 North-West	1502	6	113	0	11
	C - A1156 South-West	264	74	0	146	2
	D - A14 South-East	364	0	262	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	5	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	10.32	5.9	28.0	B	1775	2663

B - A14 North-West	0.16	4.85	0.2	0.5	A	1573	178
C - A1156 South-West	0.78	23.15	3.3	16.0	C	446	669
D - A14 South-East	1.06	142.22	30.3	74.4	F	589	883
E - Unnamed Road North-East	0.52	39.98	1.0	4.7	E	80	120

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1456	1456	364	0	1131	219	2584	0.564	1451	477	0.0	1.3	3.164	A
B - A14 North-West	1291	97	24	1131	0	599	1055	0.092	97	996	0.0	0.1	3.756	A
C - A1156 South-West	366	366	91	0	0	1231	1074	0.340	364	566	0.0	0.5	5.051	A
D - A14 South-East	483	483	121	0	0	1317	1086	0.445	480	395	0.0	0.8	5.906	A
E - Unnamed Road North-East	66	66	16	0	0	1647	509	0.130	65	24	0.0	0.1	8.109	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1739	1739	435	0	1350	262	2538	0.685	1736	570	1.3	2.1	4.468	A
B - A14 North-West	1541	116	29	1350	0	716	976	0.119	116	1191	0.1	0.1	4.189	A
C - A1156 South-West	437	437	109	0	0	1472	904	0.483	435	677	0.5	0.9	7.655	A
D - A14 South-East	577	577	144	0	0	1575	909	0.634	573	472	0.8	1.7	10.606	B
E - Unnamed Road North-East	79	79	20	0	0	1970	373	0.211	78	28	0.1	0.3	12.193	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2130	2130	532	0	1654	318	2478	0.859	2116	661	2.1	5.7	9.580	A
B - A14 North-West	1888	143	36	1654	0	836	895	0.159	142	1450	0.1	0.2	4.783	A
C - A1156 South-West	535	535	134	0	0	1760	700	0.765	527	802	0.9	3.0	19.962	C
D - A14 South-East	706	706	177	0	0	1919	673	1.049	642	575	1.7	17.7	70.653	F
E - Unnamed Road North-East	96	96	24	0	0	2400	192	0.502	94	33	0.3	0.9	35.756	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2130	2130	532	0	1654	320	2475	0.860	2129	673	5.7	5.9	10.323	B
B - A14 North-West	1888	143	36	1654	0	851	885	0.161	143	1461	0.2	0.2	4.847	A
C - A1156 South-West	535	535	134	0	0	1778	687	0.779	534	811	3.0	3.3	23.148	C
D - A14 South-East	706	706	177	0	0	1932	664	1.064	656	579	17.7	30.3	142.219	F
E - Unnamed Road North-East	96	96	24	0	0	2416	185	0.520	96	33	0.9	1.0	39.980	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1739	1739	435	0	1350	269	2531	0.687	1754	643	5.9	2.2	4.717	A
B - A14 North-West	1541	116	29	1350	0	795	922	0.126	117	1206	0.2	0.1	4.470	A
C - A1156 South-West	437	437	109	0	0	1555	846	0.517	446	729	3.3	1.1	9.189	A
D - A14 South-East	577	577	144	0	0	1594	896	0.643	690	479	30.3	1.9	28.543	D
E - Unnamed Road North-East	79	79	20	0	0	1991	364	0.216	82	31	1.0	0.3	12.878	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1456	1456	364	0	1131	221	2582	0.564	1460	484	2.2	1.3	3.219	A
B - A14 North-West	1291	97	24	1131	0	607	1049	0.093	98	1002	0.1	0.1	3.782	A
C - A1156 South-West	366	366	91	0	0	1242	1067	0.343	368	571	1.1	0.5	5.169	A
D - A14 South-East	483	483	121	0	0	1326	1080	0.447	487	398	1.9	0.8	6.116	A
E - Unnamed Road North-East	66	66	16	0	0	1657	504	0.131	66	24	0.3	0.2	8.231	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.56	1.17	1.62	1.81			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.51	0.51	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.79	0.09	0.84	1.33	1.33			N/A	N/A
E - Unnamed Road North-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.14	0.04	0.40	5.76	10.66			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	0.92	0.05	0.60	1.84	2.65			N/A	N/A
D - A14 South-East	1.68	0.04	0.40	4.48	7.97			N/A	N/A
E - Unnamed Road North-East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.69	0.03	0.32	7.80	28.01			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.97	0.03	0.33	5.57	15.70			N/A	N/A
D - A14 South-East	17.70	1.58	13.49	36.33	45.53			N/A	N/A
E - Unnamed Road North-East	0.93	0.03	0.28	0.93	2.66			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.92	0.03	0.28	5.92	14.79			N/A	N/A
B - A14 North-West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	3.28	0.03	0.31	4.32	15.96			N/A	N/A

D - A14 South-East	30.30	4.05	24.31	60.24	74.39			N/A	N/A
E - Unnamed Road North-East	1.02	0.04	0.36	2.55	4.70			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.23	0.05	0.67	5.94	9.29			N/A	N/A
B - A14 North-West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A1156 South-West	1.09	0.05	0.60	2.42	3.52			N/A	N/A
D - A14 South-East	1.90	0.03	0.33	3.85	9.98			N/A	N/A
E - Unnamed Road North-East	0.28	0.03	0.27	0.49	0.90			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.04	0.35	3.21	6.47			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.53	0.03	0.32	1.02	2.27			N/A	N/A
D - A14 South-East	0.82	0.03	0.27	0.82	1.49			N/A	N/A
E - Unnamed Road North-East	0.15	0.03	0.26	0.46	0.49			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	7.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	118	75.10
B - A14 North-West	915	128.00
C - A1156 South-West	1719	80.70
D - A14 South-East	1958	131.50
E - Unnamed Road North-East	2309	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1679	100.000
B - A14 North-West		ONE HOUR	✓	1326	100.000
C - A1156 South-West		ONE HOUR	✓	497	100.000
D - A14 South-East		ONE HOUR	✓	642	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	998	354	322	4
	B - A14 North-West	1240	4	42	0	40
	C - A1156 South-West	292	79	4	117	5
	D - A14 South-East	377	0	264	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	4	5	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.80	2.4	5.4	A	1540	2311

B - A14 North-West	0.11	4.87	0.1	0.5	A	1197	118
C - A1156 South-West	0.63	11.36	1.7	5.3	B	456	684
D - A14 South-East	0.78	17.93	3.4	16.7	C	589	884
E - Unnamed Road North-East	0.11	11.10	0.1	0.5	B	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1264	1264	316	0	934	160	2680	0.472	1260	506	0.0	0.9	2.529	A
B - A14 North-West	982	65	16	934	0	602	1011	0.064	64	830	0.0	0.1	3.801	A
C - A1156 South-West	374	374	94	0	0	1060	1241	0.301	372	500	0.0	0.4	4.134	A
D - A14 South-East	483	483	121	0	0	1079	1274	0.379	481	333	0.0	0.6	4.524	A
E - Unnamed Road North-East	28	28	7	0	0	1383	672	0.042	28	37	0.0	0.0	5.591	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	1509	377	0	1115	191	2645	0.570	1507	606	0.9	1.3	3.159	A
B - A14 North-West	1172	77	19	1115	0	720	937	0.082	77	993	0.1	0.1	4.186	A
C - A1156 South-West	447	447	112	0	0	1268	1082	0.413	446	598	0.4	0.7	5.644	A
D - A14 South-East	577	577	144	0	0	1290	1119	0.516	575	398	0.6	1.0	6.598	A
E - Unnamed Road North-East	34	34	8	0	0	1654	543	0.062	34	44	0.0	0.1	7.067	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1848	1848	462	0	1366	233	2599	0.711	1844	737	1.3	2.4	4.743	A
B - A14 North-West	1436	94	24	1366	0	876	839	0.113	94	1215	0.1	0.1	4.832	A
C - A1156 South-West	547	547	137	0	0	1547	869	0.629	543	729	0.7	1.6	10.923	B
D - A14 South-East	707	707	177	0	0	1578	908	0.778	698	486	1.0	3.2	16.489	C
E - Unnamed Road North-East	41	41	10	0	0	2023	368	0.112	41	54	0.1	0.1	11.003	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1848	1848	462	0	1366	235	2597	0.712	1848	743	2.4	2.4	4.803	A
B - A14 North-West	1436	94	24	1366	0	884	834	0.113	94	1218	0.1	0.1	4.866	A
C - A1156 South-West	547	547	137	0	0	1555	863	0.634	547	733	1.6	1.7	11.358	B
D - A14 South-East	707	707	177	0	0	1582	905	0.781	706	488	3.2	3.4	17.926	C
E - Unnamed Road North-East	41	41	10	0	0	2029	365	0.113	41	54	0.1	0.1	11.102	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	1509	377	0	1115	193	2644	0.571	1514	615	2.4	1.3	3.199	A
B - A14 North-West	1172	77	19	1115	0	731	930	0.083	77	998	0.1	0.1	4.222	A
C - A1156 South-West	447	447	112	0	0	1278	1075	0.416	451	604	1.7	0.7	5.806	A
D - A14 South-East	577	577	144	0	0	1296	1115	0.517	586	400	3.4	1.1	6.920	A
E - Unnamed Road North-East	34	34	8	0	0	1662	539	0.062	34	44	0.1	0.1	7.123	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1264	1264	316	0	934	161	2679	0.472	1266	510	1.3	0.9	2.549	A
B - A14 North-West	982	65	16	934	0	607	1008	0.064	65	834	0.1	0.1	3.814	A
C - A1156 South-West	374	374	94	0	0	1066	1237	0.303	375	503	0.7	0.4	4.186	A
D - A14 South-East	483	483	121	0	0	1083	1271	0.380	485	334	1.1	0.6	4.593	A
E - Unnamed Road North-East	28	28	7	0	0	1389	669	0.042	28	37	0.1	0.0	5.622	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - A14 South-East	0.61	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.04	0.45	3.35	5.35			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.70	0.06	0.70	1.11	1.11			N/A	N/A
D - A14 South-East	1.05	0.05	0.50	2.36	3.50			N/A	N/A
E - Unnamed Road North-East	0.07	0.03	0.26	0.46	0.49			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.42	0.03	0.27	2.42	2.42			N/A	N/A
B - A14 North-West	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.65	0.03	0.27	1.65	2.95			N/A	N/A
D - A14 South-East	3.24	0.03	0.32	5.36	16.72			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.44	0.03	0.26	2.44	2.44			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.69	0.03	0.28	1.69	5.27			N/A	N/A

D - A14 South-East	3.40	0.03	0.30	3.40	14.15			N/A	N/A
E - Unnamed Road North-East	0.13	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.15	1.18	2.17	2.79			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.72	0.07	0.73	1.20	1.20			N/A	N/A
D - A14 South-East	1.09	0.05	0.48	2.56	3.83			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.06	0.71	1.67	2.21			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.44	0.04	0.37	1.25	1.43			N/A	N/A
D - A14 South-East	0.62	0.03	0.33	1.37	2.72			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	9.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms
[same as above]

Roundabout Geometry
[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	761	128.00
C - A1156 South-West	1709	80.70
D - A14 South-East	1995	131.50
E - Unnamed Road North-East	2406	37.20

Bypass
[same as above]

Slope / Intercept / Capacity
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1788	100.000
B - A14 North-West		ONE HOUR	✓	1566	100.000
C - A1156 South-West		ONE HOUR	✓	532	100.000
D - A14 South-East		ONE HOUR	✓	684	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1071	316	398	1
	B - A14 North-West	1453	3	89	0	21
	C - A1156 South-West	234	77	0	193	28
	D - A14 South-East	370	0	314	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	4	2	1	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.32	3.4	7.3	A	1641	2462

B - A14 North-West	0.14	4.75	0.2	0.5	A	1444	156
C - A1156 South-West	0.67	12.57	2.0	6.4	B	488	733
D - A14 South-East	0.84	23.87	4.7	24.1	C	628	941
E - Unnamed Road North-East	0.10	14.32	0.1	0.5	B	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1346	1346	337	0	1094	250	2668	0.505	1342	454	0.0	1.0	2.708	A
B - A14 North-West	1184	85	21	1094	0	619	1076	0.079	85	878	0.0	0.1	3.633	A
C - A1156 South-West	401	401	100	0	0	1098	1259	0.318	399	544	0.0	0.5	4.175	A
D - A14 South-East	515	515	129	0	0	1130	1273	0.404	512	444	0.0	0.7	4.715	A
E - Unnamed Road North-East	19	19	5	0	0	1555	591	0.033	19	38	0.0	0.0	6.292	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1608	1608	402	0	1307	300	2613	0.615	1605	543	1.0	1.6	3.564	A
B - A14 North-West	1414	102	25	1307	0	741	994	0.102	102	1050	0.1	0.1	4.032	A
C - A1156 South-West	478	478	120	0	0	1314	1097	0.436	477	650	0.5	0.8	5.800	A
D - A14 South-East	615	615	154	0	0	1351	1116	0.551	613	532	0.7	1.2	7.121	A
E - Unnamed Road North-East	23	23	6	0	0	1860	460	0.050	23	45	0.0	0.1	8.231	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1969	1969	492	0	1600	366	2540	0.775	1962	658	1.6	3.3	6.154	A
B - A14 North-West	1732	125	31	1600	0	899	889	0.140	124	1283	0.1	0.2	4.709	A
C - A1156 South-West	586	586	146	0	0	1601	879	0.666	581	791	0.8	1.9	11.903	B
D - A14 South-East	753	753	188	0	0	1652	903	0.834	740	649	1.2	4.4	20.673	C
E - Unnamed Road North-East	28	28	7	0	0	2272	283	0.100	28	55	0.1	0.1	14.091	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1969	1969	492	0	1600	368	2538	0.776	1969	666	3.3	3.4	6.321	A
B - A14 North-West	1732	125	31	1600	0	909	882	0.141	124	1288	0.2	0.2	4.752	A
C - A1156 South-West	586	586	146	0	0	1611	871	0.672	586	798	1.9	2.0	12.568	B
D - A14 South-East	753	753	188	0	0	1657	899	0.837	752	652	4.4	4.7	23.869	C
E - Unnamed Road North-East	28	28	7	0	0	2281	280	0.101	28	55	0.1	0.1	14.321	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1608	1608	402	0	1307	302	2610	0.616	1615	554	3.4	1.6	3.641	A
B - A14 North-West	1414	102	25	1307	0	755	985	0.103	102	1057	0.2	0.1	4.076	A
C - A1156 South-West	478	478	120	0	0	1328	1086	0.441	483	660	2.0	0.8	6.026	A
D - A14 South-East	615	615	154	0	0	1359	1111	0.554	629	536	4.7	1.3	7.681	A
E - Unnamed Road North-East	23	23	6	0	0	1872	455	0.051	23	46	0.1	0.1	8.340	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1346	1346	337	0	1094	252	2666	0.505	1349	458	1.6	1.0	2.736	A
B - A14 North-West	1184	85	21	1094	0	624	1072	0.079	85	883	0.1	0.1	3.650	A
C - A1156 South-West	401	401	100	0	0	1105	1254	0.319	402	547	0.8	0.5	4.229	A
D - A14 South-East	515	515	129	0	0	1135	1269	0.406	517	447	1.3	0.7	4.802	A
E - Unnamed Road North-East	19	19	5	0	0	1563	588	0.033	19	38	0.1	0.0	6.336	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D - A14 South-East	0.67	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.04	0.41	4.19	7.26			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.77	0.06	0.68	1.16	1.68			N/A	N/A
D - A14 South-East	1.21	0.05	0.46	2.93	4.61			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.35	0.03	0.28	3.35	7.03			N/A	N/A
B - A14 North-West	0.16	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.92	0.03	0.28	1.92	5.48			N/A	N/A
D - A14 South-East	4.39	0.04	0.37	10.78	23.70			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.41	0.03	0.27	3.41	3.41			N/A	N/A
B - A14 North-West	0.16	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.00	0.03	0.28	2.00	6.40			N/A	N/A

D - A14 South-East	4.75	0.03	0.32	7.26	24.10			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.08	1.12	3.47	4.74			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.80	0.06	0.73	1.25	1.73			N/A	N/A
D - A14 South-East	1.26	0.04	0.42	3.22	5.32			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.04	0.45	2.44	3.75			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.47	0.04	0.37	1.24	1.24			N/A	N/A
D - A14 South-East	0.69	0.03	0.31	1.28	3.30			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	3.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	72	75.10
B - A14 North-West	258	128.00
C - A1156 South-West	916	80.70
D - A14 South-East	855	131.50
E - Unnamed Road North-East	1047	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	912	100.000
B - A14 North-West		ONE HOUR	✓	738	100.000
C - A1156 South-West		ONE HOUR	✓	60	100.000
D - A14 South-East		ONE HOUR	✓	261	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	631	77	202	1
	B - A14 North-West	668	8	51	0	11
	C - A1156 South-West	52	7	0	0	1
	D - A14 South-East	170	0	80	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	9	88	94	0	11
	C - A1156 South-West	42	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.13	0.6	2.8	A	836	1255

B - A14 North-West	0.10	5.06	0.1	0.5	A	432	96
C - A1156 South-West	0.07	3.80	0.1	0.5	A	55	83
D - A14 South-East	0.20	3.13	0.2	0.5	A	239	359
E - Unnamed Road North-East	0.04	4.16	0.0	0.5	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	686	686	172	0	503	62	2746	0.250	685	173	0.0	0.3	1.746	A
B - A14 North-West	354	52	13	503	0	183	828	0.063	52	500	0.0	0.1	4.641	A
C - A1156 South-West	45	45	11	0	0	637	1213	0.037	45	156	0.0	0.0	3.082	A
D - A14 South-East	196	196	49	0	0	597	1717	0.114	196	153	0.0	0.1	2.367	A
E - Unnamed Road North-East	22	22	5	0	0	728	1146	0.019	22	18	0.0	0.0	3.202	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	819	819	205	0	601	74	2724	0.301	819	207	0.3	0.4	1.889	A
B - A14 North-West	423	62	16	601	0	219	811	0.077	62	597	0.1	0.1	4.810	A
C - A1156 South-West	54	54	14	0	0	762	1129	0.048	54	187	0.0	0.1	3.348	A
D - A14 South-East	235	235	59	0	0	714	1598	0.147	234	183	0.1	0.2	2.638	A
E - Unnamed Road North-East	26	26	7	0	0	871	1041	0.025	26	22	0.0	0.0	3.545	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	1004	251	0	736	91	2693	0.373	1003	254	0.4	0.6	2.130	A
B - A14 North-West	518	77	19	736	0	268	788	0.097	76	732	0.1	0.1	5.060	A
C - A1156 South-West	66	66	17	0	0	933	1014	0.065	66	228	0.1	0.1	3.798	A
D - A14 South-East	287	287	72	0	0	875	1436	0.200	287	224	0.2	0.2	3.132	A
E - Unnamed Road North-East	32	32	8	0	0	1067	898	0.036	32	27	0.0	0.0	4.155	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	1004	251	0	736	91	2693	0.373	1004	254	0.6	0.6	2.130	A
B - A14 North-West	518	77	19	736	0	268	788	0.097	77	732	0.1	0.1	5.061	A
C - A1156 South-West	66	66	17	0	0	934	1013	0.065	66	229	0.1	0.1	3.800	A
D - A14 South-East	287	287	72	0	0	876	1436	0.200	287	224	0.2	0.2	3.134	A
E - Unnamed Road North-East	32	32	8	0	0	1067	898	0.036	32	27	0.0	0.0	4.157	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	819	819	205	0	601	74	2723	0.301	820	208	0.6	0.4	1.891	A
B - A14 North-West	423	62	16	601	0	219	811	0.077	63	598	0.1	0.1	4.815	A
C - A1156 South-West	54	54	14	0	0	763	1128	0.048	54	187	0.1	0.1	3.351	A
D - A14 South-East	235	235	59	0	0	715	1597	0.147	235	183	0.2	0.2	2.642	A
E - Unnamed Road North-East	26	26	7	0	0	872	1041	0.025	26	22	0.0	0.0	3.551	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	686	686	172	0	503	62	2746	0.250	687	174	0.4	0.3	1.747	A
B - A14 North-West	354	52	13	503	0	184	827	0.063	52	501	0.1	0.1	4.646	A
C - A1156 South-West	45	45	11	0	0	639	1212	0.037	45	156	0.1	0.0	3.085	A
D - A14 South-East	196	196	49	0	0	599	1715	0.115	197	153	0.2	0.1	2.372	A
E - Unnamed Road North-East	22	22	5	0	0	730	1144	0.019	22	18	0.0	0.0	3.206	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D - A14 South-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A14 North-West	0.08	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.17	0.00	0.00	0.17	0.17			N/A	N/A
E - Unnamed Road North-East	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.03	0.25	0.59	0.59			N/A	N/A
B - A14 North-West	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C - A1156 South-West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
D - A14 South-East	0.25	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.03	0.29	1.31	2.76			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A

D - A14 South-East	0.25	0.03	0.26	0.47	0.50			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D - A14 South-East	0.17	0.00	0.00	0.17	0.17			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D - A14 South-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	8.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	650	128.00
C - A1156 South-West	1750	80.70
D - A14 South-East	1697	131.50
E - Unnamed Road North-East	1946	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1574	100.000
B - A14 North-West		ONE HOUR	✓	1416	100.000
C - A1156 South-West		ONE HOUR	✓	354	100.000
D - A14 South-East		ONE HOUR	✓	565	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1107	193	270	4
	B - A14 North-West	1278	2	105	0	32
	C - A1156 South-West	216	52	0	81	6
	D - A14 South-East	346	3	202	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	9	100	46	0	19
	C - A1156 South-West	27	12	0	5	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.95	2.4	4.9	A	1444	2166

B - A14 North-West	0.22	6.52	0.3	1.2	A	1041	191
C - A1156 South-West	0.60	13.68	1.5	5.8	B	325	487
D - A14 South-East	0.76	18.04	3.0	14.3	C	519	778
E - Unnamed Road North-East	0.17	12.98	0.2	0.5	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1185	1185	296	0	962	180	2573	0.460	1181	422	0.0	0.8	2.579	A
B - A14 North-West	854	104	26	962	0	498	835	0.125	104	906	0.0	0.1	4.923	A
C - A1156 South-West	267	267	67	0	0	1140	993	0.269	265	377	0.0	0.4	4.938	A
D - A14 South-East	426	426	106	0	0	1093	1234	0.345	424	264	0.0	0.5	4.428	A
E - Unnamed Road North-East	38	38	9	0	0	1319	656	0.058	38	42	0.0	0.1	5.821	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1415	1415	354	0	1149	215	2525	0.560	1413	505	0.8	1.3	3.232	A
B - A14 North-West	1020	125	31	1149	0	596	780	0.160	124	1084	0.1	0.2	5.489	A
C - A1156 South-West	318	318	80	0	0	1363	850	0.375	317	451	0.4	0.6	6.753	A
D - A14 South-East	508	508	127	0	0	1308	1060	0.479	507	315	0.5	0.9	6.485	A
E - Unnamed Road North-East	45	45	11	0	0	1578	520	0.087	45	50	0.1	0.1	7.577	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1732	1732	433	0	1407	263	2462	0.704	1728	614	1.3	2.3	4.881	A
B - A14 North-West	1249	152	38	1407	0	725	709	0.215	152	1326	0.2	0.3	6.465	A
C - A1156 South-West	390	390	97	0	0	1664	657	0.593	387	550	0.6	1.4	13.139	B
D - A14 South-East	623	623	156	0	0	1599	824	0.756	615	385	0.9	2.9	16.648	C
E - Unnamed Road North-East	55	55	14	0	0	1930	335	0.165	55	61	0.1	0.2	12.824	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1732	1732	433	0	1407	264	2460	0.704	1732	620	2.3	2.4	4.946	A
B - A14 North-West	1249	152	38	1407	0	732	705	0.216	152	1330	0.3	0.3	6.520	A
C - A1156 South-West	390	390	97	0	0	1672	652	0.598	390	553	1.4	1.5	13.684	B
D - A14 South-East	623	623	156	0	0	1603	820	0.759	622	387	2.9	3.0	18.036	C
E - Unnamed Road North-East	55	55	14	0	0	1935	332	0.166	55	62	0.2	0.2	12.983	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1415	1415	354	0	1149	217	2523	0.561	1419	514	2.4	1.3	3.274	A
B - A14 North-West	1020	125	31	1149	0	606	775	0.161	125	1090	0.3	0.2	5.545	A
C - A1156 South-West	318	318	80	0	0	1374	843	0.378	322	456	1.5	0.6	6.951	A
D - A14 South-East	508	508	127	0	0	1313	1055	0.482	517	317	3.0	0.9	6.781	A
E - Unnamed Road North-East	45	45	11	0	0	1585	516	0.087	46	51	0.2	0.1	7.657	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1185	1185	296	0	962	181	2571	0.461	1186	426	1.3	0.9	2.602	A
B - A14 North-West	854	104	26	962	0	503	832	0.125	104	911	0.2	0.1	4.948	A
C - A1156 South-West	267	267	67	0	0	1146	989	0.270	268	380	0.6	0.4	5.000	A
D - A14 South-East	426	426	106	0	0	1098	1230	0.346	427	265	0.9	0.5	4.492	A
E - Unnamed Road North-East	38	38	9	0	0	1325	653	0.058	38	42	0.1	0.1	5.856	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
D - A14 South-East	0.52	0.52	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.05	0.46	3.12	4.90			N/A	N/A
B - A14 North-West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A1156 South-West	0.59	0.06	0.67	1.34	1.42			N/A	N/A
D - A14 South-East	0.91	0.05	0.54	1.86	2.71			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.33	0.03	0.27	2.33	2.33			N/A	N/A
B - A14 North-West	0.27	0.03	0.25	0.46	0.48			N/A	N/A
C - A1156 South-West	1.41	0.03	0.27	1.41	2.47			N/A	N/A
D - A14 South-East	2.88	0.03	0.31	4.15	14.34			N/A	N/A
E - Unnamed Road North-East	0.19	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.36	0.03	0.26	2.36	2.36			N/A	N/A
B - A14 North-West	0.27	0.03	0.30	0.91	1.22			N/A	N/A
C - A1156 South-West	1.45	0.03	0.29	1.45	5.84			N/A	N/A

D - A14 South-East	3.01	0.03	0.30	3.01	12.81			N/A	N/A
E - Unnamed Road North-East	0.20	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.15	1.15	1.98	2.64			N/A	N/A
B - A14 North-West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A1156 South-West	0.61	0.06	0.62	1.36	1.45			N/A	N/A
D - A14 South-East	0.94	0.05	0.48	1.99	2.97			N/A	N/A
E - Unnamed Road North-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.06	0.69	1.57	1.98			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.37	0.03	0.34	1.14	1.34			N/A	N/A
D - A14 South-East	0.53	0.03	0.33	1.09	2.13			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	41.49	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	182	75.10
B - A14 North-West	946	128.00
C - A1156 South-West	1978	80.70
D - A14 South-East	2187	131.50
E - Unnamed Road North-East	2519	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1945	100.000
B - A14 North-West		ONE HOUR	✓	1624	100.000
C - A1156 South-West		ONE HOUR	✓	505	100.000
D - A14 South-East		ONE HOUR	✓	644	100.000
E - Unnamed Road North-East		ONE HOUR	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1214	344	384	4
	B - A14 North-West	1466	6	141	0	11
	C - A1156 South-West	319	74	0	110	2
	D - A14 South-East	366	0	262	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	5	9	0
	B - A14 North-West	9	67	20	0	0
	C - A1156 South-West	23	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	12.03	6.9	35.0	B	1785	2678

B - A14 North-West	0.24	6.54	0.3	1.4	A	1363	217
C - A1156 South-West	0.89	46.11	6.6	35.4	E	463	695
D - A14 South-East	1.14	220.81	48.9	92.0	F	591	886
E - Unnamed Road North-East	0.57	48.28	1.2	5.7	E	80	120

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1465	1465	366	0	1104	213	2550	0.574	1459	519	0.0	1.3	3.285	A
B - A14 North-West	1118	119	30	1104	0	614	866	0.137	118	1010	0.0	0.2	4.805	A
C - A1156 South-West	380	380	95	0	0	1247	961	0.395	378	575	0.0	0.6	6.139	A
D - A14 South-East	485	485	121	0	0	1341	1054	0.460	481	373	0.0	0.8	6.245	A
E - Unnamed Road North-East	66	66	16	0	0	1649	496	0.133	65	24	0.0	0.2	8.341	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1749	1749	437	0	1318	255	2501	0.699	1745	620	1.3	2.3	4.739	A
B - A14 North-West	1335	142	35	1318	0	734	794	0.178	141	1208	0.2	0.2	5.517	A
C - A1156 South-West	454	454	113	0	0	1491	806	0.563	451	687	0.6	1.3	10.095	B
D - A14 South-East	579	579	145	0	0	1604	872	0.664	574	446	0.8	1.9	11.934	B
E - Unnamed Road North-East	79	79	20	0	0	1972	359	0.219	78	28	0.2	0.3	12.797	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2142	2142	535	0	1614	307	2440	0.878	2125	699	2.3	6.5	10.888	B
B - A14 North-West	1636	173	43	1614	0	833	733	0.237	173	1469	0.2	0.3	6.428	A
C - A1156 South-West	556	556	139	0	0	1762	632	0.880	539	801	1.3	5.5	34.102	D
D - A14 South-East	709	709	177	0	0	1952	630	1.124	612	541	1.9	26.0	98.675	F
E - Unnamed Road North-East	96	96	24	0	0	2400	177	0.544	93	32	0.3	1.1	41.407	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2142	2142	535	0	1614	310	2436	0.879	2141	710	6.5	6.9	12.028	B
B - A14 North-West	1636	173	43	1614	0	846	724	0.239	173	1482	0.3	0.3	6.536	A
C - A1156 South-West	556	556	139	0	0	1777	622	0.893	551	807	5.5	6.6	46.108	E
D - A14 South-East	709	709	177	0	0	1967	620	1.143	617	547	26.0	48.9	220.806	F
E - Unnamed Road North-East	96	96	24	0	0	2418	169	0.569	96	33	1.1	1.2	48.284	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1749	1749	437	0	1318	265	2490	0.702	1767	743	6.9	2.4	5.097	A
B - A14 North-West	1335	142	35	1318	0	866	716	0.198	142	1228	0.3	0.2	6.271	A
C - A1156 South-West	454	454	113	0	0	1621	724	0.627	473	770	6.6	1.7	15.396	C
D - A14 South-East	579	579	145	0	0	1626	857	0.675	765	455	48.9	2.3	85.756	F
E - Unnamed Road North-East	79	79	20	0	0	1999	348	0.226	82	33	1.2	0.3	13.745	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1465	1465	366	0	1104	216	2547	0.575	1469	529	2.4	1.4	3.351	A
B - A14 North-West	1118	119	30	1104	0	626	859	0.138	119	1018	0.2	0.2	4.864	A
C - A1156 South-West	380	380	95	0	0	1259	954	0.399	384	581	1.7	0.7	6.374	A
D - A14 South-East	485	485	121	0	0	1350	1048	0.463	490	377	2.3	0.9	6.526	A
E - Unnamed Road North-East	66	66	16	0	0	1660	491	0.134	66	24	0.3	0.2	8.487	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.56	1.24	1.72	1.89			N/A	N/A
B - A14 North-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A1156 South-West	0.65	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.84	0.06	0.73	1.44	1.86			N/A	N/A
E - Unnamed Road North-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.29	0.04	0.40	6.14	11.44			N/A	N/A
B - A14 North-West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A1156 South-West	1.26	0.05	0.49	3.01	4.67			N/A	N/A
D - A14 South-East	1.90	0.04	0.39	5.04	9.36			N/A	N/A
E - Unnamed Road North-East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.54	0.03	0.34	12.24	34.96			N/A	N/A
B - A14 North-West	0.31	0.03	0.25	0.46	0.48			N/A	N/A
C - A1156 South-West	5.50	0.05	0.78	15.83	26.55			N/A	N/A
D - A14 South-East	26.03	6.68	22.75	45.53	53.88			N/A	N/A
E - Unnamed Road North-East	1.08	0.03	0.28	1.10	4.21			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.89	0.03	0.29	6.89	24.03			N/A	N/A
B - A14 North-West	0.31	0.03	0.31	1.08	1.35			N/A	N/A
C - A1156 South-West	6.63	0.04	0.43	18.30	35.36			N/A	N/A

D - A14 South-East	48.91	17.31	44.76	79.66	91.98			N/A	N/A
E - Unnamed Road North-East	1.22	0.04	0.38	3.10	5.66			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.40	0.05	0.52	6.56	10.52			N/A	N/A
B - A14 North-West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A1156 South-West	1.75	0.05	0.48	4.61	7.33			N/A	N/A
D - A14 South-East	2.32	0.03	0.32	4.42	12.24			N/A	N/A
E - Unnamed Road North-East	0.30	0.03	0.29	0.83	1.17			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.03	0.34	3.18	6.96			N/A	N/A
B - A14 North-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A1156 South-West	0.67	0.03	0.29	1.18	2.93			N/A	N/A
D - A14 South-East	0.87	0.03	0.26	0.87	0.87			N/A	N/A
E - Unnamed Road North-East	0.16	0.03	0.27	0.48	0.66			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	10.69	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	116	75.10
B - A14 North-West	940	128.00
C - A1156 South-West	1816	80.70
D - A14 South-East	2071	131.50
E - Unnamed Road North-East	2422	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1724	100.000
B - A14 North-West		ONE HOUR	✓	1341	100.000
C - A1156 South-West		ONE HOUR	✓	543	100.000
D - A14 South-East		ONE HOUR	✓	643	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1035	348	336	4
	B - A14 North-West	1240	4	57	0	40
	C - A1156 South-West	335	79	4	120	5
	D - A14 South-East	378	0	264	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	10	4	6	33
	B - A14 North-West	6	0	30	0	12
	C - A1156 South-West	15	3	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.80	3.0	6.6	A	1582	2373

B - A14 North-West	0.16	6.27	0.2	0.5	A	1084	139
C - A1156 South-West	0.78	21.33	3.4	16.8	C	498	747
D - A14 South-East	0.83	24.26	4.5	23.1	C	590	885
E - Unnamed Road North-East	0.13	12.82	0.1	0.5	B	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1298	1298	324	0	934	173	2612	0.497	1294	539	0.0	1.0	2.724	A
B - A14 North-West	889	76	19	934	0	636	858	0.088	76	858	0.0	0.1	4.596	A
C - A1156 South-West	409	409	102	0	0	1088	1120	0.365	406	506	0.0	0.6	5.026	A
D - A14 South-East	484	484	121	0	0	1113	1230	0.394	481	345	0.0	0.6	4.794	A
E - Unnamed Road North-East	28	28	7	0	0	1430	635	0.044	28	37	0.0	0.0	5.933	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1550	1550	387	0	1115	207	2572	0.602	1548	645	1.0	1.5	3.506	A
B - A14 North-West	1062	91	23	1115	0	761	786	0.115	90	1026	0.1	0.1	5.178	A
C - A1156 South-West	488	488	122	0	0	1301	970	0.503	486	606	0.6	1.0	7.408	A
D - A14 South-East	578	578	144	0	0	1331	1071	0.540	576	413	0.6	1.2	7.240	A
E - Unnamed Road North-East	34	34	8	0	0	1711	503	0.067	34	44	0.0	0.1	7.662	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1898	1898	474	0	1366	252	2520	0.753	1892	780	1.5	3.0	5.679	A
B - A14 North-West	1301	111	28	1366	0	921	693	0.160	111	1254	0.1	0.2	6.181	A
C - A1156 South-West	598	598	149	0	0	1586	771	0.776	589	737	1.0	3.2	19.002	C
D - A14 South-East	708	708	177	0	0	1627	856	0.827	696	504	1.2	4.2	21.095	C
E - Unnamed Road North-East	41	41	10	0	0	2090	326	0.127	41	54	0.1	0.1	12.638	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1898	1898	474	0	1366	254	2518	0.754	1898	791	3.0	3.0	5.802	A
B - A14 North-West	1301	111	28	1366	0	934	685	0.162	111	1259	0.2	0.2	6.268	A
C - A1156 South-West	598	598	149	0	0	1596	764	0.783	597	743	3.2	3.4	21.326	C
D - A14 South-East	708	708	177	0	0	1632	852	0.831	707	506	4.2	4.5	24.262	C
E - Unnamed Road North-East	41	41	10	0	0	2098	322	0.128	41	54	0.1	0.1	12.821	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1550	1550	387	0	1115	210	2569	0.603	1556	661	3.0	1.5	3.572	A
B - A14 North-West	1062	91	23	1115	0	780	775	0.117	91	1033	0.2	0.1	5.264	A
C - A1156 South-West	488	488	122	0	0	1316	961	0.508	497	614	3.4	1.1	7.922	A
D - A14 South-East	578	578	144	0	0	1338	1066	0.542	591	417	4.5	1.2	7.792	A
E - Unnamed Road North-East	34	34	8	0	0	1721	498	0.068	34	44	0.1	0.1	7.759	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1298	1298	324	0	934	175	2610	0.497	1300	544	1.5	1.0	2.754	A
B - A14 North-West	889	76	19	934	0	643	855	0.089	76	862	0.1	0.1	4.624	A
C - A1156 South-West	409	409	102	0	0	1095	1116	0.366	411	510	1.1	0.6	5.120	A
D - A14 South-East	484	484	121	0	0	1118	1226	0.395	486	347	1.2	0.7	4.880	A
E - Unnamed Road North-East	28	28	7	0	0	1437	631	0.045	28	37	0.1	0.0	5.971	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.57	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.64	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.04	0.43	3.92	6.60			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.00	0.05	0.57	2.07	3.00			N/A	N/A
D - A14 South-East	1.15	0.05	0.47	2.77	4.24			N/A	N/A
E - Unnamed Road North-East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.98	0.03	0.27	2.98	4.23			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.16	0.03	0.33	5.96	16.76			N/A	N/A
D - A14 South-East	4.21	0.04	0.37	10.24	22.68			N/A	N/A
E - Unnamed Road North-East	0.14	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.02	0.03	0.26	3.02	3.02			N/A	N/A
B - A14 North-West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	3.39	0.03	0.30	3.72	15.77			N/A	N/A

D - A14 South-East	4.54	0.03	0.32	6.97	23.07			N/A	N/A
E - Unnamed Road North-East	0.15	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.54	0.10	1.17	2.99	4.00			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.05	0.05	0.46	2.48	3.76			N/A	N/A
D - A14 South-East	1.21	0.04	0.42	3.02	4.97			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.05	0.49	2.18	3.25			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.58	0.03	0.32	1.23	2.58			N/A	N/A
D - A14 South-East	0.66	0.03	0.31	1.22	3.10			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	10.95	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms
[same as above]

Roundabout Geometry
[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	773	128.00
C - A1156 South-West	1718	80.70
D - A14 South-East	2020	131.50
E - Unnamed Road North-East	2453	37.20

Bypass
[same as above]

Slope / Intercept / Capacity
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1786	100.000
B - A14 North-West		ONE HOUR	✓	1553	100.000
C - A1156 South-West		ONE HOUR	✓	556	100.000
D - A14 South-East		ONE HOUR	✓	700	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1078	297	408	1
	B - A14 North-West	1437	3	92	0	21
	C - A1156 South-West	247	77	0	204	28
	D - A14 South-East	371	0	329	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	2	2	0
	B - A14 North-West	3	33	3	0	11
	C - A1156 South-West	5	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	7.12	3.8	10.9	A	1639	2459

B - A14 North-West	0.15	5.10	0.2	0.5	A	1401	160
C - A1156 South-West	0.74	16.70	2.7	11.9	C	510	766
D - A14 South-East	0.87	29.38	5.9	32.3	D	642	963
E - Unnamed Road North-East	0.11	15.38	0.1	0.5	C	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1345	1345	336	0	1082	261	2606	0.516	1341	464	0.0	1.1	2.837	A
B - A14 North-West	1149	87	22	1082	0	638	1031	0.085	87	883	0.0	0.1	3.814	A
C - A1156 South-West	419	419	105	0	0	1104	1214	0.345	417	543	0.0	0.5	4.505	A
D - A14 South-East	527	527	132	0	0	1123	1263	0.417	524	460	0.0	0.7	4.856	A
E - Unnamed Road North-East	19	19	5	0	0	1564	576	0.034	19	38	0.0	0.0	6.458	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1606	1606	401	0	1292	312	2549	0.630	1603	555	1.1	1.7	3.798	A
B - A14 North-West	1372	104	26	1292	0	763	948	0.110	104	1056	0.1	0.1	4.265	A
C - A1156 South-West	500	500	125	0	0	1321	1051	0.476	499	649	0.5	0.9	6.502	A
D - A14 South-East	629	629	157	0	0	1343	1104	0.570	627	550	0.7	1.3	7.500	A
E - Unnamed Road North-East	23	23	6	0	0	1870	445	0.052	23	45	0.0	0.1	8.540	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1967	1967	492	0	1583	380	2474	0.795	1959	671	1.7	3.7	6.876	A
B - A14 North-West	1681	128	32	1583	0	923	842	0.152	128	1290	0.1	0.2	5.034	A
C - A1156 South-West	612	612	153	0	0	1607	835	0.733	606	788	0.9	2.6	15.260	C
D - A14 South-East	771	771	193	0	0	1641	891	0.865	755	671	1.3	5.3	24.117	C
E - Unnamed Road North-East	28	28	7	0	0	2284	267	0.106	28	55	0.1	0.1	15.063	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1967	1967	492	0	1583	383	2471	0.796	1967	681	3.7	3.8	7.121	A
B - A14 North-West	1681	128	32	1583	0	936	834	0.153	128	1296	0.2	0.2	5.095	A
C - A1156 South-West	612	612	153	0	0	1620	826	0.741	612	796	2.6	2.7	16.695	C
D - A14 South-East	771	771	193	0	0	1647	886	0.870	768	675	5.3	5.9	29.382	D
E - Unnamed Road North-East	28	28	7	0	0	2294	262	0.108	28	55	0.1	0.1	15.376	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1606	1606	401	0	1292	316	2545	0.631	1614	570	3.8	1.7	3.903	A
B - A14 North-West	1372	104	26	1292	0	781	936	0.111	105	1064	0.2	0.1	4.332	A
C - A1156 South-West	500	500	125	0	0	1338	1038	0.482	507	661	2.7	0.9	6.878	A
D - A14 South-East	629	629	157	0	0	1352	1098	0.573	647	556	5.9	1.4	8.301	A
E - Unnamed Road North-East	23	23	6	0	0	1885	438	0.053	23	46	0.1	0.1	8.677	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1345	1345	336	0	1082	263	2603	0.517	1347	468	1.7	1.1	2.872	A
B - A14 North-West	1149	87	22	1082	0	644	1027	0.085	88	888	0.1	0.1	3.835	A
C - A1156 South-West	419	419	105	0	0	1111	1208	0.347	420	547	0.9	0.5	4.578	A
D - A14 South-East	527	527	132	0	0	1129	1258	0.419	530	463	1.4	0.7	4.955	A
E - Unnamed Road North-East	19	19	5	0	0	1572	573	0.034	19	38	0.1	0.0	6.506	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.52	0.52	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.71	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.04	0.41	4.49	7.85			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.90	0.05	0.61	1.77	2.49			N/A	N/A
D - A14 South-East	1.30	0.04	0.45	3.29	5.25			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.74	0.03	0.28	3.74	10.89			N/A	N/A
B - A14 North-West	0.18	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.59	0.03	0.30	2.75	11.91			N/A	N/A
D - A14 South-East	5.32	0.04	0.43	14.71	27.97			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.26	0.47	0.54			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.82	0.03	0.27	3.82	3.82			N/A	N/A
B - A14 North-West	0.18	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.75	0.03	0.29	2.75	10.92			N/A	N/A

D - A14 South-East	5.92	0.04	0.35	12.66	32.31			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.07	1.04	3.94	5.62			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	0.94	0.05	0.59	1.91	2.77			N/A	N/A
D - A14 South-East	1.37	0.04	0.40	3.58	6.21			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.04	0.42	2.67	4.34			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.53	0.03	0.34	1.08	1.97			N/A	N/A
D - A14 South-East	0.73	0.03	0.30	1.05	3.51			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	946	100.000
B - A14 North-West		ONE HOUR	✓	627	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	250	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	657	77	210	1
	B - A14 North-West	605	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	163	0	76	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.03	0.6	2.7	A	868	1301

B - A14 North-West	0.02	3.44	0.0	0.5	A	463	30
C - A1156 South-West	0.03	2.78	0.0	0.5	A	35	53
D - A14 South-East	0.18	2.95	0.2	0.5	A	230	345
E - Unnamed Road North-East	0.04	3.97	0.0	0.5	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	712	712	178	0	456	26	2834	0.251	711	152	0.0	0.3	1.695	A
B - A14 North-West	380	16	4	456	0	162	1112	0.015	16	520	0.0	0.0	3.284	A
C - A1156 South-West	29	29	7	0	0	653	1611	0.018	29	117	0.0	0.0	2.274	A
D - A14 South-East	188	188	47	0	0	582	1755	0.107	188	159	0.0	0.1	2.297	A
E - Unnamed Road North-East	23	23	6	0	0	718	1173	0.019	23	19	0.0	0.0	3.128	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	850	850	213	0	544	32	2826	0.301	850	182	0.3	0.4	1.820	A
B - A14 North-West	454	20	5	544	0	194	1094	0.018	20	621	0.0	0.0	3.349	A
C - A1156 South-West	34	34	9	0	0	781	1496	0.023	34	140	0.0	0.0	2.461	A
D - A14 South-East	225	225	56	0	0	696	1646	0.137	225	190	0.1	0.2	2.532	A
E - Unnamed Road North-East	27	27	7	0	0	858	1075	0.025	27	23	0.0	0.0	3.434	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1041	1041	260	0	666	39	2817	0.370	1040	223	0.4	0.6	2.027	A
B - A14 North-West	556	24	6	666	0	237	1069	0.023	24	761	0.0	0.0	3.443	A
C - A1156 South-West	42	42	11	0	0	956	1339	0.031	42	171	0.0	0.0	2.774	A
D - A14 South-East	276	276	69	0	0	852	1497	0.184	275	233	0.2	0.2	2.945	A
E - Unnamed Road North-East	33	33	8	0	0	1051	941	0.035	33	28	0.0	0.0	3.966	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1041	1041	260	0	666	39	2817	0.370	1041	223	0.6	0.6	2.027	A
B - A14 North-West	556	24	6	666	0	237	1069	0.023	24	761	0.0	0.0	3.443	A
C - A1156 South-West	42	42	11	0	0	957	1339	0.031	42	171	0.0	0.0	2.775	A
D - A14 South-East	276	276	69	0	0	852	1497	0.184	276	233	0.2	0.2	2.946	A
E - Unnamed Road North-East	33	33	8	0	0	1052	940	0.035	33	28	0.0	0.0	3.968	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	850	850	213	0	544	32	2826	0.301	851	182	0.6	0.4	1.821	A
B - A14 North-West	454	20	5	544	0	194	1094	0.018	20	622	0.0	0.0	3.350	A
C - A1156 South-West	34	34	9	0	0	782	1495	0.023	34	140	0.0	0.0	2.463	A
D - A14 South-East	225	225	56	0	0	697	1646	0.137	225	190	0.2	0.2	2.536	A
E - Unnamed Road North-East	27	27	7	0	0	859	1075	0.025	27	23	0.0	0.0	3.436	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	712	712	178	0	456	27	2833	0.251	712	152	0.4	0.3	1.696	A
B - A14 North-West	380	16	4	456	0	162	1112	0.015	16	521	0.0	0.0	3.288	A
C - A1156 South-West	29	29	7	0	0	655	1609	0.018	29	117	0.0	0.0	2.277	A
D - A14 South-East	188	188	47	0	0	583	1754	0.107	189	159	0.2	0.1	2.301	A
E - Unnamed Road North-East	23	23	6	0	0	720	1172	0.019	23	19	0.0	0.0	3.132	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.16	0.00	0.00	0.16	0.16			N/A	N/A
E - Unnamed Road North-East	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D - A14 South-East	0.22	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.03	0.29	1.33	2.74			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A

D - A14 South-East	0.23	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.16	0.00	0.00	0.16	0.16			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	173	75.10
B - A14 North-West	671	128.00
C - A1156 South-West	1782	80.70
D - A14 South-East	1755	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1648	100.000
B - A14 North-West		ONE HOUR	✓	1401	100.000
C - A1156 South-West		ONE HOUR	✓	341	100.000
D - A14 South-East		ONE HOUR	✓	587	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1160	198	286	4
	B - A14 North-West	1307	2	60	0	33
	C - A1156 South-West	162	52	0	122	6
	D - A14 South-East	349	3	220	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	9	100	5	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	4	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.95	2.5	5.3	A	1512	2268

B - A14 North-West	0.11	4.37	0.1	0.5	A	1252	130
C - A1156 South-West	0.52	10.53	1.1	4.7	B	313	470
D - A14 South-East	0.75	16.36	2.8	12.9	C	539	808
E - Unnamed Road North-East	0.17	12.93	0.2	0.5	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	1240	310	0	984	178	2637	0.470	1237	384	0.0	0.9	2.565	A
B - A14 North-West	1027	71	18	984	0	492	1076	0.066	71	947	0.0	0.1	3.582	A
C - A1156 South-West	257	257	64	0	0	1183	1114	0.231	256	361	0.0	0.3	4.188	A
D - A14 South-East	442	442	110	0	0	1104	1264	0.350	440	306	0.0	0.5	4.359	A
E - Unnamed Road North-East	39	39	10	0	0	1372	651	0.060	39	44	0.0	0.1	5.879	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	1481	370	0	1175	214	2597	0.570	1479	460	0.9	1.3	3.213	A
B - A14 North-West	1227	85	21	1175	0	588	1014	0.084	85	1133	0.1	0.1	3.876	A
C - A1156 South-West	307	307	77	0	0	1416	947	0.324	306	432	0.3	0.5	5.608	A
D - A14 South-East	528	528	132	0	0	1321	1096	0.482	526	367	0.5	0.9	6.302	A
E - Unnamed Road North-East	47	47	12	0	0	1641	518	0.090	47	52	0.1	0.1	7.628	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	1814	454	0	1439	261	2542	0.714	1810	559	1.3	2.4	4.884	A
B - A14 North-West	1503	104	26	1439	0	716	932	0.112	104	1386	0.1	0.1	4.350	A
C - A1156 South-West	376	376	94	0	0	1728	723	0.520	373	526	0.5	1.1	10.233	B
D - A14 South-East	646	646	162	0	0	1616	868	0.745	639	448	0.9	2.7	15.267	C
E - Unnamed Road North-East	57	57	14	0	0	2007	338	0.169	57	64	0.1	0.2	12.771	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	1814	454	0	1439	262	2541	0.714	1814	564	2.4	2.5	4.951	A
B - A14 North-West	1503	104	26	1439	0	722	928	0.112	104	1390	0.1	0.1	4.371	A
C - A1156 South-West	376	376	94	0	0	1736	717	0.524	376	529	1.1	1.1	10.527	B
D - A14 South-East	646	646	162	0	0	1620	865	0.747	646	450	2.7	2.8	16.359	C
E - Unnamed Road North-East	57	57	14	0	0	2012	336	0.171	57	64	0.2	0.2	12.926	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	1481	370	0	1175	215	2595	0.571	1486	467	2.5	1.3	3.261	A
B - A14 North-West	1227	85	21	1175	0	597	1008	0.084	85	1139	0.1	0.1	3.901	A
C - A1156 South-West	307	307	77	0	0	1426	940	0.327	309	436	1.1	0.5	5.729	A
D - A14 South-East	528	528	132	0	0	1327	1091	0.484	535	369	2.8	0.9	6.559	A
E - Unnamed Road North-East	47	47	12	0	0	1648	515	0.091	47	53	0.2	0.1	7.707	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	1240	310	0	984	180	2636	0.471	1242	387	1.3	0.9	2.586	A
B - A14 North-West	1027	71	18	984	0	496	1073	0.066	71	952	0.1	0.1	3.591	A
C - A1156 South-West	257	257	64	0	0	1190	1109	0.232	258	363	0.5	0.3	4.232	A
D - A14 South-East	442	442	110	0	0	1109	1260	0.351	444	308	0.9	0.5	4.421	A
E - Unnamed Road North-East	39	39	10	0	0	1378	648	0.061	39	44	0.1	0.1	5.919	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - A14 South-East	0.53	0.53	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.04	0.45	3.35	5.34			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.47	0.04	0.40	1.24	1.37			N/A	N/A
D - A14 South-East	0.92	0.05	0.57	1.86	2.69			N/A	N/A
E - Unnamed Road North-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.45	0.03	0.27	2.45	2.45			N/A	N/A
B - A14 North-West	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.06	0.03	0.26	1.06	1.06			N/A	N/A
D - A14 South-East	2.73	0.03	0.30	3.18	12.89			N/A	N/A
E - Unnamed Road North-East	0.20	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.47	0.03	0.26	2.47	2.47			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.08	0.03	0.29	1.40	4.71			N/A	N/A

D - A14 South-East	2.85	0.03	0.29	2.85	11.08			N/A	N/A
E - Unnamed Road North-East	0.20	0.03	0.25	0.46	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.14	1.17	2.21	2.83			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.49	0.04	0.44	1.27	1.38			N/A	N/A
D - A14 South-East	0.95	0.05	0.53	1.96	2.89			N/A	N/A
E - Unnamed Road North-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.06	0.69	1.69	2.27			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.30	0.03	0.27	0.49	0.87			N/A	N/A
D - A14 South-East	0.54	0.03	0.34	1.13	2.07			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	53.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	177	75.10
B - A14 North-West	971	128.00
C - A1156 South-West	2035	80.70
D - A14 South-East	2308	131.50
E - Unnamed Road North-East	2658	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2078	100.000
B - A14 North-West		ONE HOUR	✓	1645	100.000
C - A1156 South-West		ONE HOUR	✓	517	100.000
D - A14 South-East		ONE HOUR	✓	674	100.000
E - Unnamed Road North-East		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1258	424	392	4
	B - A14 North-West	1515	6	113	0	11
	C - A1156 South-West	264	74	0	177	2
	D - A14 South-East	365	0	293	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	4	7	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	6	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	19.04	11.4	62.2	C	1906	2860

B - A14 North-West	0.16	4.85	0.2	0.5	A	1579	179
C - A1156 South-West	0.82	27.99	4.2	22.0	D	474	712
D - A14 South-East	1.22	295.87	68.1	111.8	F	619	928
E - Unnamed Road North-East	0.71	79.81	2.0	9.1	F	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	1564	391	0	1141	243	2582	0.606	1558	478	0.0	1.5	3.498	A
B - A14 North-West	1295	98	24	1141	0	623	1029	0.095	97	1045	0.0	0.1	3.861	A
C - A1156 South-West	389	389	97	0	0	1281	1052	0.370	387	637	0.0	0.6	5.395	A
D - A14 South-East	508	508	127	0	0	1415	1039	0.488	504	429	0.0	0.9	6.674	A
E - Unnamed Road North-East	68	68	17	0	0	1777	467	0.146	68	24	0.0	0.2	8.989	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1868	1868	467	0	1362	291	2530	0.738	1863	570	1.5	2.8	5.355	A
B - A14 North-West	1547	117	29	1362	0	745	949	0.123	117	1249	0.1	0.1	4.323	A
C - A1156 South-West	465	465	116	0	0	1531	880	0.528	463	762	0.6	1.1	8.578	A
D - A14 South-East	606	606	152	0	0	1692	858	0.706	601	513	0.9	2.3	13.696	B
E - Unnamed Road North-East	82	82	20	0	0	2124	330	0.247	81	29	0.2	0.3	14.412	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2287	2287	572	0	1668	351	2466	0.928	2257	628	2.8	10.3	15.446	C
B - A14 North-West	1895	143	36	1668	0	835	890	0.161	143	1512	0.1	0.2	4.817	A
C - A1156 South-West	569	569	142	0	0	1788	703	0.809	559	873	1.1	3.7	23.395	C
D - A14 South-East	742	742	186	0	0	2049	625	1.187	613	621	2.3	34.6	124.500	F
E - Unnamed Road North-East	100	100	25	0	0	2575	152	0.657	95	33	0.3	1.6	58.549	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2287	2287	572	0	1668	354	2463	0.929	2283	630	10.3	11.4	19.035	C
B - A14 North-West	1895	143	36	1668	0	840	887	0.161	143	1530	0.2	0.2	4.840	A
C - A1156 South-West	569	569	142	0	0	1803	693	0.822	567	877	3.7	4.2	27.989	D
D - A14 South-East	742	742	186	0	0	2073	609	1.218	608	629	34.6	68.1	295.866	F
E - Unnamed Road North-East	100	100	25	0	0	2604	141	0.710	98	33	1.6	2.0	79.810	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1868	1868	467	0	1362	301	2519	0.741	1902	697	11.4	2.9	6.135	A
B - A14 North-West	1547	117	29	1362	0	880	859	0.136	117	1279	0.2	0.2	4.853	A
C - A1156 South-West	465	465	116	0	0	1684	776	0.599	475	867	4.2	1.5	12.379	B
D - A14 South-East	606	606	152	0	0	1730	833	0.728	821	525	68.1	14.5	186.107	F
E - Unnamed Road North-East	82	82	20	0	0	2168	313	0.261	88	35	2.0	0.4	16.467	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	1564	391	0	1141	247	2577	0.607	1570	512	2.9	1.6	3.594	A
B - A14 North-West	1295	98	24	1141	0	661	1004	0.097	98	1054	0.2	0.1	3.975	A
C - A1156 South-West	389	389	97	0	0	1322	1024	0.380	393	666	1.5	0.6	5.734	A
D - A14 South-East	508	508	127	0	0	1426	1032	0.492	562	434	14.5	1.0	8.570	A
E - Unnamed Road North-East	68	68	17	0	0	1791	462	0.148	69	26	0.4	0.2	9.183	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.52	0.51	1.39	2.09	2.65			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.58	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.94	0.05	0.60	1.89	2.74			N/A	N/A
E - Unnamed Road North-East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.76	0.04	0.40	7.44	14.01			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	1.10	0.05	0.57	2.47	3.61			N/A	N/A
D - A14 South-East	2.29	0.04	0.40	6.17	11.39			N/A	N/A
E - Unnamed Road North-East	0.32	0.03	0.26	0.46	0.49			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.28	0.05	0.47	28.93	54.66			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.73	0.04	0.37	9.07	20.03			N/A	N/A
D - A14 South-East	34.63	12.82	31.76	55.29	63.55			N/A	N/A
E - Unnamed Road North-East	1.60	0.03	0.33	3.44	8.35			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.40	0.04	0.36	23.06	62.16			N/A	N/A
B - A14 North-West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	4.19	0.03	0.33	7.39	21.99			N/A	N/A

D - A14 South-East	68.13	33.22	64.78	99.96	111.79			N/A	N/A
E - Unnamed Road North-East	2.04	0.05	0.46	5.52	9.11			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.93	0.05	0.45	8.16	14.14			N/A	N/A
B - A14 North-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A1156 South-West	1.54	0.06	0.83	3.65	5.30			N/A	N/A
D - A14 South-East	14.50	1.58	11.32	28.76	35.65			N/A	N/A
E - Unnamed Road North-East	0.36	0.03	0.33	1.18	1.41			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.03	0.32	2.82	8.04			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.62	0.03	0.31	1.12	2.90			N/A	N/A
D - A14 South-East	0.98	0.03	0.26	0.98	0.98			N/A	N/A
E - Unnamed Road North-East	0.18	0.03	0.28	0.52	1.11			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	19.40	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	138	75.10
B - A14 North-West	1026	128.00
C - A1156 South-West	1785	80.70
D - A14 South-East	2100	131.50
E - Unnamed Road North-East	2484	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1856	100.000
B - A14 North-West		ONE HOUR	✓	1432	100.000
C - A1156 South-West		ONE HOUR	✓	574	100.000
D - A14 South-East		ONE HOUR	✓	734	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1074	431	346	4
	B - A14 North-West	1344	4	42	0	41
	C - A1156 South-West	339	79	4	147	5
	D - A14 South-East	414	0	319	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.66	3.7	9.4	A	1703	2554

B - A14 North-West	0.13	5.45	0.1	0.5	A	1280	120
C - A1156 South-West	0.79	21.29	3.6	17.2	C	527	790
D - A14 South-East	0.99	78.96	17.5	65.5	F	673	1010
E - Unnamed Road North-East	0.15	14.73	0.2	0.5	B	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1397	1397	349	0	1012	183	2678	0.522	1393	569	0.0	1.1	2.793	A
B - A14 North-West	1050	66	16	1012	0	687	946	0.069	65	888	0.0	0.1	4.085	A
C - A1156 South-West	432	432	108	0	0	1145	1188	0.364	430	598	0.0	0.6	4.734	A
D - A14 South-East	553	553	138	0	0	1194	1207	0.458	549	373	0.0	0.8	5.448	A
E - Unnamed Road North-East	29	29	7	0	0	1538	607	0.048	29	38	0.0	0.1	6.231	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1668	1668	417	0	1209	219	2638	0.633	1666	680	1.1	1.7	3.695	A
B - A14 North-West	1254	79	20	1209	0	821	864	0.091	78	1062	0.1	0.1	4.580	A
C - A1156 South-West	516	516	129	0	0	1369	1021	0.505	514	716	0.6	1.0	7.080	A
D - A14 South-East	660	660	165	0	0	1428	1043	0.633	656	446	0.8	1.7	9.242	A
E - Unnamed Road North-East	35	35	9	0	0	1840	473	0.074	35	46	0.1	0.1	8.223	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2043	2043	511	0	1480	267	2585	0.790	2036	807	1.7	3.6	6.460	A
B - A14 North-West	1536	96	24	1480	0	978	769	0.125	96	1297	0.1	0.1	5.347	A
C - A1156 South-West	632	632	158	0	0	1652	810	0.780	623	858	1.0	3.2	18.432	C
D - A14 South-East	808	808	202	0	0	1745	820	0.985	765	544	1.7	12.4	46.972	E
E - Unnamed Road North-East	43	43	11	0	0	2246	292	0.147	42	56	0.1	0.2	14.435	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2043	2043	511	0	1480	269	2583	0.791	2043	824	3.6	3.7	6.665	A
B - A14 North-West	1536	96	24	1480	0	997	757	0.127	96	1303	0.1	0.1	5.445	A
C - A1156 South-West	632	632	158	0	0	1669	797	0.793	631	870	3.2	3.6	21.290	C
D - A14 South-East	808	808	202	0	0	1752	816	0.990	788	547	12.4	17.5	78.965	F
E - Unnamed Road North-East	43	43	11	0	0	2256	287	0.149	43	56	0.2	0.2	14.725	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1668	1668	417	0	1209	223	2634	0.633	1676	725	3.7	1.7	3.789	A
B - A14 North-West	1254	79	20	1209	0	869	835	0.094	79	1070	0.1	0.1	4.761	A
C - A1156 South-West	516	516	129	0	0	1413	989	0.522	526	747	3.6	1.1	7.938	A
D - A14 South-East	660	660	165	0	0	1437	1036	0.637	723	451	17.5	1.8	13.850	B
E - Unnamed Road North-East	35	35	9	0	0	1853	467	0.075	35	46	0.2	0.1	8.354	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1397	1397	349	0	1012	185	2676	0.522	1400	576	1.7	1.1	2.826	A
B - A14 North-West	1050	66	16	1012	0	695	942	0.070	66	893	0.1	0.1	4.111	A
C - A1156 South-West	432	432	108	0	0	1153	1182	0.366	434	603	1.1	0.6	4.830	A
D - A14 South-East	553	553	138	0	0	1200	1202	0.460	556	375	1.8	0.9	5.605	A
E - Unnamed Road North-East	29	29	7	0	0	1546	603	0.049	29	39	0.1	0.1	6.278	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.57	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.84	0.17	0.93	1.43	1.49			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.70	0.04	0.41	4.54	7.96			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	1.01	0.05	0.53	2.17	3.19			N/A	N/A
D - A14 South-East	1.68	0.04	0.41	4.49	7.75			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.65	0.03	0.28	3.65	9.38			N/A	N/A
B - A14 North-West	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.24	0.03	0.33	6.08	17.19			N/A	N/A
D - A14 South-East	12.44	0.26	6.59	31.02	42.48			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.72	0.03	0.27	3.72	3.72			N/A	N/A
B - A14 North-West	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	3.57	0.03	0.31	4.13	16.84			N/A	N/A

D - A14 South-East	17.55	0.21	7.89	46.41	65.55			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.07	1.10	3.92	5.54			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	1.11	0.05	0.49	2.60	3.85			N/A	N/A
D - A14 South-East	1.81	0.03	0.34	4.22	9.45			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.04	0.43	2.72	4.33			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.58	0.03	0.32	1.21	2.59			N/A	N/A
D - A14 South-East	0.86	0.03	0.28	0.86	2.56			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	34.54	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	162	75.10
B - A14 North-West	901	128.00
C - A1156 South-West	1885	80.70
D - A14 South-East	2153	131.50
E - Unnamed Road North-East	2578	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2017	100.000
B - A14 North-West		ONE HOUR	✓	1710	100.000
C - A1156 South-West		ONE HOUR	✓	572	100.000
D - A14 South-East		ONE HOUR	✓	757	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1273	341	400	1
	B - A14 North-West	1596	3	89	0	22
	C - A1156 South-West	249	77	0	217	29
	D - A14 South-East	384	0	373	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	2	1	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	11.57	6.9	34.5	B	1851	2777

B - A14 North-West	0.15	4.92	0.2	0.5	A	1562	157
C - A1156 South-West	0.83	27.29	4.5	23.9	D	525	788
D - A14 South-East	1.10	168.69	43.5	91.2	F	695	1042
E - Unnamed Road North-East	0.15	22.01	0.2	0.7	C	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1519	1519	380	0	1202	270	2669	0.569	1514	475	0.0	1.3	3.103	A
B - A14 North-West	1282	86	21	1202	0	659	1031	0.083	85	1030	0.0	0.1	3.808	A
C - A1156 South-West	431	431	108	0	0	1260	1149	0.375	428	606	0.0	0.6	4.978	A
D - A14 South-East	570	570	142	0	0	1300	1170	0.487	566	464	0.0	0.9	5.927	A
E - Unnamed Road North-East	20	20	5	0	0	1744	521	0.039	20	39	0.0	0.0	7.187	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	1814	453	0	1435	323	2609	0.695	1810	567	1.3	2.2	4.483	A
B - A14 North-West	1530	102	26	1435	0	787	947	0.108	102	1231	0.1	0.1	4.259	A
C - A1156 South-West	514	514	129	0	0	1506	973	0.529	512	725	0.6	1.1	7.775	A
D - A14 South-East	680	680	170	0	0	1555	998	0.682	676	554	0.9	2.1	11.020	B
E - Unnamed Road North-East	24	24	6	0	0	2086	383	0.063	24	47	0.0	0.1	10.019	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2221	2221	555	0	1758	391	2532	0.877	2204	649	2.2	6.5	10.461	B
B - A14 North-West	1874	125	31	1758	0	914	866	0.145	125	1499	0.1	0.2	4.861	A
C - A1156 South-West	630	630	158	0	0	1795	768	0.821	618	844	1.1	4.0	22.605	C
D - A14 South-East	833	833	208	0	0	1894	770	1.083	745	673	2.1	24.2	78.501	F
E - Unnamed Road North-East	29	29	7	0	0	2538	201	0.147	29	57	0.1	0.2	20.921	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2221	2221	555	0	1758	395	2528	0.879	2220	658	6.5	6.9	11.566	B
B - A14 North-West	1874	125	31	1758	0	928	857	0.146	125	1510	0.2	0.2	4.923	A
C - A1156 South-West	630	630	158	0	0	1811	756	0.833	628	853	4.0	4.5	27.287	D
D - A14 South-East	833	833	208	0	0	1907	761	1.095	756	680	24.2	43.5	168.691	F
E - Unnamed Road North-East	29	29	7	0	0	2558	193	0.153	29	57	0.2	0.2	22.010	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	1814	453	0	1435	329	2602	0.697	1832	659	6.9	2.3	4.780	A
B - A14 North-West	1530	102	26	1435	0	886	883	0.116	103	1248	0.2	0.1	4.614	A
C - A1156 South-West	514	514	129	0	0	1606	902	0.570	527	812	4.5	1.4	9.913	A
D - A14 South-East	680	680	170	0	0	1573	986	0.690	845	564	43.5	2.4	53.707	F
E - Unnamed Road North-East	24	24	6	0	0	2113	372	0.065	24	48	0.2	0.1	10.372	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1519	1519	380	0	1202	272	2665	0.570	1523	482	2.3	1.3	3.163	A
B - A14 North-West	1282	86	21	1202	0	668	1025	0.084	86	1037	0.1	0.1	3.838	A
C - A1156 South-West	431	431	108	0	0	1271	1142	0.377	434	613	1.4	0.6	5.109	A
D - A14 South-East	570	570	142	0	0	1308	1164	0.489	576	467	2.4	1.0	6.172	A
E - Unnamed Road North-East	20	20	5	0	0	1756	516	0.039	20	40	0.1	0.0	7.265	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.56	1.21	1.70	1.87			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.59	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.94	0.08	0.87	1.55	1.91			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.24	0.04	0.39	5.95	11.29			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	1.10	0.05	0.49	2.58	3.84			N/A	N/A
D - A14 South-East	2.06	0.04	0.41	5.59	10.05			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.52	0.03	0.34	11.66	34.50			N/A	N/A
B - A14 North-West	0.17	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	4.01	0.04	0.37	9.90	21.59			N/A	N/A
D - A14 South-East	24.18	4.44	20.23	45.26	54.79			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.27	0.48	0.75			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.87	0.03	0.29	6.87	22.99			N/A	N/A
B - A14 North-West	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	4.52	0.03	0.33	8.17	23.88			N/A	N/A

D - A14 South-East	43.50	11.21	38.22	76.94	91.21			N/A	N/A
E - Unnamed Road North-East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.34	0.05	0.54	6.36	10.14			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.36	0.05	0.50	3.35	5.08			N/A	N/A
D - A14 South-East	2.41	0.03	0.33	5.01	12.84			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.03	0.34	3.12	6.80			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.61	0.03	0.30	1.03	2.87			N/A	N/A
D - A14 South-East	0.97	0.03	0.27	0.97	1.40			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Operational Forecast, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Forecast	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	946	100.000
B - A14 North-West		ONE HOUR	✓	627	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	250	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	657	77	210	1
	B - A14 North-West	605	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	163	0	76	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.03	0.6	2.7	A	868	1301

B - A14 North-West	0.02	3.44	0.0	0.5	A	463	30
C - A1156 South-West	0.03	2.78	0.0	0.5	A	35	53
D - A14 South-East	0.18	2.95	0.2	0.5	A	230	345
E - Unnamed Road North-East	0.04	3.97	0.0	0.5	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	712	712	178	0	456	26	2834	0.251	711	152	0.0	0.3	1.695	A
B - A14 North-West	380	16	4	456	0	162	1112	0.015	16	520	0.0	0.0	3.284	A
C - A1156 South-West	29	29	7	0	0	653	1611	0.018	29	117	0.0	0.0	2.274	A
D - A14 South-East	188	188	47	0	0	582	1755	0.107	188	159	0.0	0.1	2.297	A
E - Unnamed Road North-East	23	23	6	0	0	718	1173	0.019	23	19	0.0	0.0	3.128	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	850	850	213	0	544	32	2826	0.301	850	182	0.3	0.4	1.820	A
B - A14 North-West	454	20	5	544	0	194	1094	0.018	20	621	0.0	0.0	3.349	A
C - A1156 South-West	34	34	9	0	0	781	1496	0.023	34	140	0.0	0.0	2.461	A
D - A14 South-East	225	225	56	0	0	696	1646	0.137	225	190	0.1	0.2	2.532	A
E - Unnamed Road North-East	27	27	7	0	0	858	1075	0.025	27	23	0.0	0.0	3.434	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1041	1041	260	0	666	39	2817	0.370	1040	223	0.4	0.6	2.027	A
B - A14 North-West	556	24	6	666	0	237	1069	0.023	24	761	0.0	0.0	3.443	A
C - A1156 South-West	42	42	11	0	0	956	1339	0.031	42	171	0.0	0.0	2.774	A
D - A14 South-East	276	276	69	0	0	852	1497	0.184	275	233	0.2	0.2	2.945	A
E - Unnamed Road North-East	33	33	8	0	0	1051	941	0.035	33	28	0.0	0.0	3.966	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1041	1041	260	0	666	39	2817	0.370	1041	223	0.6	0.6	2.027	A
B - A14 North-West	556	24	6	666	0	237	1069	0.023	24	761	0.0	0.0	3.443	A
C - A1156 South-West	42	42	11	0	0	957	1339	0.031	42	171	0.0	0.0	2.775	A
D - A14 South-East	276	276	69	0	0	852	1497	0.184	276	233	0.2	0.2	2.946	A
E - Unnamed Road North-East	33	33	8	0	0	1052	940	0.035	33	28	0.0	0.0	3.968	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	850	850	213	0	544	32	2826	0.301	851	182	0.6	0.4	1.821	A
B - A14 North-West	454	20	5	544	0	194	1094	0.018	20	622	0.0	0.0	3.350	A
C - A1156 South-West	34	34	9	0	0	782	1495	0.023	34	140	0.0	0.0	2.463	A
D - A14 South-East	225	225	56	0	0	697	1646	0.137	225	190	0.2	0.2	2.536	A
E - Unnamed Road North-East	27	27	7	0	0	859	1075	0.025	27	23	0.0	0.0	3.436	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	712	712	178	0	456	27	2833	0.251	712	152	0.4	0.3	1.696	A
B - A14 North-West	380	16	4	456	0	162	1112	0.015	16	521	0.0	0.0	3.288	A
C - A1156 South-West	29	29	7	0	0	655	1609	0.018	29	117	0.0	0.0	2.277	A
D - A14 South-East	188	188	47	0	0	583	1754	0.107	189	159	0.2	0.1	2.301	A
E - Unnamed Road North-East	23	23	6	0	0	720	1172	0.019	23	19	0.0	0.0	3.132	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.16	0.00	0.00	0.16	0.16			N/A	N/A
E - Unnamed Road North-East	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D - A14 South-East	0.22	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.03	0.29	1.33	2.74			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A

D - A14 South-East	0.23	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.16	0.00	0.00	0.16	0.16			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Forecast, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	174	75.10
B - A14 North-West	673	128.00
C - A1156 South-West	1781	80.70
D - A14 South-East	1754	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Forecast	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1649	100.000
B - A14 North-West		ONE HOUR	✓	1404	100.000
C - A1156 South-West		ONE HOUR	✓	345	100.000
D - A14 South-East		ONE HOUR	✓	587	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1158	201	286	4
	B - A14 North-West	1310	2	60	0	33
	C - A1156 South-West	162	52	0	126	6
	D - A14 South-East	349	3	220	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	2	9	33
	B - A14 North-West	9	100	5	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	4	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	4.99	2.5	5.4	A	1513	2269

B - A14 North-West	0.11	4.39	0.1	0.5	A	1256	130
C - A1156 South-West	0.53	10.61	1.1	4.8	B	317	475
D - A14 South-East	0.75	16.43	2.9	13.0	C	539	808
E - Unnamed Road North-East	0.17	13.04	0.2	0.5	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1241	1241	310	0	986	181	2634	0.471	1238	384	0.0	0.9	2.572	A
B - A14 North-West	1031	71	18	986	0	495	1074	0.066	71	946	0.0	0.1	3.589	A
C - A1156 South-West	260	260	65	0	0	1182	1116	0.233	259	363	0.0	0.3	4.195	A
D - A14 South-East	442	442	110	0	0	1105	1263	0.350	440	309	0.0	0.5	4.361	A
E - Unnamed Road North-East	39	39	10	0	0	1375	649	0.060	39	44	0.0	0.1	5.896	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1482	1482	371	0	1177	217	2593	0.572	1480	460	0.9	1.3	3.230	A
B - A14 North-West	1231	85	21	1177	0	592	1011	0.084	85	1131	0.1	0.1	3.886	A
C - A1156 South-West	310	310	78	0	0	1414	949	0.327	310	434	0.3	0.5	5.624	A
D - A14 South-East	528	528	132	0	0	1322	1095	0.482	526	370	0.5	0.9	6.310	A
E - Unnamed Road North-East	47	47	12	0	0	1645	516	0.091	47	52	0.1	0.1	7.662	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1815	1815	454	0	1442	265	2537	0.715	1811	559	1.3	2.5	4.921	A
B - A14 North-West	1508	104	26	1442	0	720	929	0.112	104	1384	0.1	0.1	4.365	A
C - A1156 South-West	380	380	95	0	0	1726	725	0.525	378	529	0.5	1.1	10.304	B
D - A14 South-East	646	646	162	0	0	1617	867	0.745	639	452	0.9	2.7	15.318	C
E - Unnamed Road North-East	57	57	14	0	0	2012	336	0.171	57	64	0.1	0.2	12.884	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1815	1815	454	0	1442	266	2536	0.716	1815	564	2.5	2.5	4.991	A
B - A14 North-West	1508	104	26	1442	0	727	925	0.113	104	1387	0.1	0.1	4.386	A
C - A1156 South-West	380	380	95	0	0	1734	719	0.529	380	533	1.1	1.1	10.605	B
D - A14 South-East	646	646	162	0	0	1621	864	0.748	646	454	2.7	2.9	16.425	C
E - Unnamed Road North-East	57	57	14	0	0	2018	333	0.172	57	64	0.2	0.2	13.045	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1482	1482	371	0	1177	219	2591	0.572	1487	467	2.5	1.3	3.275	A
B - A14 North-West	1231	85	21	1177	0	600	1006	0.085	85	1137	0.1	0.1	3.910	A
C - A1156 South-West	310	310	78	0	0	1424	942	0.330	313	439	1.1	0.5	5.747	A
D - A14 South-East	528	528	132	0	0	1328	1091	0.484	535	372	2.9	1.0	6.568	A
E - Unnamed Road North-East	47	47	12	0	0	1653	513	0.091	47	53	0.2	0.1	7.741	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1241	1241	310	0	986	183	2632	0.472	1243	387	1.3	0.9	2.595	A
B - A14 North-West	1031	71	18	986	0	499	1071	0.067	71	950	0.1	0.1	3.602	A
C - A1156 South-West	260	260	65	0	0	1188	1111	0.234	261	365	0.5	0.3	4.237	A
D - A14 South-East	442	442	110	0	0	1110	1259	0.351	444	311	1.0	0.5	4.422	A
E - Unnamed Road North-East	39	39	10	0	0	1382	646	0.061	39	44	0.1	0.1	5.936	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - A14 South-East	0.53	0.53	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.04	0.45	3.37	5.39			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.48	0.04	0.42	1.25	1.38			N/A	N/A
D - A14 South-East	0.92	0.05	0.57	1.86	2.70			N/A	N/A
E - Unnamed Road North-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.47	0.03	0.27	2.47	2.47			N/A	N/A
B - A14 North-West	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.08	0.03	0.26	1.08	1.08			N/A	N/A
D - A14 South-East	2.74	0.03	0.30	3.23	12.97			N/A	N/A
E - Unnamed Road North-East	0.20	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.49	0.03	0.26	2.49	2.49			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.10	0.03	0.29	1.38	4.75			N/A	N/A

D - A14 South-East	2.86	0.03	0.29	2.86	11.17			N/A	N/A
E - Unnamed Road North-East	0.21	0.03	0.25	0.46	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.14	1.17	2.25	2.86			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.50	0.05	0.46	1.28	1.39			N/A	N/A
D - A14 South-East	0.95	0.05	0.53	1.96	2.90			N/A	N/A
E - Unnamed Road North-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.06	0.68	1.71	2.32			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.31	0.03	0.28	0.50	0.96			N/A	N/A
D - A14 South-East	0.54	0.03	0.34	1.13	2.08			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2034 Operational Forecast, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	59.65	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	163	75.10
B - A14 North-West	957	128.00
C - A1156 South-West	2034	80.70
D - A14 South-East	2301	131.50
E - Unnamed Road North-East	2637	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Forecast	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2102	100.000
B - A14 North-West		ONE HOUR	✓	1644	100.000
C - A1156 South-West		ONE HOUR	✓	518	100.000
D - A14 South-East		ONE HOUR	✓	675	100.000
E - Unnamed Road North-East		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1266	440	392	4
	B - A14 North-West	1514	6	113	0	11
	C - A1156 South-West	264	74	0	178	2
	D - A14 South-East	366	0	293	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	4	7	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	21.37	12.9	71.6	C	1928	2893

B - A14 North-West	0.16	4.81	0.2	0.5	A	1580	179
C - A1156 South-West	0.82	28.08	4.2	22.1	D	475	713
D - A14 South-East	1.26	335.56	76.6	120.2	F	620	929
E - Unnamed Road North-East	0.78	105.86	2.7	11.3	F	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	1582	396	0	1140	244	2584	0.612	1576	478	0.0	1.6	3.551	A
B - A14 North-West	1296	98	24	1140	0	625	1030	0.095	97	1051	0.0	0.1	3.859	A
C - A1156 South-West	390	390	97	0	0	1288	1047	0.373	388	649	0.0	0.6	5.440	A
D - A14 South-East	508	508	127	0	0	1433	1026	0.495	504	430	0.0	1.0	6.849	A
E - Unnamed Road North-East	68	68	17	0	0	1795	459	0.149	68	24	0.0	0.2	9.177	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1889	1889	472	0	1361	292	2532	0.746	1884	571	1.6	2.9	5.510	A
B - A14 North-West	1548	117	29	1361	0	746	950	0.123	117	1256	0.1	0.1	4.322	A
C - A1156 South-West	466	466	116	0	0	1539	874	0.533	464	776	0.6	1.1	8.719	A
D - A14 South-East	607	607	152	0	0	1713	843	0.720	601	514	1.0	2.4	14.558	B
E - Unnamed Road North-East	82	82	20	0	0	2146	320	0.255	81	29	0.2	0.3	15.044	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2314	2314	578	0	1667	351	2468	0.938	2280	620	2.9	11.4	16.753	C
B - A14 North-West	1896	143	36	1667	0	829	895	0.160	143	1517	0.1	0.2	4.782	A
C - A1156 South-West	570	570	143	0	0	1786	704	0.810	560	883	1.1	3.7	23.483	C
D - A14 South-East	743	743	186	0	0	2070	609	1.220	599	622	2.4	38.5	139.169	F
E - Unnamed Road North-East	100	100	25	0	0	2598	140	0.714	94	33	0.3	1.9	70.322	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2314	2314	578	0	1667	354	2465	0.939	2308	621	11.4	12.9	21.373	C
B - A14 North-West	1896	143	36	1667	0	832	893	0.160	143	1538	0.2	0.2	4.798	A
C - A1156 South-West	570	570	143	0	0	1801	693	0.823	568	887	3.7	4.2	28.079	D
D - A14 South-East	743	743	186	0	0	2097	592	1.256	591	630	38.5	76.6	335.561	F
E - Unnamed Road North-East	100	100	25	0	0	2630	128	0.784	97	32	1.9	2.7	105.864	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1889	1889	472	0	1361	301	2522	0.749	1929	687	12.9	3.1	6.461	A
B - A14 North-West	1548	117	29	1361	0	872	865	0.135	117	1291	0.2	0.2	4.811	A
C - A1156 South-West	466	466	116	0	0	1686	773	0.602	476	875	4.2	1.6	12.527	B
D - A14 South-East	607	607	152	0	0	1759	812	0.747	802	527	76.6	27.9	235.992	F
E - Unnamed Road North-East	82	82	20	0	0	2196	300	0.272	91	34	2.7	0.4	17.908	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	1582	396	0	1140	249	2578	0.614	1588	542	3.1	1.6	3.659	A
B - A14 North-West	1296	98	24	1140	0	693	984	0.099	98	1060	0.2	0.1	4.065	A
C - A1156 South-West	390	390	97	0	0	1359	998	0.391	394	701	1.6	0.6	5.992	A
D - A14 South-East	508	508	127	0	0	1445	1018	0.499	616	435	27.9	1.0	11.776	B
E - Unnamed Road North-East	68	68	17	0	0	1810	453	0.151	69	27	0.4	0.2	9.388	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.44	1.41	2.31	2.80			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.59	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.97	0.05	0.49	2.06	3.06			N/A	N/A
E - Unnamed Road North-East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.87	0.04	0.40	7.76	14.62			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	1.12	0.05	0.59	2.52	3.67			N/A	N/A
D - A14 South-East	2.44	0.04	0.40	6.61	12.18			N/A	N/A
E - Unnamed Road North-East	0.34	0.03	0.28	0.53	1.02			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.43	0.05	0.84	33.19	59.02			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.75	0.04	0.37	9.16	20.15			N/A	N/A
D - A14 South-East	38.51	15.92	35.82	59.50	67.68			N/A	N/A
E - Unnamed Road North-East	1.94	0.04	0.37	5.01	9.84			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.92	0.04	0.39	30.63	71.58			N/A	N/A
B - A14 North-West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	4.21	0.03	0.33	7.40	22.09			N/A	N/A

D - A14 South-East	76.58	40.80	73.51	108.58	120.20			N/A	N/A
E - Unnamed Road North-East	2.67	0.06	0.82	7.24	11.26			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.06	0.04	0.44	8.55	15.03			N/A	N/A
B - A14 North-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A1156 South-West	1.56	0.06	0.81	3.73	5.46			N/A	N/A
D - A14 South-East	27.89	10.84	25.66	43.63	49.87			N/A	N/A
E - Unnamed Road North-East	0.38	0.03	0.33	1.12	1.12			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.03	0.31	2.71	8.20			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.65	0.03	0.31	1.25	3.04			N/A	N/A
D - A14 South-East	1.02	0.03	0.26	1.02	1.02			N/A	N/A
E - Unnamed Road North-East	0.18	0.03	0.28	0.50	1.16			N/A	N/A

2034 Operational Forecast, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	18.83	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	137	75.10
B - A14 North-West	1028	128.00
C - A1156 South-West	1786	80.70
D - A14 South-East	2097	131.50
E - Unnamed Road North-East	2479	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Forecast	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1849	100.000
B - A14 North-West		ONE HOUR	✓	1434	100.000
C - A1156 South-West		ONE HOUR	✓	576	100.000
D - A14 South-East		ONE HOUR	✓	734	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1065	433	346	4
	B - A14 North-West	1346	4	42	0	41
	C - A1156 South-West	339	79	4	149	5
	D - A14 South-East	414	0	319	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.62	3.7	9.1	A	1697	2545

B - A14 North-West	0.13	5.46	0.1	0.5	A	1281	120
C - A1156 South-West	0.79	20.88	3.5	16.9	C	529	793
D - A14 South-East	0.99	75.69	16.7	64.5	F	673	1010
E - Unnamed Road North-East	0.15	14.65	0.2	0.5	B	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1392	1392	348	0	1014	185	2674	0.520	1388	569	0.0	1.1	2.789	A
B - A14 North-West	1051	66	16	1014	0	688	945	0.070	65	881	0.0	0.1	4.091	A
C - A1156 South-West	434	434	108	0	0	1138	1192	0.364	431	600	0.0	0.6	4.716	A
D - A14 South-East	553	553	138	0	0	1189	1210	0.457	549	375	0.0	0.8	5.424	A
E - Unnamed Road North-East	29	29	7	0	0	1534	608	0.048	29	38	0.0	0.1	6.218	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1662	1662	416	0	1210	221	2634	0.631	1660	680	1.1	1.7	3.685	A
B - A14 North-West	1255	79	20	1210	0	823	863	0.091	78	1054	0.1	0.1	4.587	A
C - A1156 South-West	518	518	129	0	0	1361	1026	0.505	516	717	0.6	1.0	7.034	A
D - A14 South-East	660	660	165	0	0	1422	1046	0.631	656	448	0.8	1.7	9.164	A
E - Unnamed Road North-East	35	35	9	0	0	1835	474	0.074	35	46	0.1	0.1	8.200	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2036	2036	509	0	1483	269	2581	0.789	2028	808	1.7	3.6	6.422	A
B - A14 North-West	1538	96	24	1483	0	981	767	0.125	96	1287	0.1	0.1	5.364	A
C - A1156 South-West	634	634	159	0	0	1643	816	0.777	625	861	1.0	3.2	18.144	C
D - A14 South-East	808	808	202	0	0	1737	824	0.980	767	546	1.7	12.0	45.695	E
E - Unnamed Road North-East	43	43	11	0	0	2241	293	0.146	42	56	0.1	0.2	14.362	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2036	2036	509	0	1483	271	2578	0.789	2035	825	3.6	3.7	6.620	A
B - A14 North-West	1538	96	24	1483	0	1001	755	0.127	96	1293	0.1	0.1	5.462	A
C - A1156 South-West	634	634	159	0	0	1660	803	0.790	633	873	3.2	3.5	20.882	C
D - A14 South-East	808	808	202	0	0	1744	820	0.986	789	549	12.0	16.7	75.694	F
E - Unnamed Road North-East	43	43	11	0	0	2250	289	0.148	43	56	0.2	0.2	14.647	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1662	1662	416	0	1210	225	2630	0.632	1670	723	3.7	1.7	3.777	A
B - A14 North-West	1255	79	20	1210	0	869	835	0.094	79	1062	0.1	0.1	4.761	A
C - A1156 South-West	518	518	129	0	0	1403	995	0.520	528	747	3.5	1.1	7.848	A
D - A14 South-East	660	660	165	0	0	1431	1040	0.635	719	453	16.7	1.8	13.377	B
E - Unnamed Road North-East	35	35	9	0	0	1848	468	0.075	35	46	0.2	0.1	8.331	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1392	1392	348	0	1014	187	2673	0.521	1394	575	1.7	1.1	2.821	A
B - A14 North-West	1051	66	16	1014	0	696	941	0.070	66	886	0.1	0.1	4.117	A
C - A1156 South-West	434	434	108	0	0	1146	1186	0.366	436	605	1.1	0.6	4.811	A
D - A14 South-East	553	553	138	0	0	1195	1205	0.458	556	377	1.8	0.9	5.576	A
E - Unnamed Road North-East	29	29	7	0	0	1542	604	0.048	29	39	0.1	0.1	6.265	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.57	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.83	0.18	0.94	1.42	1.48			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.69	0.04	0.41	4.51	7.89			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	1.00	0.05	0.53	2.15	3.15			N/A	N/A
D - A14 South-East	1.66	0.04	0.41	4.45	7.66			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.61	0.03	0.28	3.61	9.07			N/A	N/A
B - A14 North-West	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.20	0.03	0.33	5.84	16.88			N/A	N/A
D - A14 South-East	12.01	0.23	6.05	30.41	41.98			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.68	0.03	0.27	3.68	3.68			N/A	N/A
B - A14 North-West	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	3.52	0.03	0.31	3.90	16.42			N/A	N/A

D - A14 South-East	16.71	0.17	6.86	45.01	64.47			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.08	1.10	3.88	5.45			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	1.10	0.05	0.49	2.57	3.81			N/A	N/A
D - A14 South-East	1.79	0.03	0.34	4.22	9.35			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.04	0.43	2.69	4.26			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.58	0.03	0.32	1.22	2.57			N/A	N/A
D - A14 South-East	0.86	0.03	0.28	0.86	2.64			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Forecast, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	35.35	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	164	75.10
B - A14 North-West	909	128.00
C - A1156 South-West	1886	80.70
D - A14 South-East	2154	131.50
E - Unnamed Road North-East	2582	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Forecast	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2022	100.000
B - A14 North-West		ONE HOUR	✓	1714	100.000
C - A1156 South-West		ONE HOUR	✓	565	100.000
D - A14 South-East		ONE HOUR	✓	757	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1282	337	400	1
	B - A14 North-West	1600	3	89	0	22
	C - A1156 South-West	237	77	0	222	29
	D - A14 South-East	384	0	373	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	2	1	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	12.00	7.1	36.2	B	1856	2784

B - A14 North-West	0.15	4.89	0.2	0.5	A	1566	157
C - A1156 South-West	0.83	26.90	4.4	23.1	D	519	778
D - A14 South-East	1.10	173.52	44.8	92.5	F	695	1042
E - Unnamed Road North-East	0.16	22.53	0.2	0.8	C	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1523	1523	381	0	1205	273	2664	0.572	1517	466	0.0	1.3	3.125	A
B - A14 North-West	1285	86	21	1205	0	654	1033	0.083	85	1037	0.0	0.1	3.799	A
C - A1156 South-West	426	426	106	0	0	1267	1145	0.372	423	603	0.0	0.6	4.974	A
D - A14 South-East	570	570	142	0	0	1304	1167	0.488	566	467	0.0	0.9	5.951	A
E - Unnamed Road North-East	20	20	5	0	0	1751	518	0.039	20	39	0.0	0.0	7.228	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1818	1818	455	0	1439	327	2604	0.698	1814	556	1.3	2.3	4.537	A
B - A14 North-West	1534	102	26	1439	0	781	950	0.108	102	1239	0.1	0.1	4.244	A
C - A1156 South-West	508	508	127	0	0	1514	968	0.525	506	721	0.6	1.1	7.761	A
D - A14 South-East	680	680	170	0	0	1560	995	0.684	676	559	0.9	2.1	11.113	B
E - Unnamed Road North-East	24	24	6	0	0	2094	380	0.063	24	47	0.0	0.1	10.109	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2227	2227	557	0	1762	397	2526	0.881	2209	635	2.3	6.8	10.785	B
B - A14 North-West	1879	125	31	1762	0	906	870	0.144	125	1508	0.1	0.2	4.830	A
C - A1156 South-West	622	622	156	0	0	1803	762	0.817	611	839	1.1	3.9	22.376	C
D - A14 South-East	833	833	208	0	0	1899	767	1.087	743	678	2.1	24.8	80.138	F
E - Unnamed Road North-East	29	29	7	0	0	2548	197	0.149	29	57	0.1	0.2	21.346	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2227	2227	557	0	1762	401	2521	0.883	2225	644	6.8	7.1	12.004	B
B - A14 North-West	1879	125	31	1762	0	919	862	0.146	125	1520	0.2	0.2	4.889	A
C - A1156 South-West	622	622	156	0	0	1819	751	0.829	620	847	3.9	4.4	26.897	D
D - A14 South-East	833	833	208	0	0	1913	757	1.100	753	685	24.8	44.8	173.520	F
E - Unnamed Road North-East	29	29	7	0	0	2569	189	0.156	29	57	0.2	0.2	22.526	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1818	1818	455	0	1439	334	2597	0.700	1837	651	7.1	2.4	4.854	A
B - A14 North-West	1534	102	26	1439	0	882	884	0.116	103	1256	0.2	0.1	4.604	A
C - A1156 South-West	508	508	127	0	0	1618	894	0.568	520	811	4.4	1.3	9.937	A
D - A14 South-East	680	680	170	0	0	1579	982	0.693	850	569	44.8	2.4	58.066	F
E - Unnamed Road North-East	24	24	6	0	0	2123	368	0.065	24	48	0.2	0.1	10.482	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1523	1523	381	0	1205	276	2661	0.572	1527	473	2.4	1.3	3.186	A
B - A14 North-West	1285	86	21	1205	0	663	1027	0.084	86	1043	0.1	0.1	3.825	A
C - A1156 South-West	426	426	106	0	0	1278	1137	0.374	429	610	1.3	0.6	5.105	A
D - A14 South-East	570	570	142	0	0	1312	1162	0.490	576	471	2.4	1.0	6.204	A
E - Unnamed Road North-East	20	20	5	0	0	1763	513	0.039	20	40	0.1	0.0	7.305	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.56	1.23	1.72	1.89			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.59	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.94	0.08	0.87	1.58	1.93			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.28	0.04	0.39	6.03	11.47			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	1.09	0.05	0.49	2.52	3.75			N/A	N/A
D - A14 South-East	2.08	0.04	0.41	5.63	10.16			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.75	0.03	0.34	12.85	36.22			N/A	N/A
B - A14 North-West	0.17	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.92	0.04	0.37	9.51	21.05			N/A	N/A
D - A14 South-East	24.76	4.81	20.86	45.89	55.37			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.27	0.48	0.76			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.14	0.03	0.29	7.14	25.57			N/A	N/A
B - A14 North-West	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	4.40	0.03	0.33	7.77	23.13			N/A	N/A

D - A14 South-East	44.85	12.21	39.70	78.36	92.54			N/A	N/A
E - Unnamed Road North-East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.37	0.05	0.50	6.49	10.44			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.35	0.05	0.52	3.29	4.96			N/A	N/A
D - A14 South-East	2.45	0.03	0.33	5.11	13.06			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.03	0.34	3.09	6.88			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.60	0.03	0.31	1.03	2.83			N/A	N/A
D - A14 South-East	0.98	0.03	0.27	0.98	1.36			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

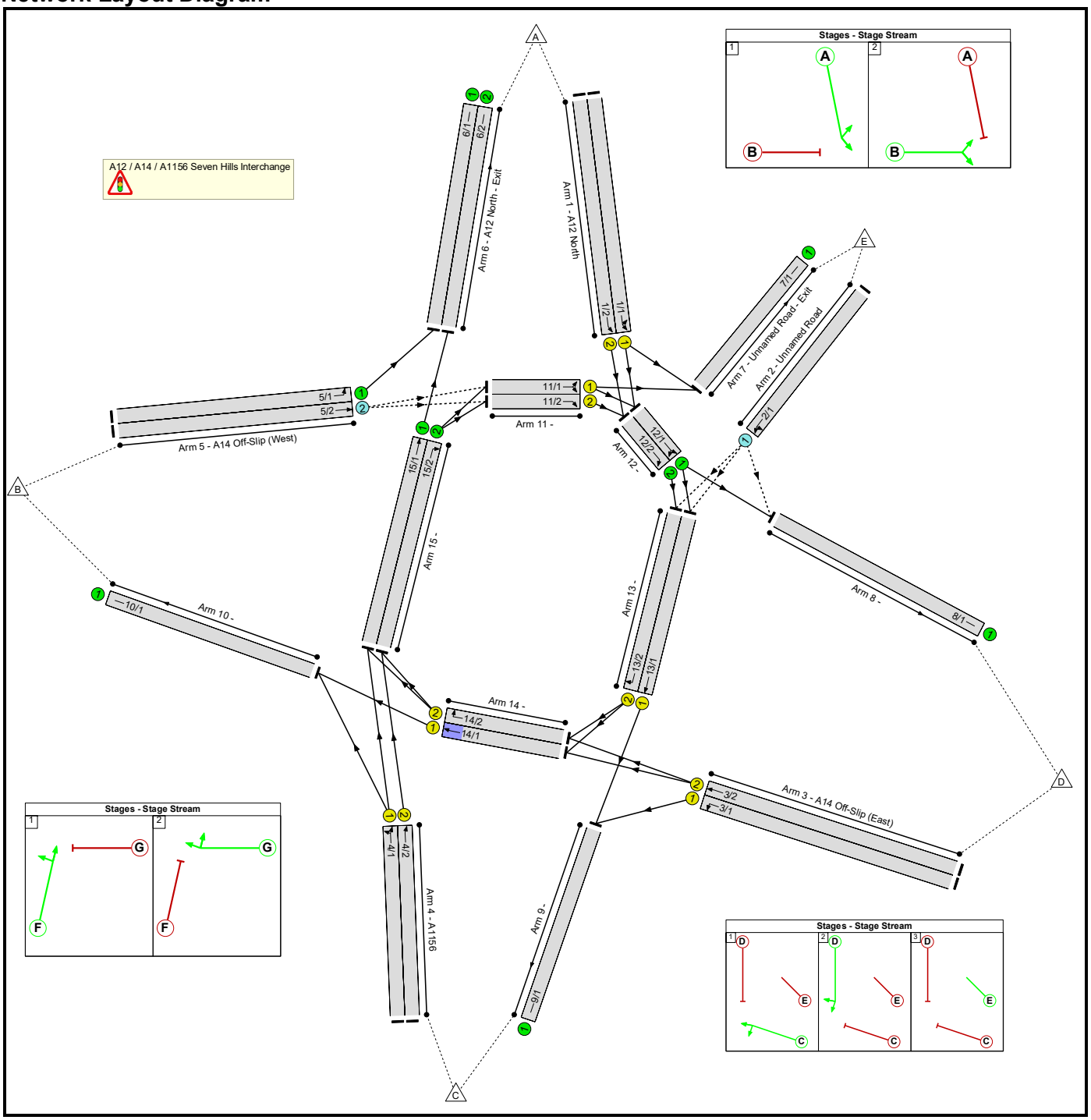
Full Input Data And Results

User and Project Details

Project:	**Sizewell C**
Title:	**Junction 21 mitigation measures**
Location:	
Additional detail:	
File name:	2019.10.17 J21_Model_v16 Mitigation (update).lsg3x
Author:	Chris Rice
Company:	WSP
Address:	Keble House, Southernhay Gardens, Exeter

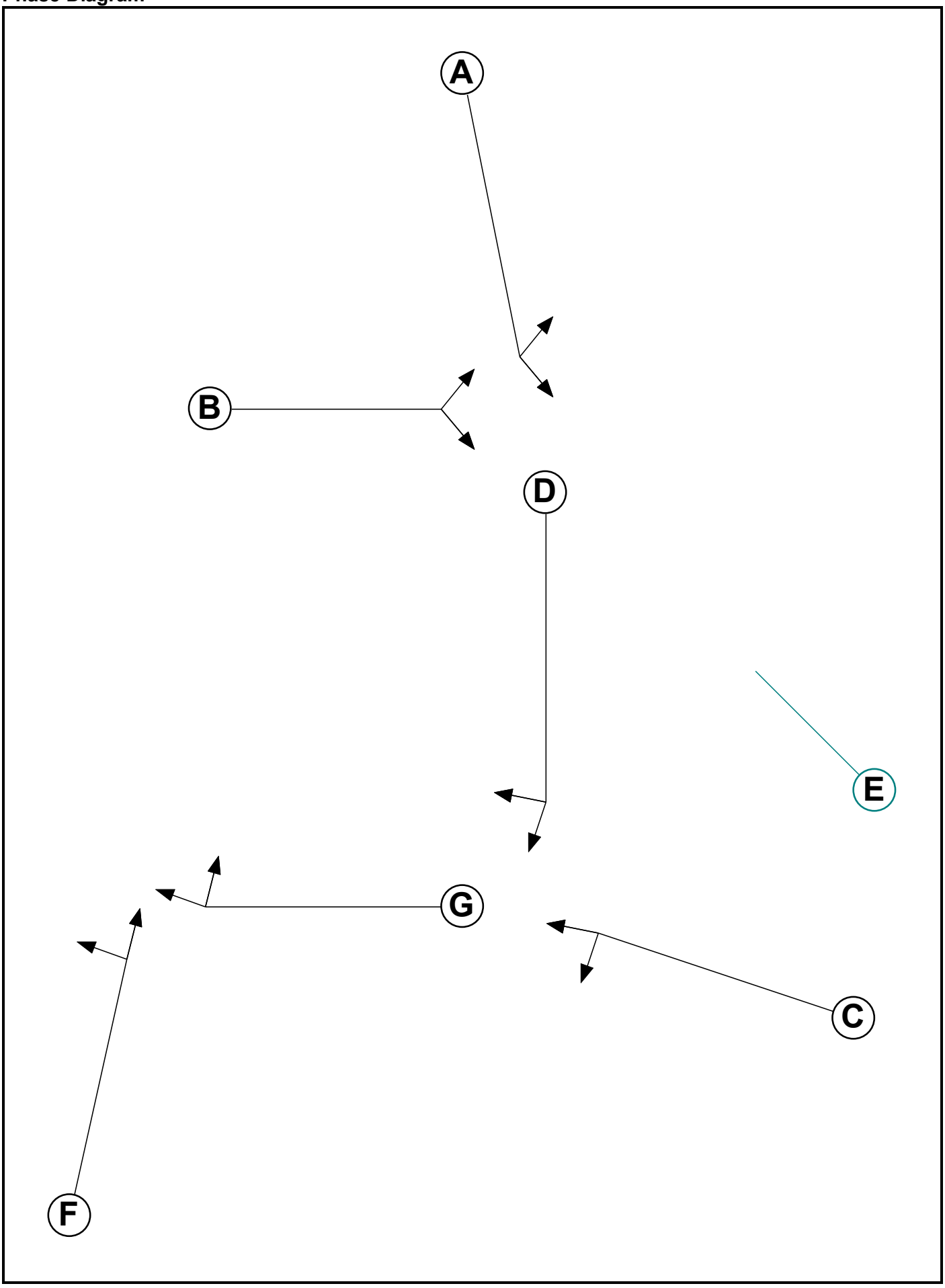
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7
E	Dummy	2		3	3
F	Traffic	3		7	7
G	Traffic	3		7	7

Phase Intergreens Matrix

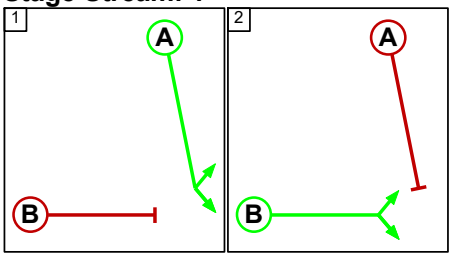
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G
A		5	-	-	-	-	-
B	5		-	-	-	-	-
C	-	-		5	3	-	-
D	-	-	5		3	-	-
E	-	-	2	2		-	-
F	-	-	-	-	-		5
G	-	-	-	-	-	5	

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D
2	3	E
3	1	F
3	2	G

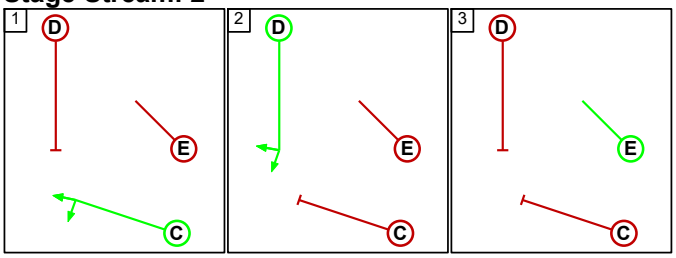
Stage Diagram

Stage Stream: 1

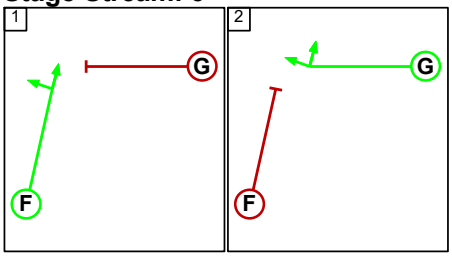


Full Input Data And Results

Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

	To Stage		
		1	2
From Stage	1		5
	2	5	

Stage Stream: 2

	To Stage			
		1	2	3
From Stage	1		5	3
	2	5		3
	3	2	2	

Full Input Data And Results

Stage Stream: 3

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Unnamed Road)	8/1 (Left)	1000	0	12/1	0.33	All	-	-	-	-	-
				12/2	0.33	All					
	13/1 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					
	13/2 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					
5/2 (A14 Off-Slip (West))	11/1 (Ahead)	1000	0	15/1	0.33	All	-	-	-	-	-
				15/2	0.33	All					
	11/2 (Ahead)	1000	0	15/1	0.33	All					
				15/2	0.33	All					

Full Input Data And Results

Lane Input Data

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A12 North)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 7 Left	24.50
											Arm 12 Ahead	24.50
1/2 (A12 North)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 12 Ahead	24.50
2/1 (Unnamed Road)	O		2	3	34.8	Geom	-	3.50	0.00	Y	Arm 8 Left	29.90
											Arm 13 Ahead	29.90
3/1 (A14 Off-Slip (East))	U	C	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 9 Left	44.60
3/2 (A14 Off-Slip (East))	U	C	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 14 Ahead	44.60
4/1 (A1156)	U	F	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 10 Left	45.40
											Arm 15 Ahead	45.40
4/2 (A1156)	U	F	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 15 Ahead	45.40
5/1 (A14 Off-Slip (West))	U		2	3	34.8	Inf	-	-	-	-	-	-
5/2 (A14 Off-Slip (West))	O		2	3	34.8	Geom	-	3.25	0.00	Y	Arm 11 Ahead	40.50
6/1 (A12 North - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
6/2 (A12 North - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
7/1 (Unnamed Road - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
8/1	U		2	3	34.8	Inf	-	-	-	-	-	-
9/1	U		2	3	34.8	Inf	-	-	-	-	-	-
10/1	U		2	3	34.8	Inf	-	-	-	-	-	-
11/1	U	B	2	3	14.8	Geom	-	3.50	0.00	Y	Arm 7 Left	36.00
											Arm 12 Right	36.00
11/2	U	B	2	3	14.8	Geom	-	3.50	0.00	Y	Arm 12 Right	36.00
12/1	U		2	3	8.7	Inf	-	-	-	-	-	-
12/2	U		2	3	8.7	Inf	-	-	-	-	-	-

Full Input Data And Results

13/1	U	D	2	3	26.1	Geom	-	3.25	0.00	Y	Arm 9 Ahead	45.00
13/2	U	D	2	3	26.1	Geom	-	3.25	0.00	Y	Arm 14 Right	45.00
14/1	U	G	2	3	14.8	Geom	-	3.25	0.00	N	Arm 10 Ahead	41.00
14/2	U	G	2	3	14.8	Geom	-	3.25	0.00	Y	Arm 15 Right	41.00
15/1	U		2	3	30.4	Inf	-	-	-	-	-	-
15/2	U		2	3	30.4	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'BY 06:00-07:00'	06:00	07:00	01:00	
2: 'BY 07:00-08:00'	07:00	08:00	01:00	
3: 'BY 08:00-09:00'	08:00	09:00	01:00	
4: 'BY 15:00-16:00'	15:00	16:00	01:00	
5: 'BY 17:00-18:00'	17:00	18:00	01:00	
6: '23RC 06:00-07:00'	06:00	07:00	01:00	
7: '23RC 07:00-08:00'	07:00	08:00	01:00	
8: '23RC 08:00-09:00'	08:00	09:00	01:00	
9: '23RC 15:00-16:00'	15:00	16:00	01:00	
10: '23RC 17:00-18:00'	17:00	18:00	01:00	
11: '23EY 06:00-07:00'	06:00	07:00	01:00	
12: '23EY 07:00-08:00'	07:00	08:00	01:00	
13: '23EY 08:00-09:00'	08:00	09:00	01:00	
14: '23EY 15:00-16:00'	15:00	16:00	01:00	
15: '23EY 17:00-18:00'	17:00	18:00	01:00	
16: '28RC 06:00-07:00'	06:00	07:00	01:00	
17: '28RC 07:00-08:00'	07:00	08:00	01:00	
18: '28RC 08:00-09:00'	08:00	09:00	01:00	
19: '28RC 15:00-16:00'	15:00	16:00	01:00	
20: '28RC 17:00-18:00'	17:00	18:00	01:00	
21: '28PC 06:00-07:00'	06:00	07:00	01:00	
22: '28PC 07:00-08:00'	07:00	08:00	01:00	
23: '28PC 08:00-09:00'	08:00	09:00	01:00	
24: '28PC 15:00-16:00'	15:00	16:00	01:00	
25: '28PC 17:00-18:00'	17:00	18:00	01:00	
26: '34RC 06:00-07:00'	06:00	07:00	01:00	
27: '34RC 07:00-08:00'	07:00	08:00	01:00	
28: '34RC 08:00-09:00'	08:00	09:00	01:00	
29: '34RC 15:00-16:00'	15:00	16:00	01:00	
30: '34RC 17:00-18:00'	17:00	18:00	01:00	
31: '34OP 06:00-07:00'	06:00	07:00	01:00	
32: '34OP 07:00-08:00'	07:00	08:00	01:00	
33: '34OP 08:00-09:00'	08:00	09:00	01:00	
34: '34OP 15:00-16:00'	15:00	16:00	01:00	
35: '34OP 17:00-18:00'	17:00	18:00	01:00	

Scenario 1: 'BY 06:00-07:00' (FG1: 'BY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	643	71	210	1	925
	B	600	21	3	0	10	634
	C	29	7	0	135	2	173
	D	161	0	70	0	10	241
	E	8	17	0	1	0	26
	Tot.	798	688	144	346	23	1999

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: BY 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	282
1/2	643
2/1	26
3/1	70
3/2	171
4/1	36
4/2	137
5/1	600
5/2	34
6/1	600
6/2	198
7/1	23
8/1	346
9/1	144
10/1	688
11/1	160
11/2	21
12/1	419
12/2	664
13/1	74
13/2	689
14/1	681
14/2	179
15/1	198
15/2	147

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.8 %	1871	1871
				Arm 13 Ahead	29.90	96.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	13.8 %	1886	1886
				Arm 12 Right	36.00	86.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: 'BY 07:00-08:00' (FG2: 'BY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1143	184	286	4	1617
	B	1252	6	66	0	32	1356
	C	158	59	0	154	10	381
	D	342	4	205	0	13	564
	E	2	43	5	1	0	51
	Tot.	1754	1255	460	441	59	3969

Traffic Lane Flows

Lane	Scenario 2: BY 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	474
1/2	1143
2/1	51
3/1	205
3/2	359
4/1	217
4/2	164
5/1	1252
5/2	104
6/1	1252
6/2	502
7/1	59
8/1	441
9/1	460
10/1	1255
11/1	275
11/2	6
12/1	690
12/2	1149
13/1	255
13/2	1194
14/1	1196
14/2	357
15/1	502
15/2	177

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	2.0 %	1871	1871
				Arm 13 Ahead	29.90	98.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	27.2 %	1878	1878
				Arm 15 Ahead	45.40	72.8 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	20.0 %	1886	1886
				Arm 12 Right	36.00	80.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'BY 08:00-09:00' (FG3: 'BY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1215	312	402	3	1932
	B	1546	12	113	0	9	1680
	C	263	81	0	216	2	562
	D	375	0	233	0	14	622
	E	8	60	19	4	0	91
	Tot.	2192	1368	677	622	28	4887

Traffic Lane Flows

Lane	Scenario 3: BY 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	717
1/2	1215
2/1	91
3/1	233
3/2	389
4/1	344
4/2	218
5/1	1546
5/2	134
6/1	1546
6/2	646
7/1	28
8/1	622
9/1	677
10/1	1368
11/1	354
11/2	12
12/1	1043
12/2	1227
13/1	444
13/2	1295
14/1	1287
14/2	397
15/1	646
15/2	232

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.4 %	1871	1871
				Arm 13 Ahead	29.90	95.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	23.5 %	1878	1878
				Arm 15 Ahead	45.40	76.5 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	7.1 %	1886	1886
				Arm 12 Right	36.00	92.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: 'BY 15:00-16:00' (FG4: 'BY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1047	291	313	5	1657
	B	1189	4	44	0	41	1278
	C	287	83	4	139	3	516
	D	357	0	190	0	1	548
	E	5	25	2	3	0	35
	Tot.	1839	1159	531	455	50	4034

Traffic Lane Flows

Lane	Scenario 4: BY 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	609
1/2	1048
2/1	35
3/1	190
3/2	358
4/1	370
4/2	146
5/1	1189
5/2	89
6/1	1189
6/2	650
7/1	50
8/1	455
9/1	531
10/1	1159
11/1	232
11/2	4
12/1	791
12/2	1052
13/1	341
13/2	1082
14/1	1076
14/2	364
15/1	650
15/2	147

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	8.6 %	1871	1871
				Arm 13 Ahead	29.90	91.4 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.4 %	1878	1878
				Arm 15 Ahead	45.40	77.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	19.4 %	1886	1886
				Arm 12 Right	36.00	80.6 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: 'BY 17:00-18:00' (FG5: 'BY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1034	233	378	1	1647
	B	1322	5	89	0	20	1436
	C	201	77	0	182	24	484
	D	373	0	269	0	0	642
	E	0	19	5	1	0	25
	Tot.	1897	1135	596	561	45	4234

Traffic Lane Flows

Lane	Scenario 5: BY 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	612
1/2	1035
2/1	25
3/1	269
3/2	373
4/1	278
4/2	206
5/1	1322
5/2	114
6/1	1322
6/2	575
7/1	45
8/1	561
9/1	596
10/1	1135
11/1	315
11/2	5
12/1	882
12/2	1040
13/1	327
13/2	1059
14/1	1058
14/2	374
15/1	575
15/2	206

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.2 %	1866	1866
				Arm 12 Ahead	24.50	99.8 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.0 %	1871	1871
				Arm 13 Ahead	29.90	96.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	27.7 %	1878	1878
				Arm 15 Ahead	45.40	72.3 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.0 %	1886	1886
				Arm 12 Right	36.00	86.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '23RC 06:00-07:00' (FG6: '23RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	686	71	216	1	974
	B	623	21	3	0	11	658
	C	29	7	0	142	2	180
	D	166	0	74	0	11	251
	E	9	19	0	1	0	29
	Tot.	827	733	148	359	25	2092

Traffic Lane Flows

Lane	Scenario 6: 23RC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	288
1/2	686
2/1	29
3/1	74
3/2	177
4/1	36
4/2	144
5/1	623
5/2	35
6/1	623
6/2	204
7/1	25
8/1	359
9/1	148
10/1	733
11/1	169
11/2	21
12/1	432
12/2	707
13/1	74
13/2	735
14/1	726
14/2	186
15/1	204
15/2	155

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.2 %	1886	1886
				Arm 12 Right	36.00	85.8 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '23RC 07:00-08:00' (FG7: '23RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1195	197	297	4	1693
	B	1310	6	66	0	35	1417
	C	168	59	0	175	11	413
	D	354	4	187	0	14	559
	E	2	47	5	1	0	55
	Tot.	1834	1311	455	473	64	4137

Traffic Lane Flows

Lane	Scenario 7: 23RC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	498
1/2	1195
2/1	55
3/1	187
3/2	372
4/1	227
4/2	186
5/1	1310
5/2	107
6/1	1310
6/2	524
7/1	64
8/1	473
9/1	455
10/1	1311
11/1	301
11/2	6
12/1	735
12/2	1201
13/1	268
13/2	1250
14/1	1252
14/2	370
15/1	524
15/2	200

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.8 %	1871	1871
				Arm 13 Ahead	29.90	98.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	19.9 %	1886	1886
				Arm 12 Right	36.00	80.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '23RC 08:00-09:00' (FG8: '23RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1284	287	411	3	1985
	B	1637	12	113	0	10	1772
	C	284	81	0	256	2	623
	D	389	0	257	0	15	661
	E	9	66	21	4	0	100
	Tot.	2319	1443	678	671	30	5141

Traffic Lane Flows

Lane	Scenario 8: 23RC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	701
1/2	1284
2/1	100
3/1	257
3/2	404
4/1	365
4/2	258
5/1	1637
5/2	135
6/1	1637
6/2	682
7/1	30
8/1	671
9/1	678
10/1	1443
11/1	396
11/2	12
12/1	1067
12/2	1296
13/1	421
13/2	1371
14/1	1362
14/2	413
15/1	682
15/2	273

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.0 %	1871	1871
				Arm 13 Ahead	29.90	96.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.2 %	1878	1878
				Arm 15 Ahead	45.40	77.8 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	6.8 %	1886	1886
				Arm 12 Right	36.00	93.2 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '23RC 15:00-16:00' (FG9: '23RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1085	322	328	5	1741
	B	1290	4	44	0	45	1383
	C	300	83	4	173	4	564
	D	380	0	235	0	1	616
	E	6	27	2	3	0	38
	Tot.	1977	1199	607	504	55	4342

Traffic Lane Flows

Lane	Scenario 9: 23RC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	655
1/2	1086
2/1	38
3/1	235
3/2	381
4/1	383
4/2	181
5/1	1290
5/2	93
6/1	1290
6/2	687
7/1	55
8/1	504
9/1	607
10/1	1199
11/1	271
11/2	4
12/1	871
12/2	1090
13/1	372
13/2	1123
14/1	1116
14/2	388
15/1	687
15/2	182

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	7.9 %	1871	1871
				Arm 13 Ahead	29.90	92.1 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	21.7 %	1878	1878
				Arm 15 Ahead	45.40	78.3 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	18.5 %	1886	1886
				Arm 12 Right	36.00	81.5 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '23RC 17:00-18:00' (FG10: '23RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1084	252	393	1	1731
	B	1352	5	89	0	22	1468
	C	234	77	0	213	27	551
	D	382	0	318	0	0	700
	E	0	21	6	1	0	28
	Tot.	1969	1187	665	607	50	4478

Traffic Lane Flows

Lane	Scenario 10: 23RC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	646
1/2	1085
2/1	28
3/1	318
3/2	382
4/1	311
4/2	240
5/1	1352
5/2	116
6/1	1352
6/2	617
7/1	50
8/1	607
9/1	665
10/1	1187
11/1	351
11/2	5
12/1	947
12/2	1090
13/1	347
13/2	1111
14/1	1110
14/2	383
15/1	617
15/2	240

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.2 %	1866	1866
				Arm 12 Ahead	24.50	99.8 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.6 %	1871	1871
				Arm 13 Ahead	29.90	96.4 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	24.8 %	1878	1878
				Arm 15 Ahead	45.40	75.2 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.0 %	1886	1886
				Arm 12 Right	36.00	86.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '23EY 06:00-07:00' (FG11: '23EY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	690	79	216	1	986
	B	714	21	6	0	11	752
	C	29	7	0	142	2	180
	D	178	0	74	0	11	263
	E	9	19	0	1	0	29
	Tot.	930	737	159	359	25	2210

Traffic Lane Flows

Lane	Scenario 11: 23EY 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	296
1/2	690
2/1	29
3/1	74
3/2	189
4/1	36
4/2	144
5/1	714
5/2	38
6/1	714
6/2	216
7/1	25
8/1	359
9/1	159
10/1	737
11/1	172
11/2	21
12/1	443
12/2	711
13/1	85
13/2	739
14/1	730
14/2	198
15/1	216
15/2	155

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.0 %	1886	1886
				Arm 12 Right	36.00	86.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '23EY 07:00-08:00' (FG12: '23EY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1197	241	291	4	1733
	B	1447	6	72	0	35	1560
	C	168	59	0	175	11	413
	D	393	4	190	0	14	601
	E	2	47	5	1	0	55
	Tot.	2010	1313	508	467	64	4362

Traffic Lane Flows

Lane	Scenario 12: 23EY 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	536
1/2	1197
2/1	55
3/1	190
3/2	411
4/1	227
4/2	186
5/1	1447
5/2	113
6/1	1447
6/2	563
7/1	64
8/1	467
9/1	508
10/1	1313
11/1	307
11/2	6
12/1	779
12/2	1203
13/1	318
13/2	1252
14/1	1254
14/2	409
15/1	563
15/2	200

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.7 %	1866	1866
				Arm 12 Ahead	24.50	99.3 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.8 %	1871	1871
				Arm 13 Ahead	29.90	98.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	19.5 %	1886	1886
				Arm 12 Right	36.00	80.5 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '23EY 08:00-09:00' (FG13: '23EY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1316	302	417	3	2038
	B	1742	12	121	0	10	1885
	C	284	84	0	270	2	640
	D	409	0	258	0	15	682
	E	9	66	21	4	0	100
	Tot.	2444	1478	702	691	30	5345

Traffic Lane Flows

Lane	Scenario 13: 23EY 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	722
1/2	1316
2/1	100
3/1	258
3/2	424
4/1	368
4/2	272
5/1	1742
5/2	143
6/1	1742
6/2	702
7/1	30
8/1	691
9/1	702
10/1	1478
11/1	418
11/2	12
12/1	1110
12/2	1328
13/1	444
13/2	1403
14/1	1394
14/2	433
15/1	702
15/2	287

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.0 %	1871	1871
				Arm 13 Ahead	29.90	96.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.8 %	1878	1878
				Arm 15 Ahead	45.40	77.2 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	6.5 %	1886	1886
				Arm 12 Right	36.00	93.5 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '23EY 15:00-16:00' (FG14: '23EY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1118	323	345	5	1792
	B	1329	4	46	0	45	1424
	C	300	85	4	173	4	566
	D	394	0	235	0	1	630
	E	6	27	2	3	0	38
	Tot.	2030	1234	610	521	55	4450

Traffic Lane Flows

Lane	Scenario 14: 23EY 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	673
1/2	1119
2/1	38
3/1	235
3/2	395
4/1	385
4/2	181
5/1	1329
5/2	95
6/1	1329
6/2	701
7/1	55
8/1	521
9/1	610
10/1	1234
11/1	273
11/2	4
12/1	891
12/2	1123
13/1	375
13/2	1156
14/1	1149
14/2	402
15/1	701
15/2	182

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.7 %	1866	1866
				Arm 12 Ahead	24.50	99.3 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	7.9 %	1871	1871
				Arm 13 Ahead	29.90	92.1 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.1 %	1878	1878
				Arm 15 Ahead	45.40	77.9 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	18.3 %	1886	1886
				Arm 12 Right	36.00	81.7 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 15: '23EY 17:00-18:00' (FG15: '23EY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1148	252	416	1	1818
	B	1367	5	89	0	22	1483
	C	266	89	0	216	27	598
	D	387	0	329	0	0	716
	E	0	21	6	1	0	28
	Tot.	2021	1263	676	633	50	4643

Traffic Lane Flows

Lane	Scenario 15: 23EY 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	669
1/2	1149
2/1	28
3/1	329
3/2	387
4/1	355
4/2	243
5/1	1367
5/2	116
6/1	1367
6/2	654
7/1	50
8/1	633
9/1	676
10/1	1263
11/1	354
11/2	5
12/1	973
12/2	1154
13/1	347
13/2	1175
14/1	1174
14/2	388
15/1	654
15/2	243

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.6 %	1871	1871
				Arm 13 Ahead	29.90	96.4 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	25.1 %	1878	1878
				Arm 15 Ahead	45.40	74.9 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	13.8 %	1886	1886
				Arm 12 Right	36.00	86.2 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 16: '28RC 06:00-07:00' (FG16: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	693	83	222	1	999
	B	646	21	3	0	12	682
	C	29	7	0	0	2	38
	D	170	0	79	0	12	261
	E	9	20	0	1	0	30
	Tot.	854	741	165	223	27	2010

Traffic Lane Flows

Lane	Scenario 16: 28RC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	306
1/2	693
2/1	30
3/1	79
3/2	182
4/1	36
4/2	2
5/1	646
5/2	36
6/1	646
6/2	208
7/1	27
8/1	223
9/1	165
10/1	741
11/1	29
11/2	21
12/1	308
12/2	714
13/1	86
13/2	743
14/1	734
14/2	191
15/1	208
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	89.7 %	1886	1886
				Arm 12 Right	36.00	10.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 17: '28RC 07:00-08:00' (FG17: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1220	197	299	5	1721
	B	1391	6	66	0	37	1500
	C	168	59	0	95	12	334
	D	363	4	204	0	15	586
	E	2	50	6	1	0	59
	Tot.	1924	1339	473	395	69	4200

Traffic Lane Flows

Lane	Scenario 17: 28RC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	501
1/2	1220
2/1	59
3/1	204
3/2	382
4/1	227
4/2	107
5/1	1391
5/2	109
6/1	1391
6/2	533
7/1	69
8/1	395
9/1	473
10/1	1339
11/1	225
11/2	6
12/1	657
12/2	1226
13/1	269
13/2	1278
14/1	1280
14/2	380
15/1	533
15/2	122

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	28.4 %	1886	1886
				Arm 12 Right	36.00	71.6 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 18: '28RC 08:00-09:00' (FG18: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1332	384	420	4	2140
	B	1678	12	113	0	11	1814
	C	284	81	0	146	2	513
	D	396	0	270	0	16	682
	E	9	70	22	5	0	106
	Tot.	2367	1495	789	571	33	5255

Traffic Lane Flows

Lane	Scenario 18: 28RC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	808
1/2	1332
2/1	106
3/1	270
3/2	412
4/1	365
4/2	148
5/1	1678
5/2	136
6/1	1678
6/2	689
7/1	33
8/1	571
9/1	789
10/1	1495
11/1	288
11/2	12
12/1	1063
12/2	1344
13/1	519
13/2	1423
14/1	1414
14/2	421
15/1	689
15/2	164

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.5 %	1866	1866
				Arm 12 Ahead	24.50	99.5 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.7 %	1871	1871
				Arm 13 Ahead	29.90	95.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.2 %	1878	1878
				Arm 15 Ahead	45.40	77.8 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	10.1 %	1886	1886
				Arm 12 Right	36.00	89.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 19: '28RC 15:00-16:00' (FG19: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1097	372	342	6	1818
	B	1347	4	44	0	48	1443
	C	300	83	4	118	4	509
	D	400	0	267	0	1	668
	E	6	29	2	4	0	41
	Tot.	2054	1213	689	464	59	4479

Traffic Lane Flows

Lane	Scenario 19: 28RC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	720
1/2	1098
2/1	41
3/1	267
3/2	401
4/1	383
4/2	126
5/1	1347
5/2	96
6/1	1347
6/2	707
7/1	59
8/1	464
9/1	689
10/1	1213
11/1	219
11/2	4
12/1	880
12/2	1102
13/1	422
13/2	1137
14/1	1130
14/2	408
15/1	707
15/2	127

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.8 %	1871	1871
				Arm 13 Ahead	29.90	90.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	21.7 %	1878	1878
				Arm 15 Ahead	45.40	78.3 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	24.2 %	1886	1886
				Arm 12 Right	36.00	75.8 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 20: '28RC 17:00-18:00' (FG20: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1120	324	402	1	1848
	B	1520	5	89	0	23	1637
	C	234	77	0	190	28	529
	D	387	0	316	0	0	703
	E	0	22	6	1	0	29
	Tot.	2142	1224	735	593	52	4746

Traffic Lane Flows

Lane	Scenario 20: 28RC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	727
1/2	1121
2/1	29
3/1	316
3/2	387
4/1	311
4/2	218
5/1	1520
5/2	117
6/1	1520
6/2	622
7/1	52
8/1	593
9/1	735
10/1	1224
11/1	330
11/2	5
12/1	1005
12/2	1126
13/1	419
13/2	1148
14/1	1147
14/2	388
15/1	622
15/2	218

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	24.8 %	1878	1878
				Arm 15 Ahead	45.40	75.2 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	15.5 %	1886	1886
				Arm 12 Right	36.00	84.5 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 21: '28PC 06:00-07:00' (FG21: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	694	83	222	1	1000
	B	750	21	113	0	12	896
	C	80	7	0	0	2	89
	D	183	0	79	0	12	274
	E	9	20	0	1	0	30
	Tot.	1022	742	275	223	27	2289

Traffic Lane Flows

Lane	Scenario 21: 28PC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	306
1/2	694
2/1	30
3/1	79
3/2	195
4/1	87
4/2	2
5/1	750
5/2	146
6/1	750
6/2	272
7/1	27
8/1	223
9/1	275
10/1	742
11/1	139
11/2	21
12/1	418
12/2	715
13/1	196
13/2	744
14/1	735
14/2	204
15/1	272
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	8.0 %	1878	1878
				Arm 15 Ahead	45.40	92.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	18.7 %	1886	1886
				Arm 12 Right	36.00	81.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 22: '28PC 07:00-08:00' (FG22: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1237	197	301	5	1740
	B	1430	6	169	0	37	1642
	C	292	59	0	85	12	448
	D	371	4	204	0	15	594
	E	2	50	6	1	0	59
	Tot.	2095	1356	576	387	69	4483

Traffic Lane Flows

Lane	Scenario 22: 28PC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	503
1/2	1237
2/1	59
3/1	204
3/2	390
4/1	351
4/2	97
5/1	1430
5/2	212
6/1	1430
6/2	665
7/1	69
8/1	387
9/1	576
10/1	1356
11/1	318
11/2	6
12/1	752
12/2	1243
13/1	372
13/2	1295
14/1	1297
14/2	388
15/1	665
15/2	112

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	16.8 %	1878	1878
				Arm 15 Ahead	45.40	83.2 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	20.1 %	1886	1886
				Arm 12 Right	36.00	79.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 23: '28PC 08:00-09:00' (FG23: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1365	368	432	4	2169
	B	1642	12	177	0	11	1842
	C	411	81	0	110	2	604
	D	398	0	270	0	16	684
	E	9	70	22	5	0	106
	Tot.	2460	1528	837	547	33	5405

Traffic Lane Flows

Lane	Scenario 23: 28PC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	804
1/2	1365
2/1	106
3/1	270
3/2	414
4/1	492
4/2	112
5/1	1642
5/2	200
6/1	1642
6/2	818
7/1	33
8/1	547
9/1	837
10/1	1528
11/1	316
11/2	12
12/1	1087
12/2	1377
13/1	567
13/2	1456
14/1	1447
14/2	423
15/1	818
15/2	128

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.5 %	1866	1866
				Arm 12 Ahead	24.50	99.5 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.7 %	1871	1871
				Arm 13 Ahead	29.90	95.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	16.5 %	1878	1878
				Arm 15 Ahead	45.40	83.5 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	9.2 %	1886	1886
				Arm 12 Right	36.00	90.8 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 24: '28PC 15:00-16:00' (FG24: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1170	366	364	6	1907
	B	1347	4	78	0	48	1477
	C	399	83	4	121	4	611
	D	401	0	267	0	1	669
	E	6	29	2	4	0	41
	Tot.	2154	1286	717	489	59	4705

Traffic Lane Flows

Lane	Scenario 24: 28PC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	736
1/2	1171
2/1	41
3/1	267
3/2	402
4/1	482
4/2	129
5/1	1347
5/2	130
6/1	1347
6/2	807
7/1	59
8/1	489
9/1	717
10/1	1286
11/1	256
11/2	4
12/1	933
12/2	1175
13/1	450
13/2	1210
14/1	1203
14/2	409
15/1	807
15/2	130

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.8 %	1871	1871
				Arm 13 Ahead	29.90	90.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	17.2 %	1878	1878
				Arm 15 Ahead	45.40	82.8 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	20.7 %	1886	1886
				Arm 12 Right	36.00	79.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 25: '28PC 17:00-18:00' (FG25: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1163	305	420	1	1890
	B	1504	5	96	0	23	1628
	C	263	77	0	201	28	569
	D	388	0	331	0	0	719
	E	0	22	6	1	0	29
	Tot.	2156	1267	738	622	52	4835

Traffic Lane Flows

Lane	Scenario 25: 28PC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	726
1/2	1164
2/1	29
3/1	331
3/2	388
4/1	340
4/2	229
5/1	1504
5/2	124
6/1	1504
6/2	652
7/1	52
8/1	622
9/1	738
10/1	1267
11/1	348
11/2	5
12/1	1022
12/2	1169
13/1	407
13/2	1191
14/1	1190
14/2	389
15/1	652
15/2	229

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.6 %	1878	1878
				Arm 15 Ahead	45.40	77.4 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.7 %	1886	1886
				Arm 12 Right	36.00	85.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 26: '34RC 06:00-07:00' (FG26: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	722	83	230	1	1036
	B	689	21	3	0	12	725
	C	29	7	0	0	2	38
	D	176	0	76	0	12	264
	E	10	20	0	1	0	31
	Tot.	904	770	162	231	27	2094

Traffic Lane Flows

Lane	Scenario 26: 34RC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	314
1/2	722
2/1	31
3/1	76
3/2	188
4/1	36
4/2	2
5/1	689
5/2	36
6/1	689
6/2	215
7/1	27
8/1	231
9/1	162
10/1	770
11/1	29
11/2	21
12/1	316
12/2	743
13/1	86
13/2	773
14/1	763
14/2	198
15/1	215
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.2 %	1871	1871
				Arm 13 Ahead	29.90	96.8 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	89.7 %	1886	1886
				Arm 12 Right	36.00	10.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 27: '34RC 07:00-08:00' (FG27: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1273	202	316	5	1796
	B	1449	6	66	0	38	1559
	C	168	59	0	124	12	363
	D	371	4	222	0	16	613
	E	2	51	6	1	0	60
	Tot.	1990	1393	496	441	71	4391

Traffic Lane Flows

Lane	Scenario 27: 34RC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	523
1/2	1273
2/1	60
3/1	222
3/2	391
4/1	227
4/2	136
5/1	1449
5/2	110
6/1	1449
6/2	541
7/1	71
8/1	441
9/1	496
10/1	1393
11/1	256
11/2	6
12/1	708
12/2	1279
13/1	274
13/2	1332
14/1	1334
14/2	389
15/1	541
15/2	152

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	25.8 %	1886	1886
				Arm 12 Right	36.00	74.2 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 28: '34RC 08:00-09:00' (FG28: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1387	448	431	4	2270
	B	1681	12	113	0	11	1817
	C	284	81	0	175	2	542
	D	394	0	302	0	17	713
	E	10	72	23	5	0	110
	Tot.	2369	1552	886	611	34	5452

Traffic Lane Flows

Lane	Scenario 28: 34RC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	883
1/2	1387
2/1	110
3/1	302
3/2	411
4/1	365
4/2	177
5/1	1681
5/2	136
6/1	1681
6/2	688
7/1	34
8/1	611
9/1	886
10/1	1552
11/1	318
11/2	12
12/1	1167
12/2	1399
13/1	584
13/2	1481
14/1	1471
14/2	421
15/1	688
15/2	194

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.5 %	1866	1866
				Arm 12 Ahead	24.50	99.5 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.5 %	1871	1871
				Arm 13 Ahead	29.90	95.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.2 %	1878	1878
				Arm 15 Ahead	45.40	77.8 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	9.4 %	1886	1886
				Arm 12 Right	36.00	90.6 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 29: '34RC 15:00-16:00' (FG29: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1166	449	363	6	1985
	B	1442	4	44	0	49	1539
	C	347	83	4	145	4	583
	D	435	0	323	0	1	759
	E	6	30	2	4	0	42
	Tot.	2231	1283	822	512	60	4908

Traffic Lane Flows

Lane	Scenario 29: 34RC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	818
1/2	1167
2/1	42
3/1	323
3/2	436
4/1	430
4/2	153
5/1	1442
5/2	97
6/1	1442
6/2	789
7/1	60
8/1	512
9/1	822
10/1	1283
11/1	247
11/2	4
12/1	1005
12/2	1171
13/1	499
13/2	1207
14/1	1200
14/2	443
15/1	789
15/2	154

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.7 %	1866	1866
				Arm 12 Ahead	24.50	99.3 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.5 %	1871	1871
				Arm 13 Ahead	29.90	90.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.3 %	1878	1878
				Arm 15 Ahead	45.40	80.7 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	21.9 %	1886	1886
				Arm 12 Right	36.00	78.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 30: '34RC 17:00-18:00' (FG30: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1310	349	402	1	2063
	B	1650	5	89	0	24	1768
	C	249	77	0	214	29	569
	D	400	0	375	0	0	775
	E	0	23	6	1	0	30
	Tot.	2300	1415	819	617	54	5205

Traffic Lane Flows

Lane	Scenario 30: 34RC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	752
1/2	1311
2/1	30
3/1	375
3/2	400
4/1	326
4/2	243
5/1	1650
5/2	118
6/1	1650
6/2	650
7/1	54
8/1	617
9/1	819
10/1	1415
11/1	356
11/2	5
12/1	1054
12/2	1316
13/1	444
13/2	1339
14/1	1338
14/2	401
15/1	650
15/2	243

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	23.6 %	1878	1878
				Arm 15 Ahead	45.40	76.4 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.9 %	1886	1886
				Arm 12 Right	36.00	85.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 31: '34OP 06:00-07:00' (FG31: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	722	83	230	1	1036
	B	689	21	3	0	12	725
	C	29	7	0	0	2	38
	D	176	0	76	0	12	264
	E	10	20	0	1	0	31
	Tot.	904	770	162	231	27	2094

Traffic Lane Flows

Lane	Scenario 31: 34OP 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	314
1/2	722
2/1	31
3/1	76
3/2	188
4/1	36
4/2	2
5/1	689
5/2	36
6/1	689
6/2	215
7/1	27
8/1	231
9/1	162
10/1	770
11/1	29
11/2	21
12/1	316
12/2	743
13/1	86
13/2	773
14/1	763
14/2	198
15/1	215
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.2 %	1871	1871
				Arm 13 Ahead	29.90	96.8 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	89.7 %	1886	1886
				Arm 12 Right	36.00	10.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 32: '34OP 07:00-08:00' (FG32: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1271	205	316	5	1797
	B	1454	6	66	0	38	1564
	C	168	59	0	128	12	367
	D	371	4	222	0	16	613
	E	2	51	6	1	0	60
	Tot.	1995	1391	499	445	71	4401

Traffic Lane Flows

Lane	Scenario 32: 34OP 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	526
1/2	1271
2/1	60
3/1	222
3/2	391
4/1	227
4/2	140
5/1	1454
5/2	110
6/1	1454
6/2	541
7/1	71
8/1	445
9/1	499
10/1	1391
11/1	260
11/2	6
12/1	715
12/2	1277
13/1	277
13/2	1330
14/1	1332
14/2	389
15/1	541
15/2	156

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	25.4 %	1886	1886
				Arm 12 Right	36.00	74.6 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 33: '34OP 08:00-09:00' (FG33: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1396	464	431	4	2295
	B	1683	12	113	0	11	1819
	C	284	81	0	176	2	543
	D	396	0	302	0	17	715
	E	10	72	23	5	0	110
	Tot.	2373	1561	902	612	34	5482

Traffic Lane Flows

Lane	Scenario 33: 34OP 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	899
1/2	1396
2/1	110
3/1	302
3/2	413
4/1	365
4/2	178
5/1	1683
5/2	136
6/1	1683
6/2	690
7/1	34
8/1	612
9/1	902
10/1	1561
11/1	319
11/2	12
12/1	1184
12/2	1408
13/1	600
13/2	1490
14/1	1480
14/2	423
15/1	690
15/2	195

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.5 %	1871	1871
				Arm 13 Ahead	29.90	95.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.2 %	1878	1878
				Arm 15 Ahead	45.40	77.8 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	9.4 %	1886	1886
				Arm 12 Right	36.00	90.6 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 34: '34OP 15:00-16:00' (FG34: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1158	451	363	6	1979
	B	1444	4	44	0	49	1541
	C	347	83	4	147	4	585
	D	435	0	323	0	1	759
	E	6	30	2	4	0	42
	Tot.	2233	1275	824	514	60	4906

Traffic Lane Flows

Lane	Scenario 34: 34OP 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	820
1/2	1159
2/1	42
3/1	323
3/2	436
4/1	430
4/2	155
5/1	1444
5/2	97
6/1	1444
6/2	789
7/1	60
8/1	514
9/1	824
10/1	1275
11/1	249
11/2	4
12/1	1009
12/2	1163
13/1	501
13/2	1199
14/1	1192
14/2	443
15/1	789
15/2	156

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.7 %	1866	1866
				Arm 12 Ahead	24.50	99.3 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.5 %	1871	1871
				Arm 13 Ahead	29.90	90.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.3 %	1878	1878
				Arm 15 Ahead	45.40	80.7 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	21.7 %	1886	1886
				Arm 12 Right	36.00	78.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 35: '34OP 17:00-18:00' (FG35: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1319	345	402	1	2068
	B	1654	5	89	0	24	1772
	C	237	77	0	219	29	562
	D	400	0	375	0	0	775
	E	0	23	6	1	0	30
	Tot.	2292	1424	815	622	54	5207

Traffic Lane Flows

Lane	Scenario 35: 34OP 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	748
1/2	1320
2/1	30
3/1	375
3/2	400
4/1	314
4/2	248
5/1	1654
5/2	118
6/1	1654
6/2	638
7/1	54
8/1	622
9/1	815
10/1	1424
11/1	361
11/2	5
12/1	1055
12/2	1325
13/1	440
13/2	1348
14/1	1347
14/2	401
15/1	638
15/2	248

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

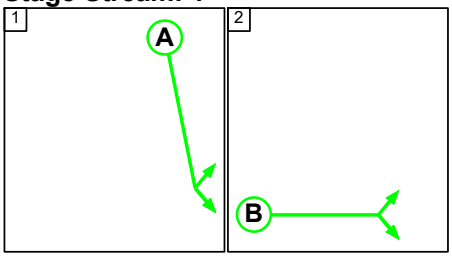
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	24.5 %	1878	1878
				Arm 15 Ahead	45.40	75.5 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.7 %	1886	1886
				Arm 12 Right	36.00	85.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

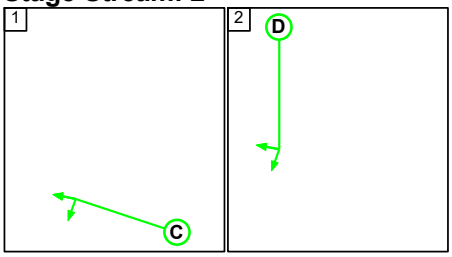
Scenario 1: 'BY 06:00-07:00' (FG1: 'BY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

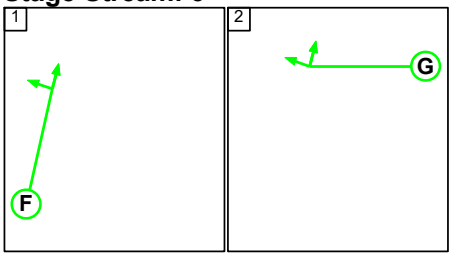
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

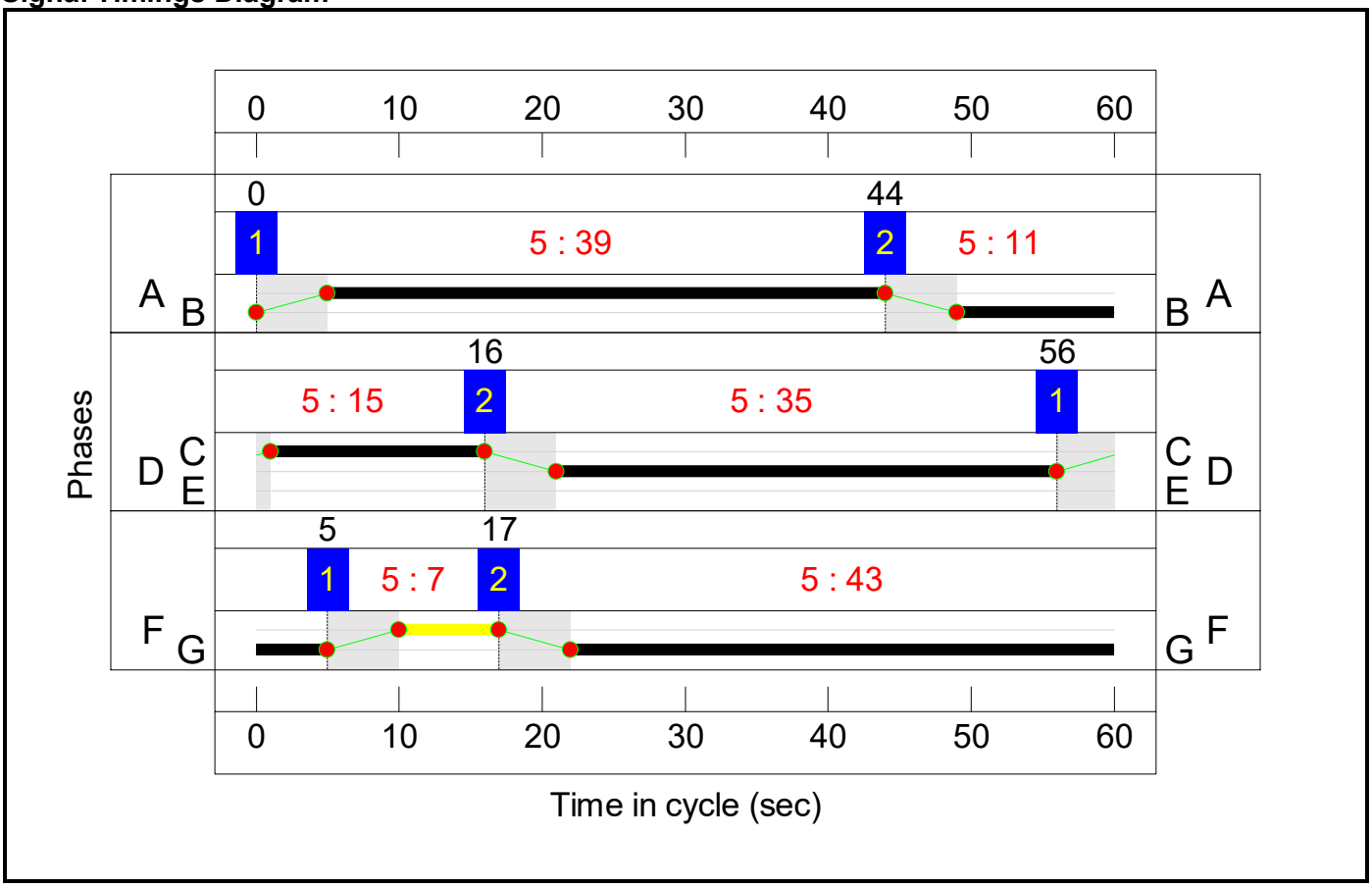
Stage	1	2
Duration	15	35
Change Point	56	16

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	5	17

Full Input Data And Results

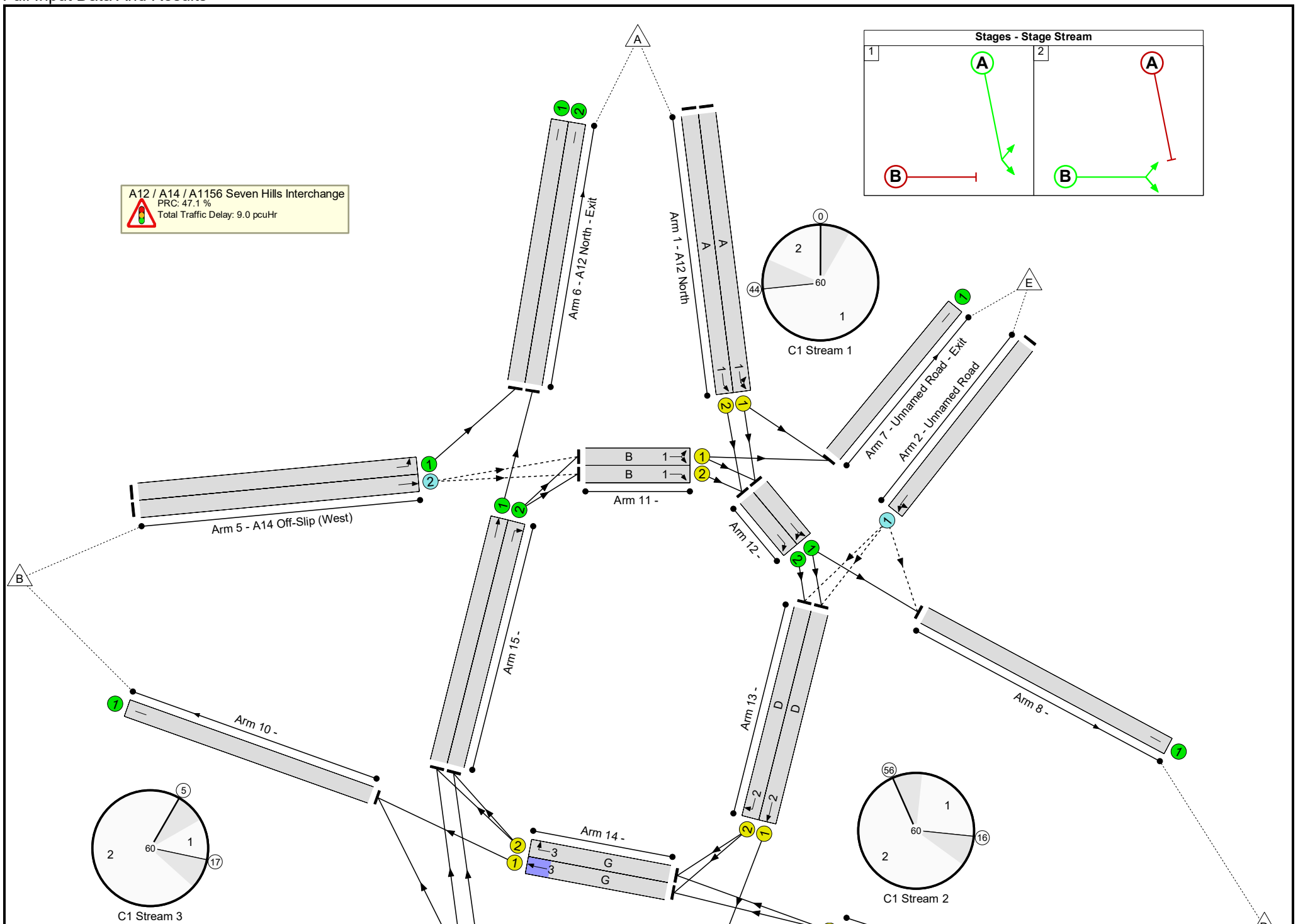
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**61.2%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**61.2%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	282	1866	1244	22.7%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	643	1866	1244	51.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	26	1871	642	4.0%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	15	-	70	1877	501	14.0%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	15	-	171	1877	501	34.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	36	1878	250	14.4%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	137	1878	250	54.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	34	1871	886	3.8%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	144	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	160	1886	377	42.4%
11/2	Right	U	1	N/A	B		1	11	-	21	1886	377	5.6%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	35	-	74	1877	1126	6.6%
13/2	Right	U	2	N/A	D		1	35	-	689	1877	1126	61.2%
14/1	Ahead	U	3	N/A	G		1	43	-	681	2007	1472	46.3%
14/2	Right	U	3	N/A	G		1	43	-	179	1872	1373	13.0%
15/1	Ahead	U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	147	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**60**	**0**	**0**	**5.5**	**3.5**	**0.0**	**9.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**60**	**0**	**0**	**5.5**	**3.5**	**0.0**	**9.0**	**-**	**-**	**-**	**-**
1/1	282	282	-	-	-	0.3	0.1	-	0.5	5.8	1.8	0.1	1.9
1/2	643	643	-	-	-	0.9	0.5	-	1.4	8.1	5.4	0.5	5.9
2/1	26	26	26	0	0	0.0	0.0	-	0.0	3.0	0.0	0.0	0.0
3/1	70	70	-	-	-	0.3	0.1	-	0.4	21.0	0.9	0.1	1.0
3/2	171	171	-	-	-	0.8	0.3	-	1.1	23.2	2.3	0.3	2.5
4/1	36	36	-	-	-	0.2	0.1	-	0.3	31.4	0.5	0.1	0.6
4/2	137	137	-	-	-	0.9	0.6	-	1.5	40.0	2.1	0.6	2.7
5/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	34	34	34	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.0
6/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	144	144	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	688	688	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	160	160	-	-	-	0.5	0.4	-	0.9	20.3	2.5	0.4	2.9
11/2	21	21	-	-	-	0.1	0.0	-	0.1	24.7	0.3	0.0	0.3
12/1	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	74	74	-	-	-	0.1	0.0	-	0.1	4.9	0.2	0.0	0.3
13/2	689	689	-	-	-	0.7	0.8	-	1.5	7.8	3.7	0.8	4.5
14/1	681	681	-	-	-	0.1	0.4	-	0.5	2.6	0.2	0.4	0.7

Full Input Data And Results

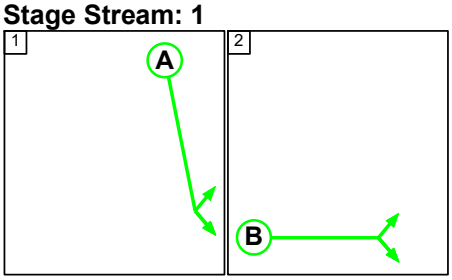
14/2	179	179	-	-	-	0.5	0.1	-	0.6	11.6	2.8	0.1	2.9
15/1	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	147	147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	74.1	Total Delay for Signalled Lanes (pcuHr):	2.94	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	47.1	Total Delay for Signalled Lanes (pcuHr):	3.10	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	64.5	Total Delay for Signalled Lanes (pcuHr):	2.90	Cycle Time (s): 60
	PRC Over All Lanes (%):	47.1	Total Delay Over All Lanes(pcuHr):	8.98	

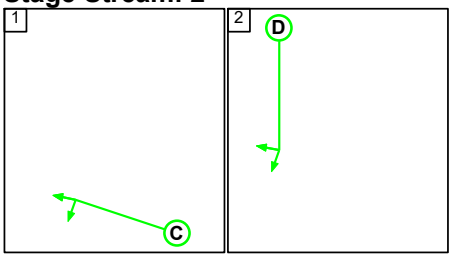
Full Input Data And Results
Scenario 2: 'BY 07:00-08:00' (FG2: 'BY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

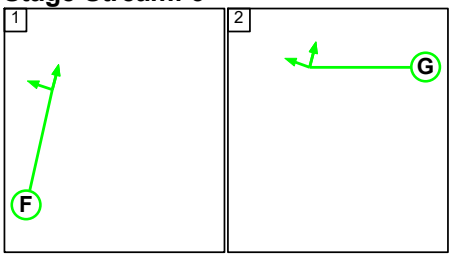
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	6	51

Stage Stream: 2

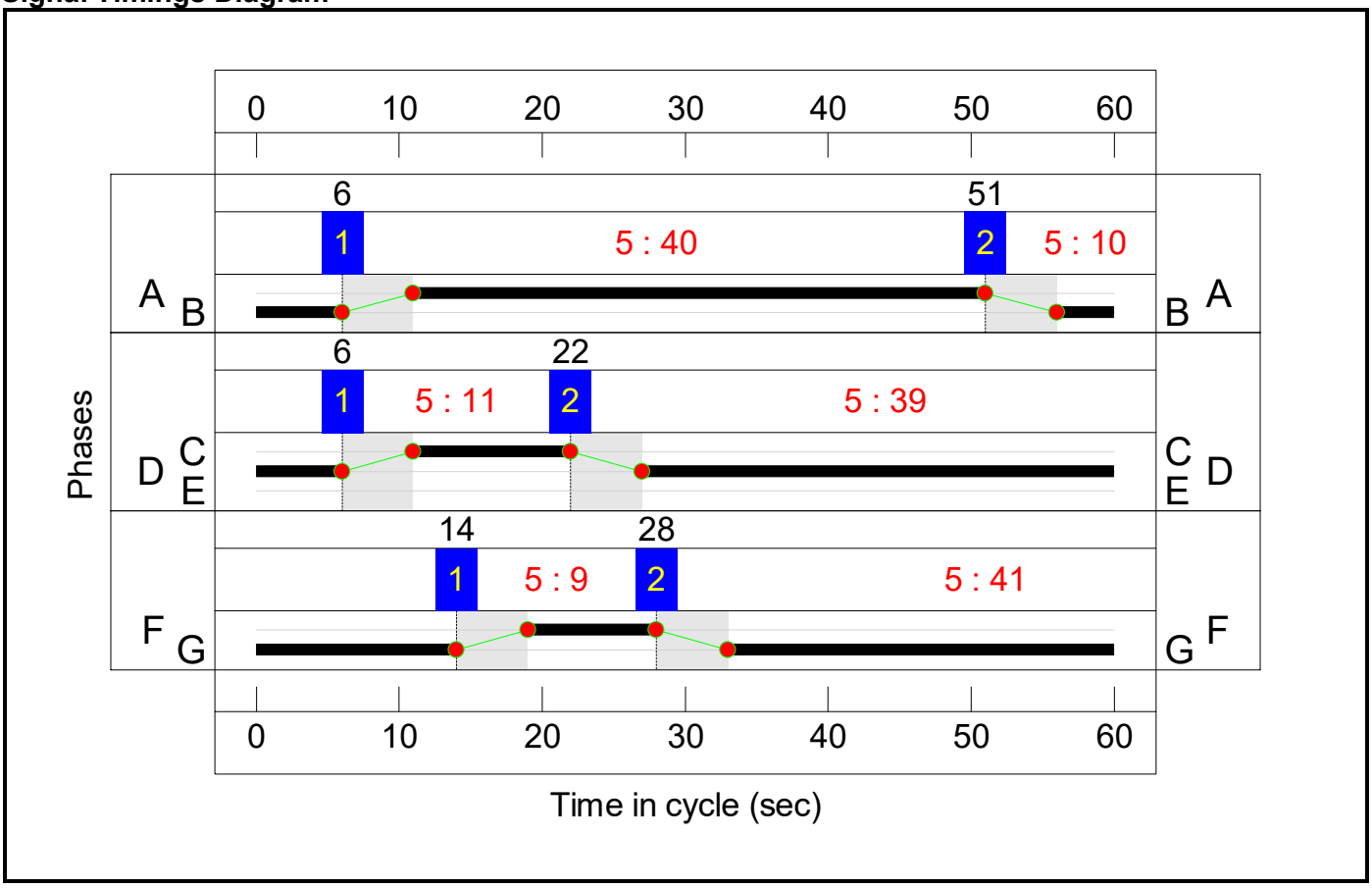
Stage	1	2
Duration	11	39
Change Point	6	22

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	14	28

Full Input Data And Results

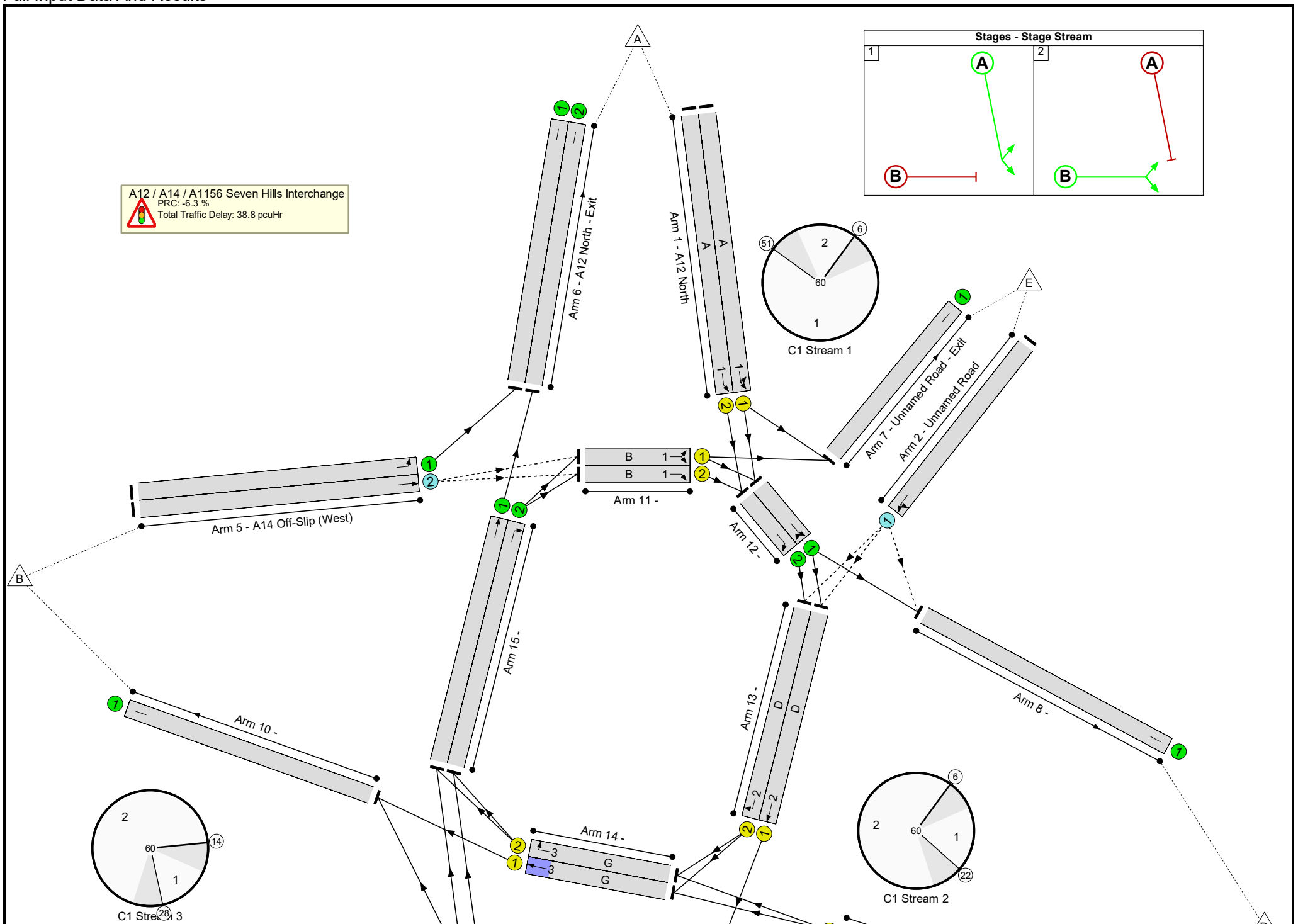
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	474	1866	1275	37.2%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1143	1866	1275	89.6%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	51	1871	402	12.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	205	1877	375	54.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	359	1877	375	95.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	217	1878	313	69.3%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	164	1878	313	52.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1252	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	104	1871	776	13.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1252	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1255	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	275	1886	346	79.5%
11/2	Right	U	1	N/A	B		1	10	-	6	1886	346	1.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	690	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1149	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	255	1877	1251	20.4%
13/2	Right	U	2	N/A	D		1	39	-	1194	1877	1251	95.4%
14/1	Ahead	U	3	N/A	G		1	41	-	1196	2007	1405	85.1%
14/2	Right	U	3	N/A	G		1	41	-	357	1872	1310	27.2%
15/1	Ahead	U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**155**	**0**	**0**	**12.8**	**26.1**	**0.0**	**38.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**155**	**0**	**0**	**12.8**	**26.1**	**0.0**	**38.8**	**-**	**-**	**-**	**-**
1/1	474	474	-	-	-	0.5	0.3	-	0.8	6.3	3.3	0.3	3.6
1/2	1143	1143	-	-	-	2.5	4.1	-	6.5	20.6	15.6	4.1	19.6
2/1	51	51	51	0	0	0.0	0.1	-	0.1	5.6	0.1	0.1	0.2
3/1	205	205	-	-	-	1.2	0.6	-	1.8	32.1	3.0	0.6	3.6
3/2	359	359	-	-	-	2.4	6.2	-	8.6	86.2	5.9	6.2	12.1
4/1	217	217	-	-	-	1.4	1.1	-	2.5	41.9	3.4	1.1	4.5
4/2	164	164	-	-	-	1.0	0.5	-	1.6	34.8	2.5	0.5	3.0
5/1	1252	1252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	104	104	104	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
6/1	1252	1252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1255	1255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	275	275	-	-	-	1.2	1.8	-	3.1	40.3	4.4	1.8	6.3
11/2	6	6	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	690	690	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1149	1149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	255	255	-	-	-	0.2	0.1	-	0.3	4.9	1.4	0.1	1.5
13/2	1194	1194	-	-	-	0.8	8.1	-	8.9	26.8	6.8	8.1	14.9
14/1	1196	1196	-	-	-	0.2	2.8	-	3.0	9.0	0.7	2.8	3.5

Full Input Data And Results

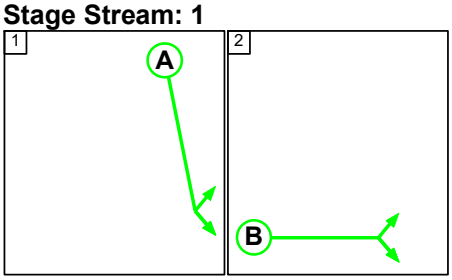
14/2	357	357	-	-	-	1.2	0.2	-	1.4	14.3	5.9	0.2	6.1
15/1	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 Stream: 1 PRC for Signalled Lanes (%):	0.4	Total Delay for Signalled Lanes (pcuHr):	10.49	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):	-6.3	Total Delay for Signalled Lanes (pcuHr):	19.67	Cycle Time (s):	60
C1 Stream: 3 PRC for Signalled Lanes (%):	5.7	Total Delay for Signalled Lanes (pcuHr):	8.51	Cycle Time (s):	60
PRC Over All Lanes (%):	-6.3	Total Delay Over All Lanes(pcuHr):	38.83		

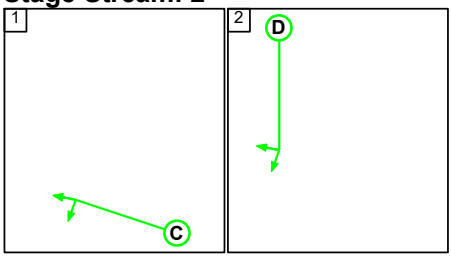
Full Input Data And Results
Scenario 3: 'BY 08:00-09:00' (FG3: 'BY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

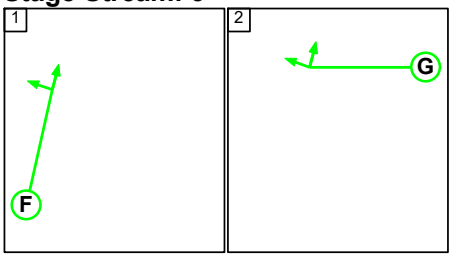
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	5	49

Stage Stream: 2

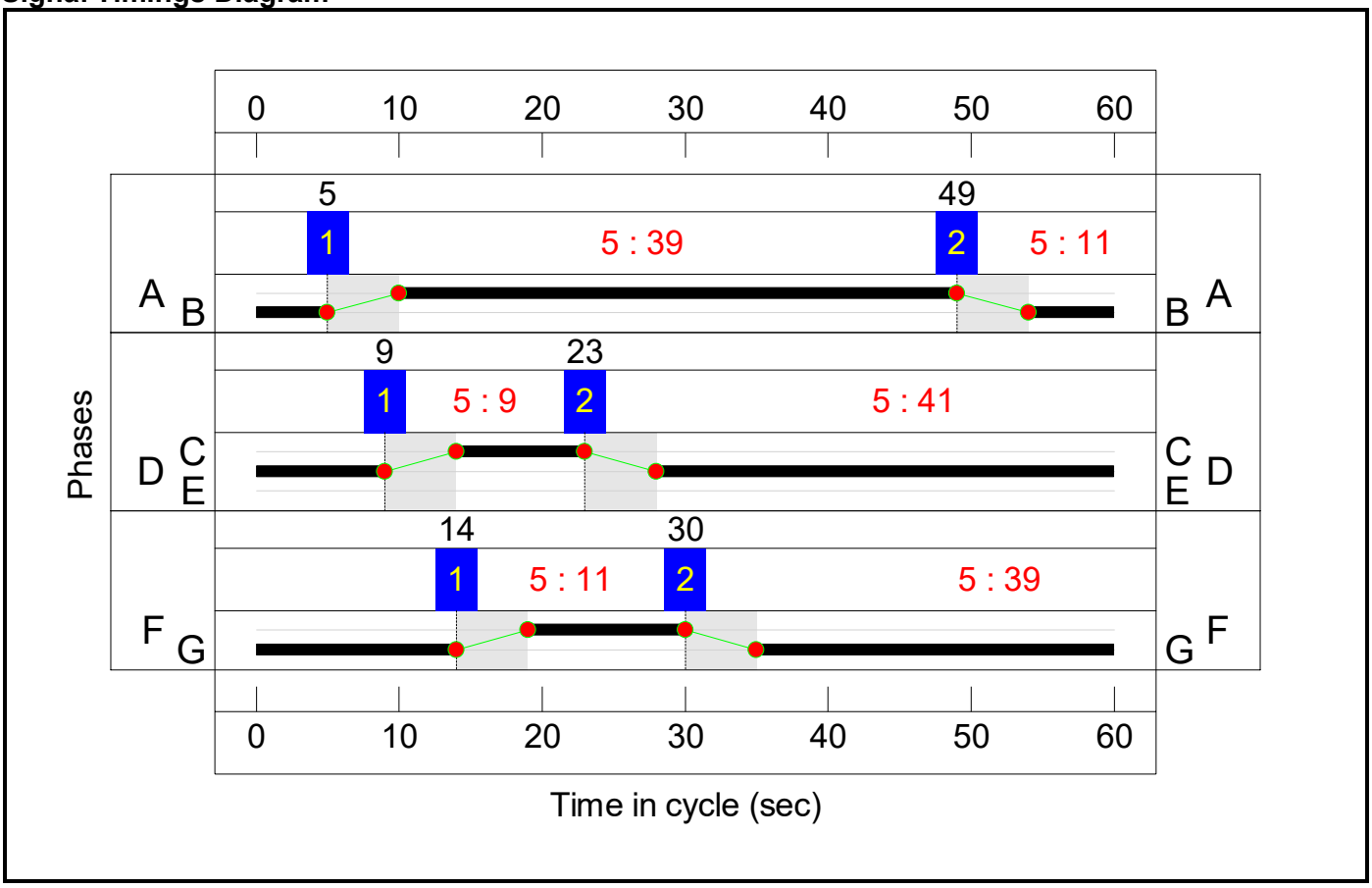
Stage	1	2
Duration	9	41
Change Point	9	23

Stage Stream: 3

Stage	1	2
Duration	11	39
Change Point	14	30

Full Input Data And Results

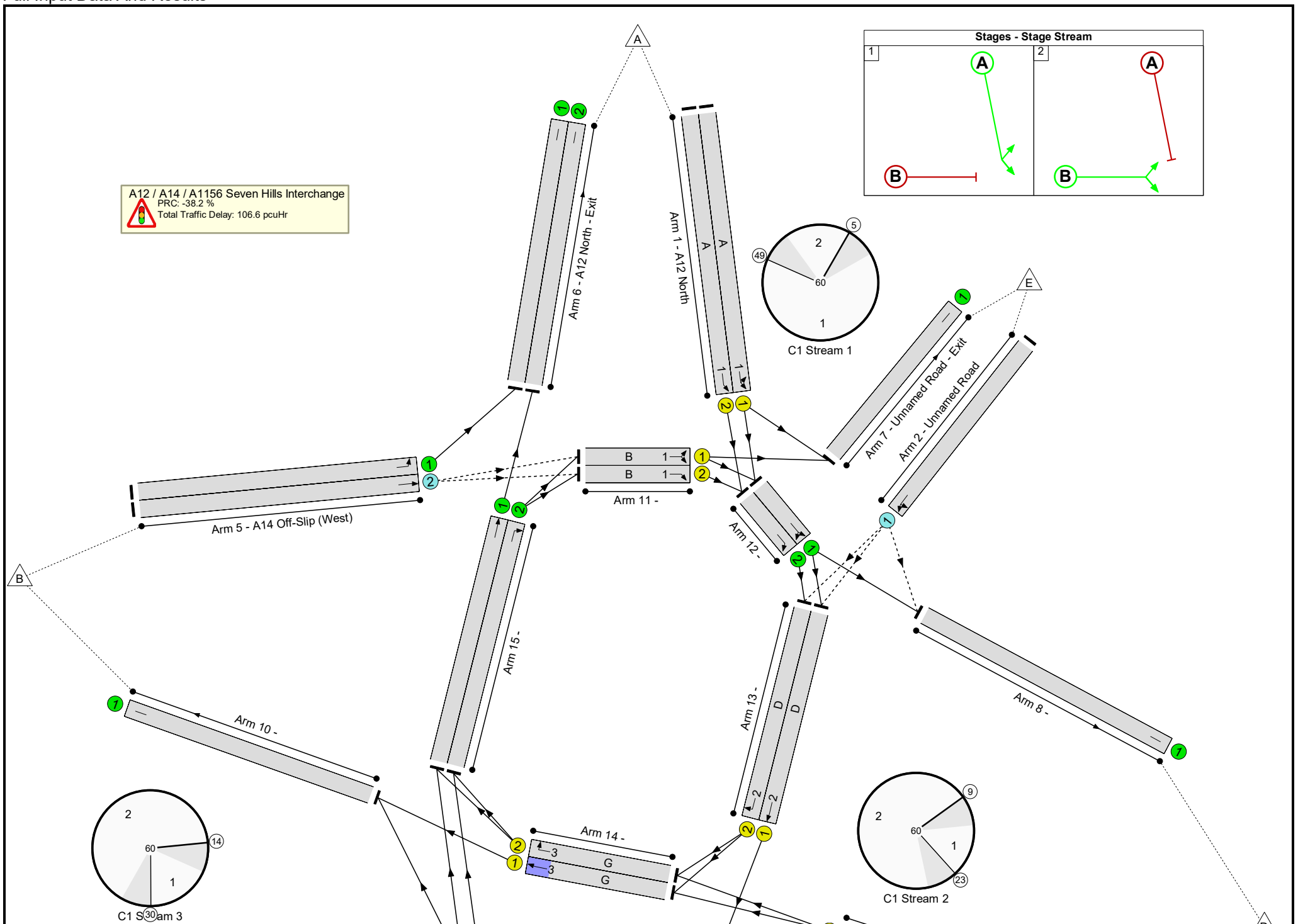
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**124.3%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**124.3%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	717	1866	1244	57.6%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	1215	1866	1244	97.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	91	1871	283	32.1%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	233	1877	313	74.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	389	1877	313	124.3%
4/1	A1156 Left Ahead	U	3	N/A	F		1	11	-	344	1878	376	91.6%
4/2	A1156 Ahead	U	3	N/A	F		1	11	-	218	1878	376	58.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1546	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	134	1871	735	18.2%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1546	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1368	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	354	1886	377	93.1%
11/2	Right	U	1	N/A	B		1	11	-	12	1886	377	3.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1043	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1227	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	444	1877	1314	33.8%
13/2	Right	U	2	N/A	D		1	41	-	1295	1877	1314	98.6%
14/1	Ahead	U	3	N/A	G		1	39	-	1287	2007	1338	96.2%
14/2	Right	U	3	N/A	G		1	39	-	397	1872	1248	25.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	232	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**225**	**0**	**0**	**18.6**	**88.0**	**0.0**	**106.6**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**225**	**0**	**0**	**18.6**	**88.0**	**0.0**	**106.6**	**-**	**-**	**-**	**-**
1/1	717	717	-	-	-	1.1	0.7	-	1.8	8.8	6.4	0.7	7.1
1/2	1215	1215	-	-	-	3.2	11.6	-	14.9	44.0	19.2	11.6	30.9
2/1	91	91	91	0	0	0.1	0.2	-	0.3	13.3	0.9	0.2	1.1
3/1	233	233	-	-	-	1.5	1.4	-	2.9	45.6	3.7	1.4	5.1
3/2	389	313	-	-	-	4.8	40.5	-	45.3	419.2	7.8	40.5	48.2
4/1	344	344	-	-	-	2.2	4.3	-	6.5	68.3	5.5	4.3	9.8
4/2	218	218	-	-	-	1.3	0.7	-	2.0	33.1	3.3	0.7	4.0
5/1	1546	1546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	134	134	134	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1546	1546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1368	1368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	351	351	-	-	-	1.5	4.9	-	6.4	65.9	5.8	4.9	10.7
11/2	12	12	-	-	-	0.1	0.0	-	0.1	24.5	0.2	0.0	0.2
12/1	1043	1043	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1227	1227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	444	444	-	-	-	0.4	0.3	-	0.6	5.3	2.8	0.3	3.0
13/2	1295	1295	-	-	-	0.5	13.9	-	14.4	40.1	11.6	13.9	25.5
14/1	1287	1287	-	-	-	0.7	9.3	-	10.0	28.0	3.5	9.3	12.8

Full Input Data And Results

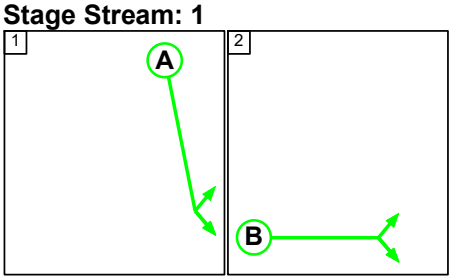
14/2	321	321	-	-	-	1.0	0.2	-	1.2	13.4	5.3	0.2	5.4
15/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	229	229	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 Stream: 1 PRC for Signalled Lanes (%):	-8.5	Total Delay for Signalled Lanes (pcuHr):	23.12	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):	-38.2	Total Delay for Signalled Lanes (pcuHr):	63.31	Cycle Time (s):	60
C1 Stream: 3 PRC for Signalled Lanes (%):	-6.9	Total Delay for Signalled Lanes (pcuHr):	19.72	Cycle Time (s):	60
PRC Over All Lanes (%):	-38.2	Total Delay Over All Lanes(pcuHr):	106.60		

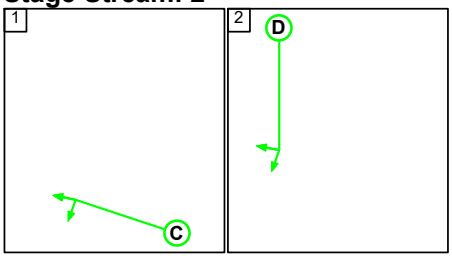
Full Input Data And Results
Scenario 4: 'BY 15:00-16:00' (FG4: 'BY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

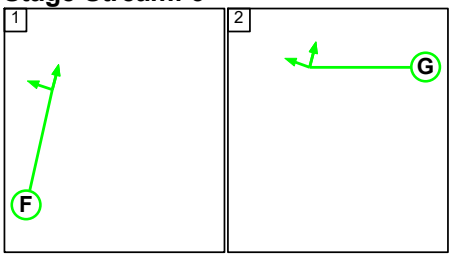
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	8	54

Stage Stream: 2

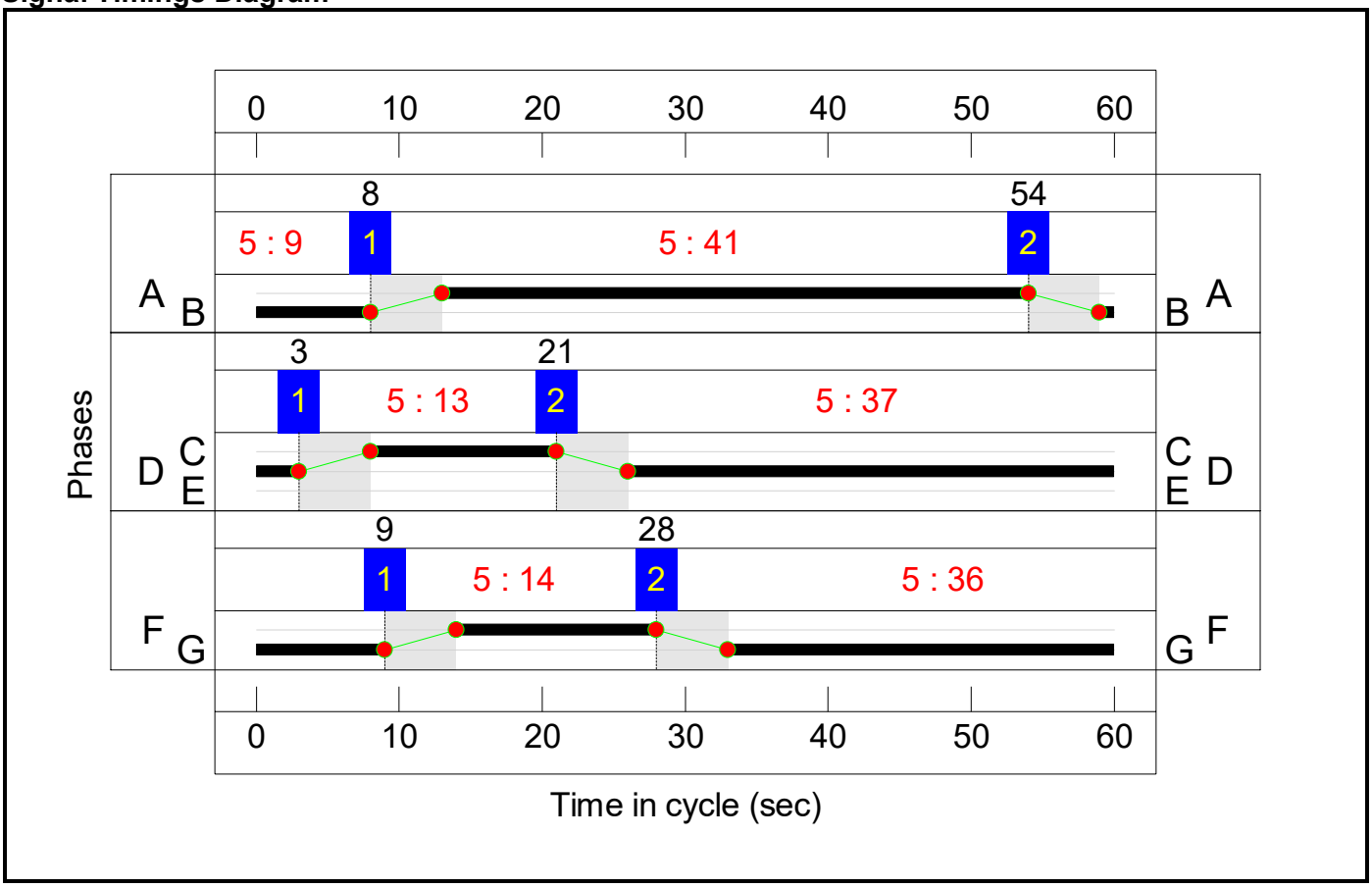
Stage	1	2
Duration	13	37
Change Point	3	21

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	9	28

Full Input Data And Results

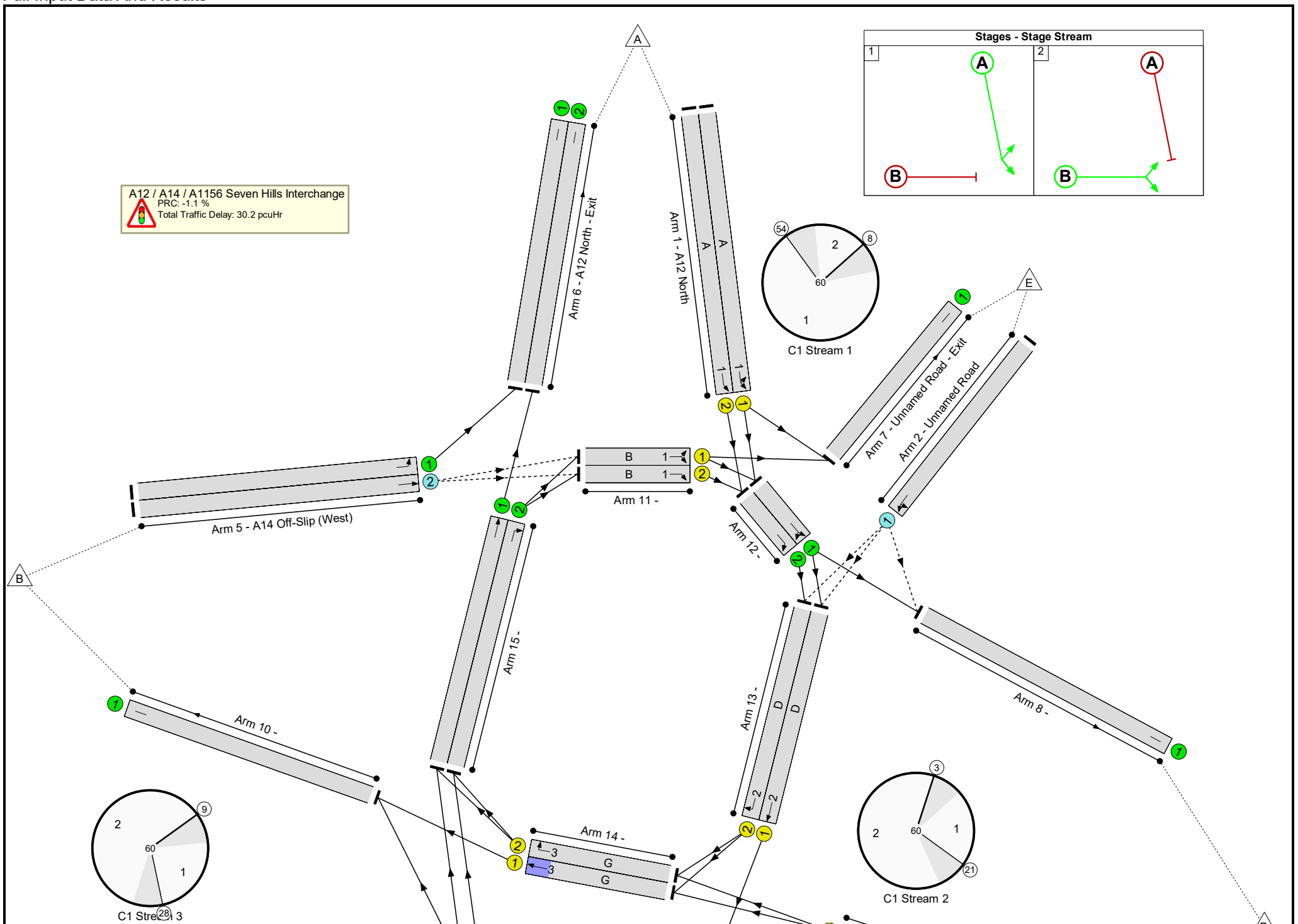
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.0%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.0%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	609	1866	1306	46.6%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	1048	1866	1306	80.2%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	35	1871	409	8.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	190	1877	438	43.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	358	1877	438	81.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	370	1878	470	78.8%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	146	1878	470	31.1%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1189	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	89	1871	737	12.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1189	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1159	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	232	1886	314	73.8%
11/2	Right	U	1	N/A	B		1	9	-	4	1886	314	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	791	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1052	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	341	1877	1189	28.7%
13/2	Right	U	2	N/A	D		1	37	-	1082	1877	1189	91.0%
14/1	Ahead	U	3	N/A	G		1	36	-	1076	2007	1238	86.9%
14/2	Right	U	3	N/A	G		1	36	-	364	1872	1154	31.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	147	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**124**	**0**	**0**	**13.5**	**16.7**	**0.0**	**30.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**124**	**0**	**0**	**13.5**	**16.7**	**0.0**	**30.2**	**-**	**-**	**-**	**-**
1/1	609	609	-	-	-	0.7	0.4	-	1.1	6.6	4.4	0.4	4.8
1/2	1048	1048	-	-	-	1.8	2.0	-	3.8	13.0	11.9	2.0	13.9
2/1	35	35	35	0	0	0.0	0.0	-	0.1	5.6	0.1	0.0	0.2
3/1	190	190	-	-	-	1.0	0.4	-	1.4	26.9	2.7	0.4	3.1
3/2	358	358	-	-	-	2.2	2.1	-	4.3	43.2	5.6	2.1	7.7
4/1	370	370	-	-	-	2.2	1.8	-	4.0	38.5	5.8	1.8	7.6
4/2	146	146	-	-	-	0.7	0.2	-	1.0	23.9	1.9	0.2	2.2
5/1	1189	1189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	89	89	89	0	0	0.0	0.1	-	0.1	2.8	0.0	0.1	0.1
6/1	1189	1189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1159	1159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	232	232	-	-	-	1.3	1.4	-	2.6	41.0	3.8	1.4	5.1
11/2	4	4	-	-	-	0.0	0.0	-	0.0	27.0	0.1	0.0	0.1
12/1	791	791	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1052	1052	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	341	341	-	-	-	0.3	0.2	-	0.5	5.6	1.6	0.2	1.9
13/2	1082	1082	-	-	-	1.3	4.7	-	5.9	19.8	6.3	4.7	11.0
14/1	1076	1076	-	-	-	0.4	3.2	-	3.6	12.2	1.6	3.2	4.8

Full Input Data And Results

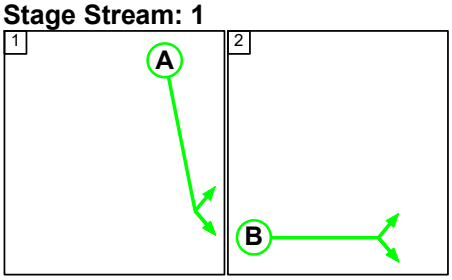
14/2	364	364	-	-	-	1.5	0.2	-	1.8	17.6	6.0	0.2	6.2
15/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	147	147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	12.2	Total Delay for Signalled Lanes (pcuHr):	7.58	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-1.1	Total Delay for Signalled Lanes (pcuHr):	12.18	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	3.5	Total Delay for Signalled Lanes (pcuHr):	10.34	Cycle Time (s): 60
	PRC Over All Lanes (%):	-1.1	Total Delay Over All Lanes(pcuHr):	30.22	

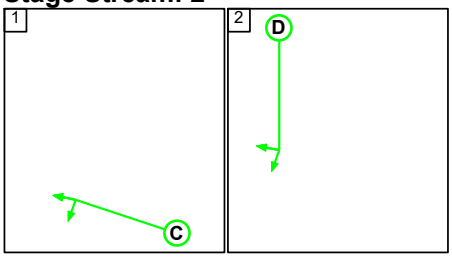
Full Input Data And Results
Scenario 5: 'BY 17:00-18:00' (FG5: 'BY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

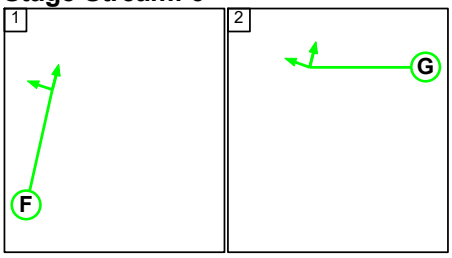
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

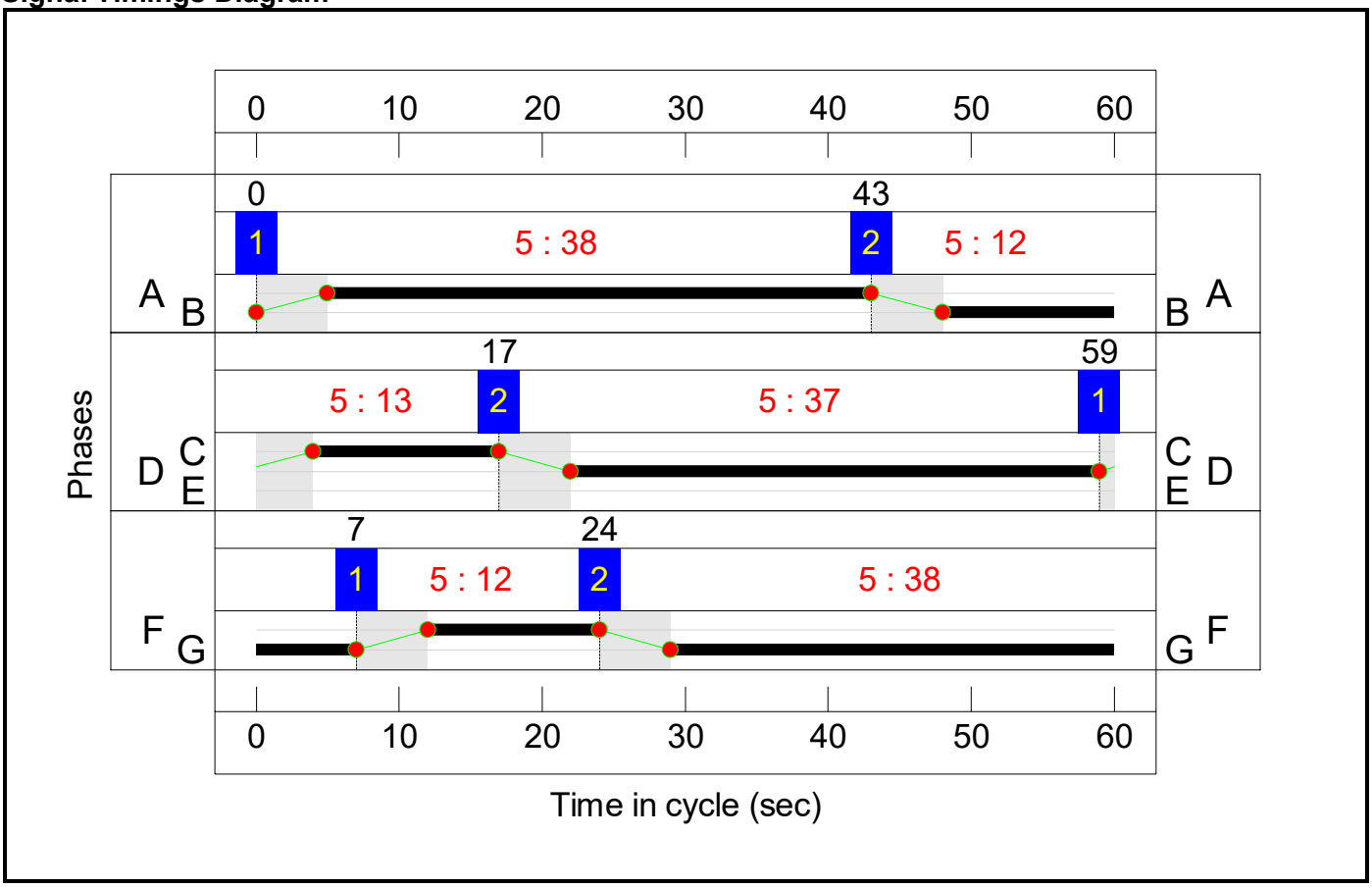
Stage	1	2
Duration	13	37
Change Point	59	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	7	24

Full Input Data And Results

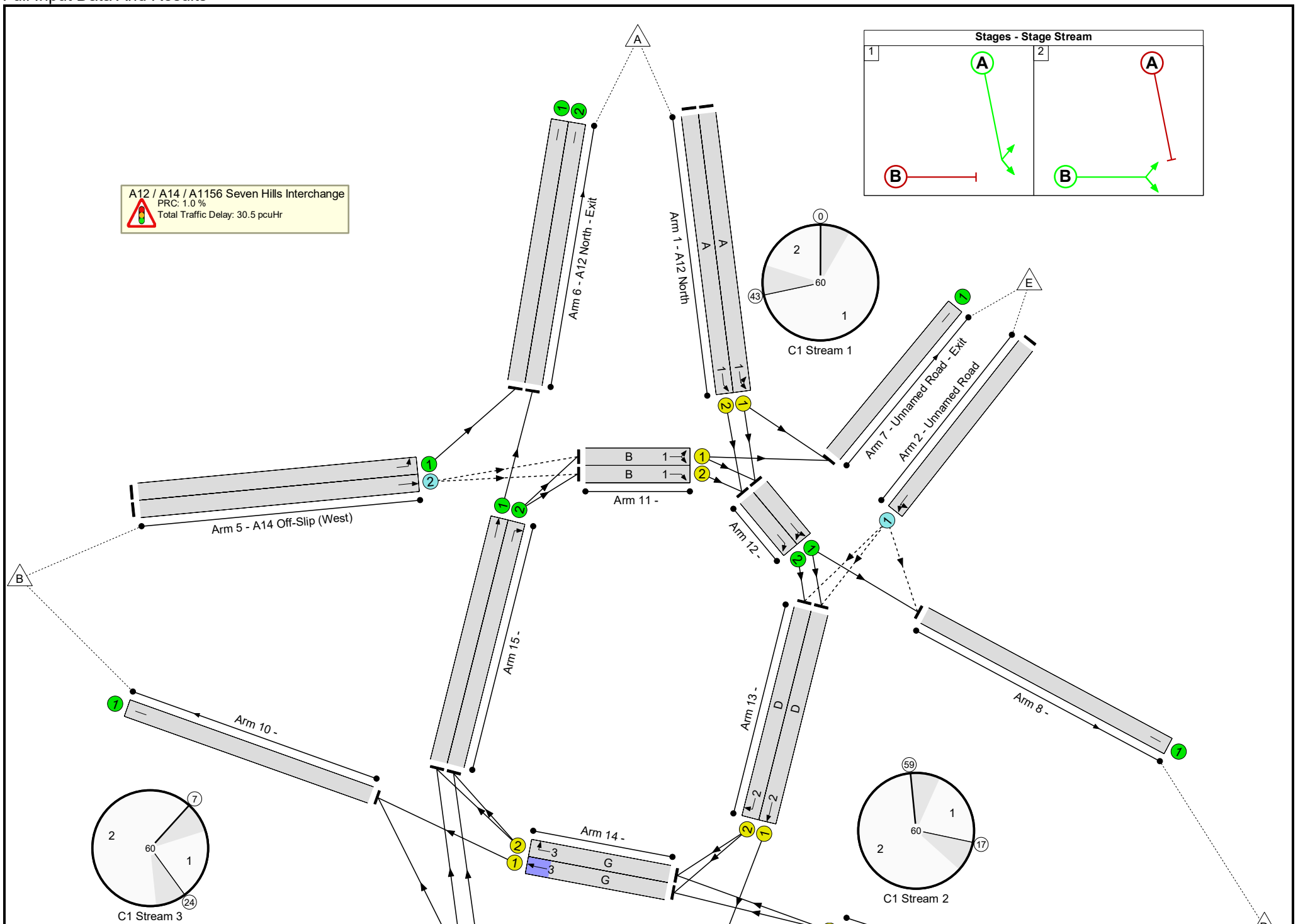
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	612	1866	1213	50.5%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1035	1866	1213	85.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	25	1871	389	6.4%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	269	1877	438	61.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	373	1877	438	85.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	278	1878	407	68.3%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	206	1878	407	50.6%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	114	1871	742	15.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	45	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	561	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1135	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	315	1886	409	77.1%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	882	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	327	1877	1189	27.5%
13/2	Right	U	2	N/A	D		1	37	-	1059	1877	1189	89.1%
14/1	Ahead	U	3	N/A	G		1	38	-	1058	2007	1305	81.1%
14/2	Right	U	3	N/A	G		1	38	-	374	1872	1217	30.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	206	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**139**	**0**	**0**	**14.0**	**16.5**	**0.0**	**30.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**139**	**0**	**0**	**14.0**	**16.5**	**0.0**	**30.5**	**-**	**-**	**-**	**-**
1/1	612	612	-	-	-	0.9	0.5	-	1.4	8.5	5.3	0.5	5.8
1/2	1035	1035	-	-	-	2.4	2.8	-	5.2	18.1	13.5	2.8	16.3
2/1	25	25	25	0	0	0.0	0.0	-	0.0	6.0	0.1	0.0	0.1
3/1	269	269	-	-	-	1.5	0.8	-	2.3	31.1	4.0	0.8	4.7
3/2	373	373	-	-	-	2.3	2.7	-	4.9	47.6	5.9	2.7	8.6
4/1	278	278	-	-	-	1.7	1.1	-	2.7	35.4	4.2	1.1	5.3
4/2	206	206	-	-	-	1.2	0.5	-	1.7	29.6	3.0	0.5	3.5
5/1	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	114	114	114	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	45	45	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1135	1135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	315	315	-	-	-	1.3	1.6	-	2.9	33.0	5.0	1.6	6.7
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	882	882	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	327	327	-	-	-	0.4	0.2	-	0.5	6.0	2.1	0.2	2.3
13/2	1059	1059	-	-	-	0.6	3.9	-	4.5	15.2	3.8	3.9	7.6
14/1	1058	1058	-	-	-	0.2	2.1	-	2.3	7.8	0.6	2.1	2.7

Full Input Data And Results

14/2	374	374	-	-	-	1.6	0.2	-	1.8	17.6	6.2	0.2	6.4
15/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

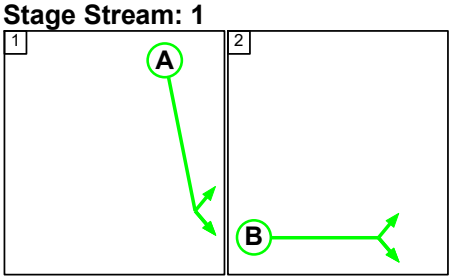
C1	Stream: 1 PRC for Signalled Lanes (%):	5.5	Total Delay for Signalled Lanes (pcuHr):	9.55	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	1.0	Total Delay for Signalled Lanes (pcuHr):	12.28	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	11.0	Total Delay for Signalled Lanes (pcuHr):	8.55	Cycle Time (s): 60
	PRC Over All Lanes (%):	1.0	Total Delay Over All Lanes(pcuHr):	30.51	

Full Input Data And Results

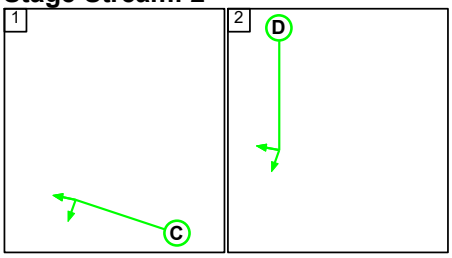
Scenario 6: '23RC 06:00-07:00' (FG6: '23RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

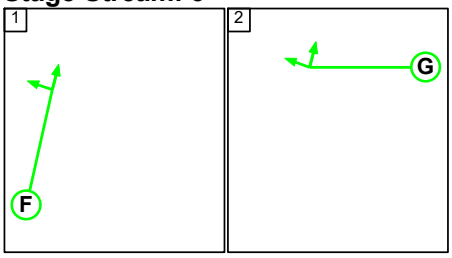
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

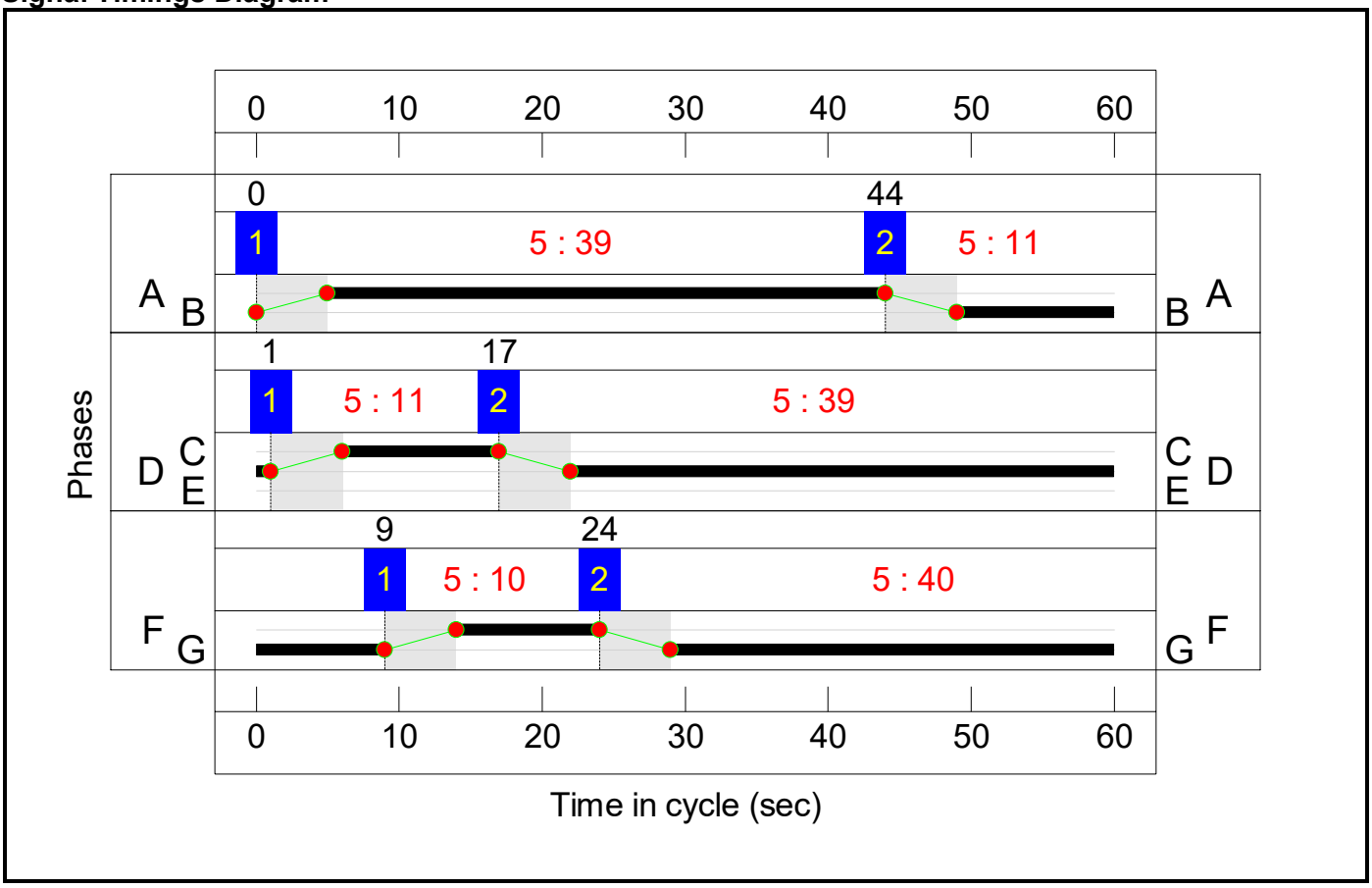
Stage	1	2
Duration	11	39
Change Point	1	17

Stage Stream: 3

Stage	1	2
Duration	10	40
Change Point	9	24

Full Input Data And Results

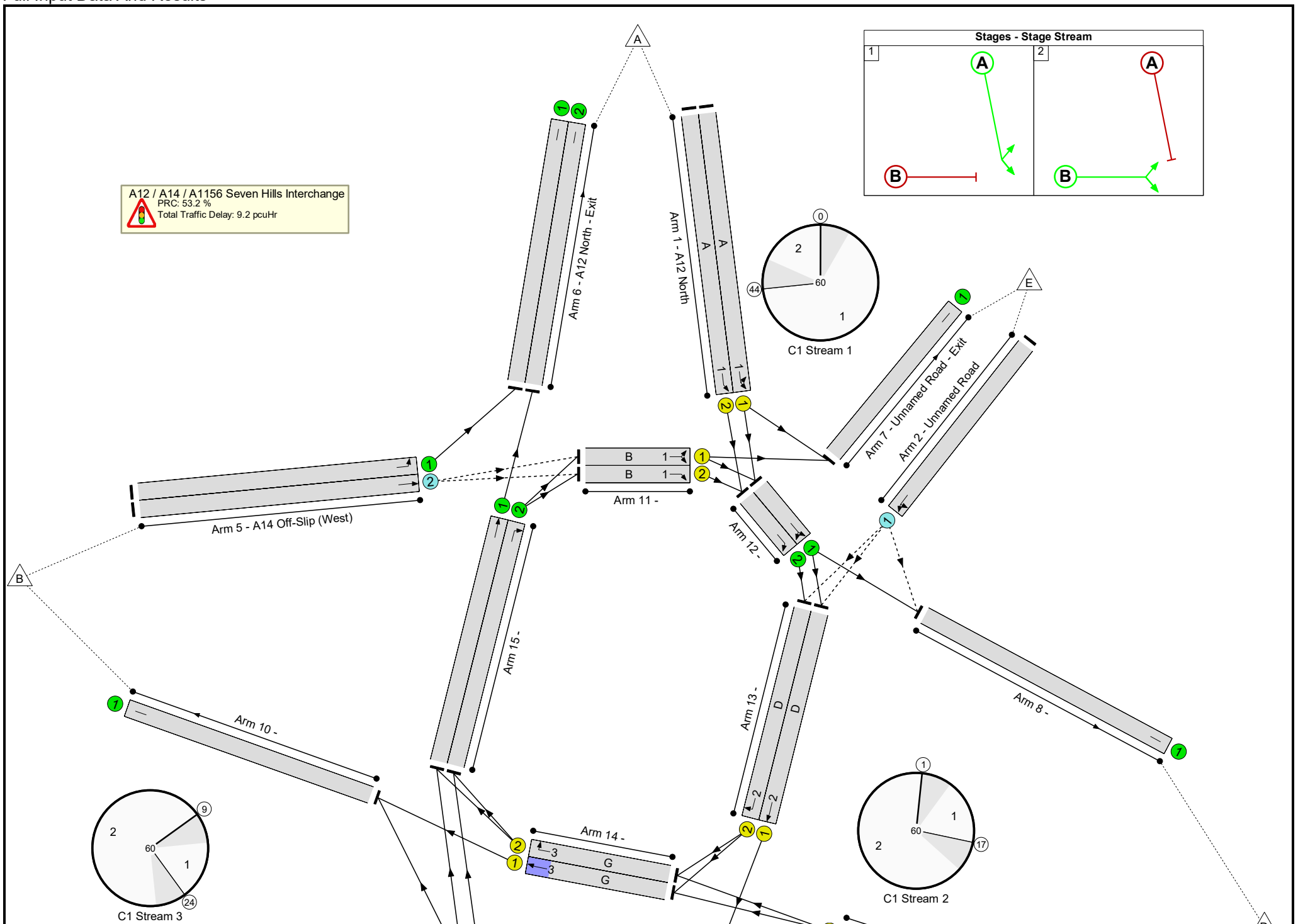
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	288	1866	1244	23.2%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	686	1866	1244	55.1%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	624	4.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	74	1877	375	19.7%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	177	1877	375	47.1%
4/1	A1156 Left Ahead	U	3	N/A	F		1	10	-	36	1878	344	10.5%
4/2	A1156 Ahead	U	3	N/A	F		1	10	-	144	1878	344	41.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	35	1871	881	4.0%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	148	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	733	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	169	1886	377	44.8%
11/2	Right	U	1	N/A	B		1	11	-	21	1886	377	5.6%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	432	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	74	1877	1251	5.9%
13/2	Right	U	2	N/A	D		1	39	-	735	1877	1251	58.7%
14/1	Ahead	U	3	N/A	G		1	40	-	726	2007	1371	52.9%
14/2	Right	U	3	N/A	G		1	40	-	186	1872	1279	14.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	155	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**64**	**0**	**0**	**5.6**	**3.6**	**0.0**	**9.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**64**	**0**	**0**	**5.6**	**3.6**	**0.0**	**9.2**	**-**	**-**	**-**	**-**
1/1	288	288	-	-	-	0.3	0.2	-	0.5	5.8	1.8	0.2	2.0
1/2	686	686	-	-	-	1.0	0.6	-	1.6	8.5	5.9	0.6	6.5
2/1	29	29	29	0	0	0.0	0.0	-	0.0	3.1	0.0	0.0	0.0
3/1	74	74	-	-	-	0.4	0.1	-	0.5	26.0	1.0	0.1	1.1
3/2	177	177	-	-	-	1.0	0.4	-	1.5	30.2	2.6	0.4	3.0
4/1	36	36	-	-	-	0.2	0.1	-	0.3	26.3	0.5	0.1	0.5
4/2	144	144	-	-	-	0.9	0.4	-	1.2	30.6	2.1	0.4	2.5
5/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	35	35	35	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.0
6/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	148	148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	733	733	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	169	169	-	-	-	0.5	0.4	-	0.9	18.5	2.5	0.4	2.9
11/2	21	21	-	-	-	0.1	0.0	-	0.1	24.7	0.3	0.0	0.3
12/1	432	432	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	74	74	-	-	-	0.0	0.0	-	0.1	3.1	0.1	0.0	0.2
13/2	735	735	-	-	-	0.4	0.7	-	1.1	5.2	2.2	0.7	2.9
14/1	726	726	-	-	-	0.1	0.6	-	0.7	3.2	0.3	0.6	0.9

Full Input Data And Results

14/2	186	186	-	-	-	0.7	0.1	-	0.7	14.3	3.0	0.1	3.1
15/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	155	155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

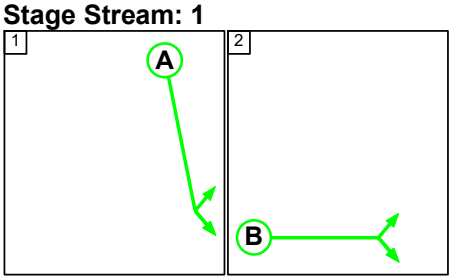
C1	Stream: 1 PRC for Signalled Lanes (%):	63.2	Total Delay for Signalled Lanes (pcuHr):	3.10	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	53.2	Total Delay for Signalled Lanes (pcuHr):	3.14	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	70.0	Total Delay for Signalled Lanes (pcuHr):	2.88	Cycle Time (s):	60
	PRC Over All Lanes (%):	53.2	Total Delay Over All Lanes(pcuHr):	9.17		

Full Input Data And Results

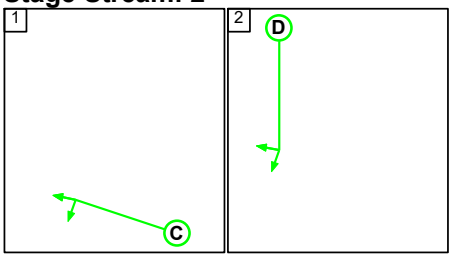
Scenario 7: '23RC 07:00-08:00' (FG7: '23RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

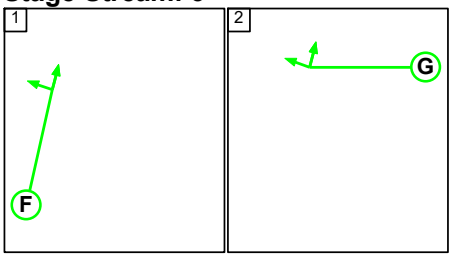
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	5	50

Stage Stream: 2

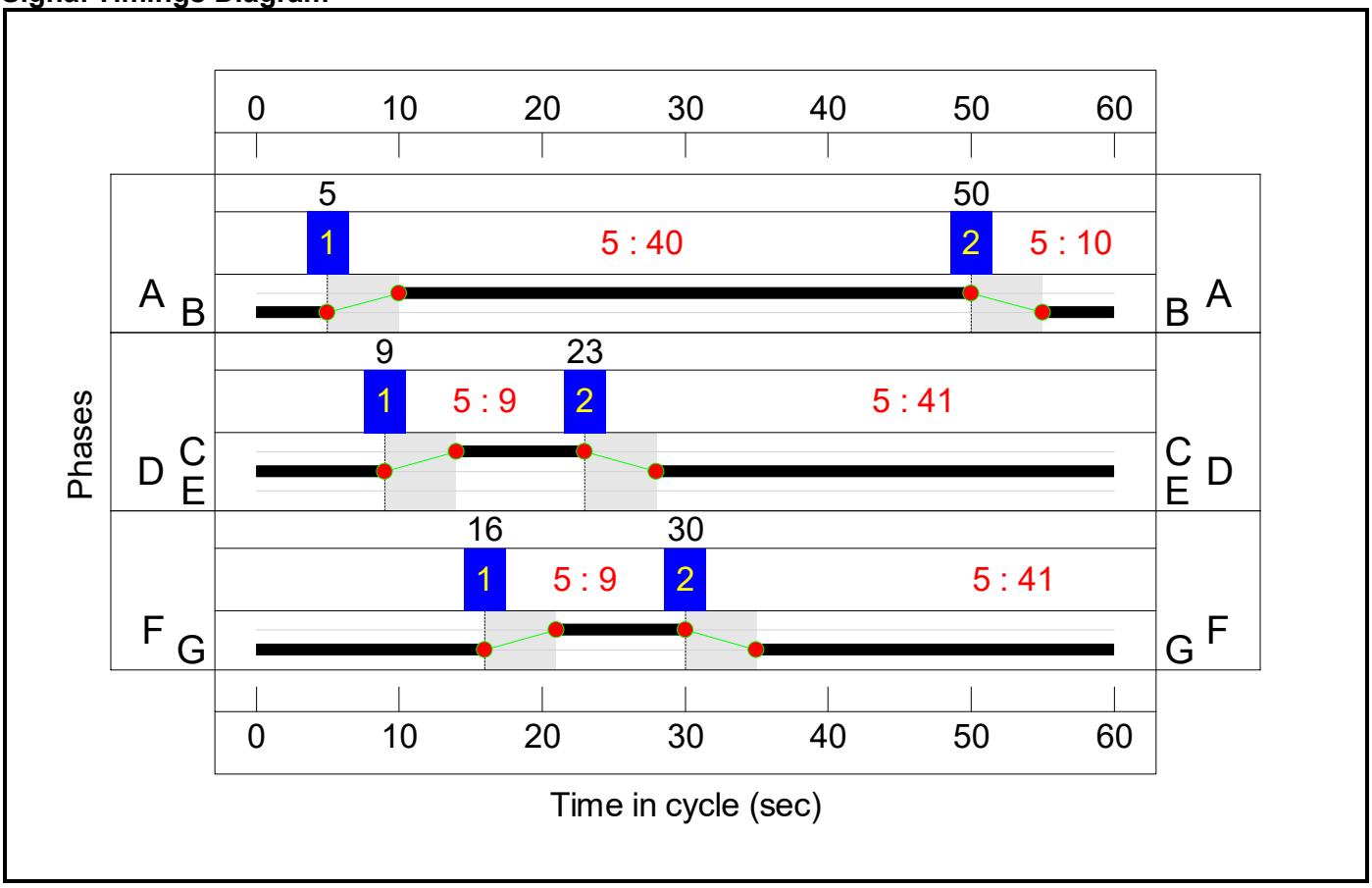
Stage	1	2
Duration	9	41
Change Point	9	23

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	16	30

Full Input Data And Results

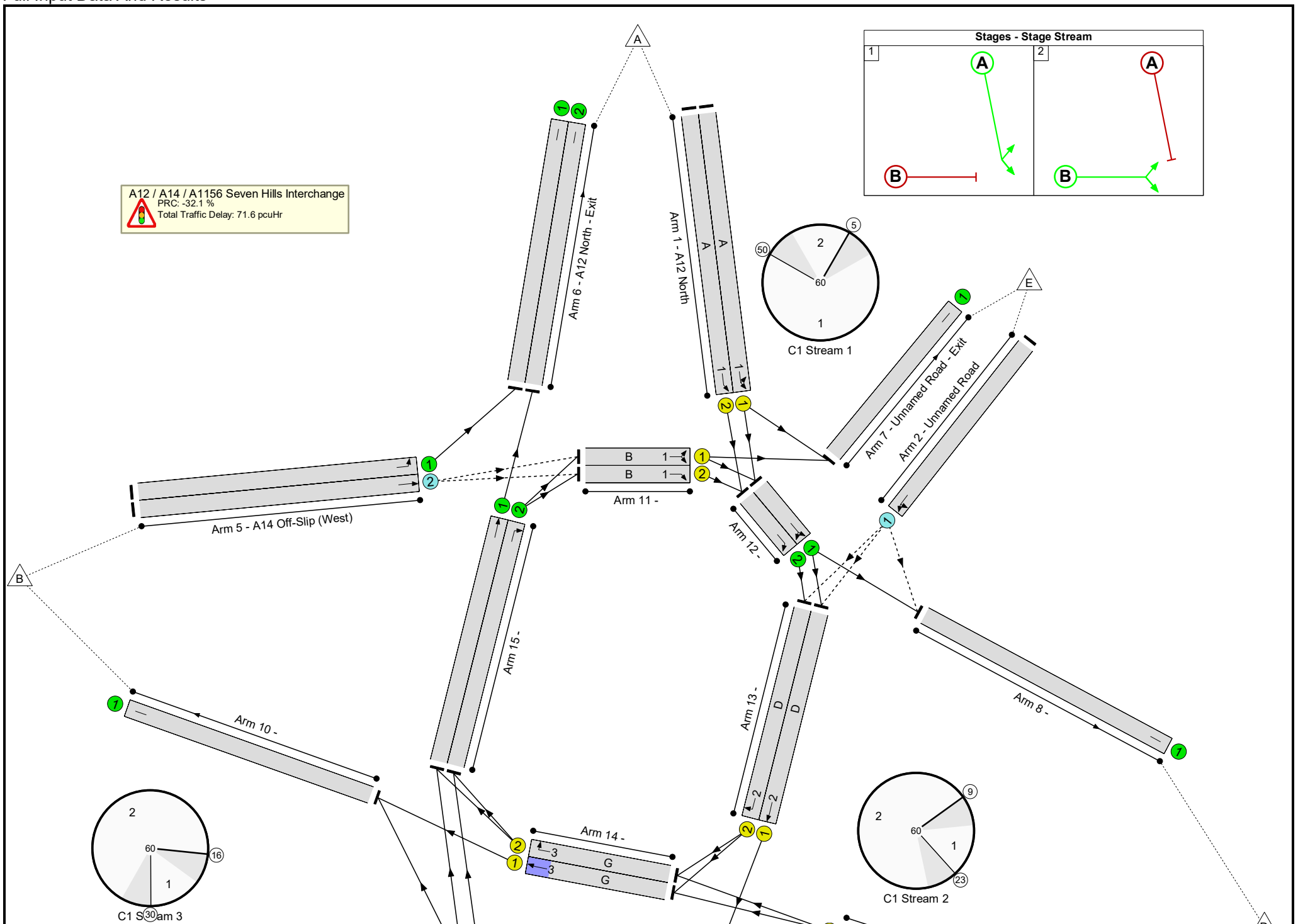
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	498	1866	1275	39.1%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1195	1866	1275	93.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	55	1871	371	14.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	187	1877	313	59.8%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	372	1877	313	118.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	227	1878	313	72.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	186	1878	313	59.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	107	1871	780	13.7%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1311	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	301	1886	346	86.4%
11/2	Right	U	1	N/A	B		1	10	-	6	1886	346	1.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1201	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	268	1877	1314	20.4%
13/2	Right	U	2	N/A	D		1	41	-	1250	1877	1314	95.1%
14/1	Ahead	U	3	N/A	G		1	41	-	1252	2007	1405	89.1%
14/2	Right	U	3	N/A	G		1	41	-	370	1872	1310	23.8%
15/1	Ahead	U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	200	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**162**	**0**	**0**	**14.6**	**57.0**	**0.0**	**71.6**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**162**	**0**	**0**	**14.6**	**57.0**	**0.0**	**71.6**	**-**	**-**	**-**	**-**
1/1	498	498	-	-	-	0.6	0.3	-	0.9	6.4	3.5	0.3	3.8
1/2	1195	1195	-	-	-	2.8	6.4	-	9.2	27.7	17.3	6.4	23.7
2/1	55	55	55	0	0	0.0	0.1	-	0.1	6.2	0.1	0.1	0.2
3/1	187	187	-	-	-	1.2	0.7	-	1.9	37.3	2.9	0.7	3.6
3/2	372	313	-	-	-	4.2	32.4	-	36.7	354.9	7.2	32.4	39.6
4/1	227	227	-	-	-	1.5	1.3	-	2.8	44.0	3.5	1.3	4.8
4/2	186	186	-	-	-	1.2	0.7	-	1.9	37.2	2.8	0.7	3.6
5/1	1310	1310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	107	107	107	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
6/1	1310	1310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	62	62	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1310	1310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	299	299	-	-	-	1.3	2.8	-	4.1	49.3	4.8	2.8	7.7
11/2	6	6	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1201	1201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	268	268	-	-	-	0.2	0.1	-	0.3	4.5	1.4	0.1	1.5
13/2	1250	1250	-	-	-	0.4	7.9	-	8.3	23.8	9.9	7.9	17.8
14/1	1251	1251	-	-	-	0.2	3.9	-	4.1	11.9	0.9	3.9	4.8

Full Input Data And Results

14/2	311	311	-	-	-	1.0	0.2	-	1.1	13.3	5.2	0.2	5.3
15/1	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

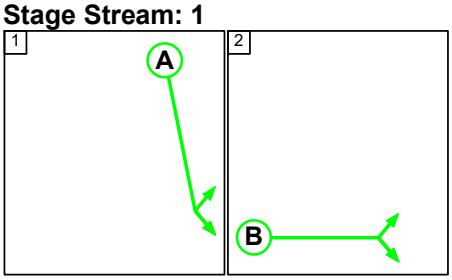
C1	Stream: 1 PRC for Signalled Lanes (%):	-4.1	Total Delay for Signalled Lanes (pcuHr):	14.23	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-32.1	Total Delay for Signalled Lanes (pcuHr):	47.22	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	1.0	Total Delay for Signalled Lanes (pcuHr):	9.97	Cycle Time (s): 60
	PRC Over All Lanes (%):	-32.1	Total Delay Over All Lanes(pcuHr):	71.59	

Full Input Data And Results

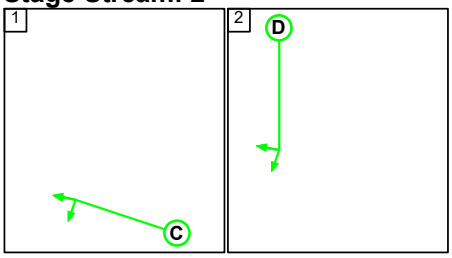
Scenario 8: '23RC 08:00-09:00' (FG8: '23RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

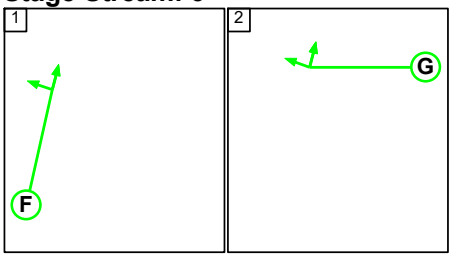
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	11	53

Stage Stream: 2

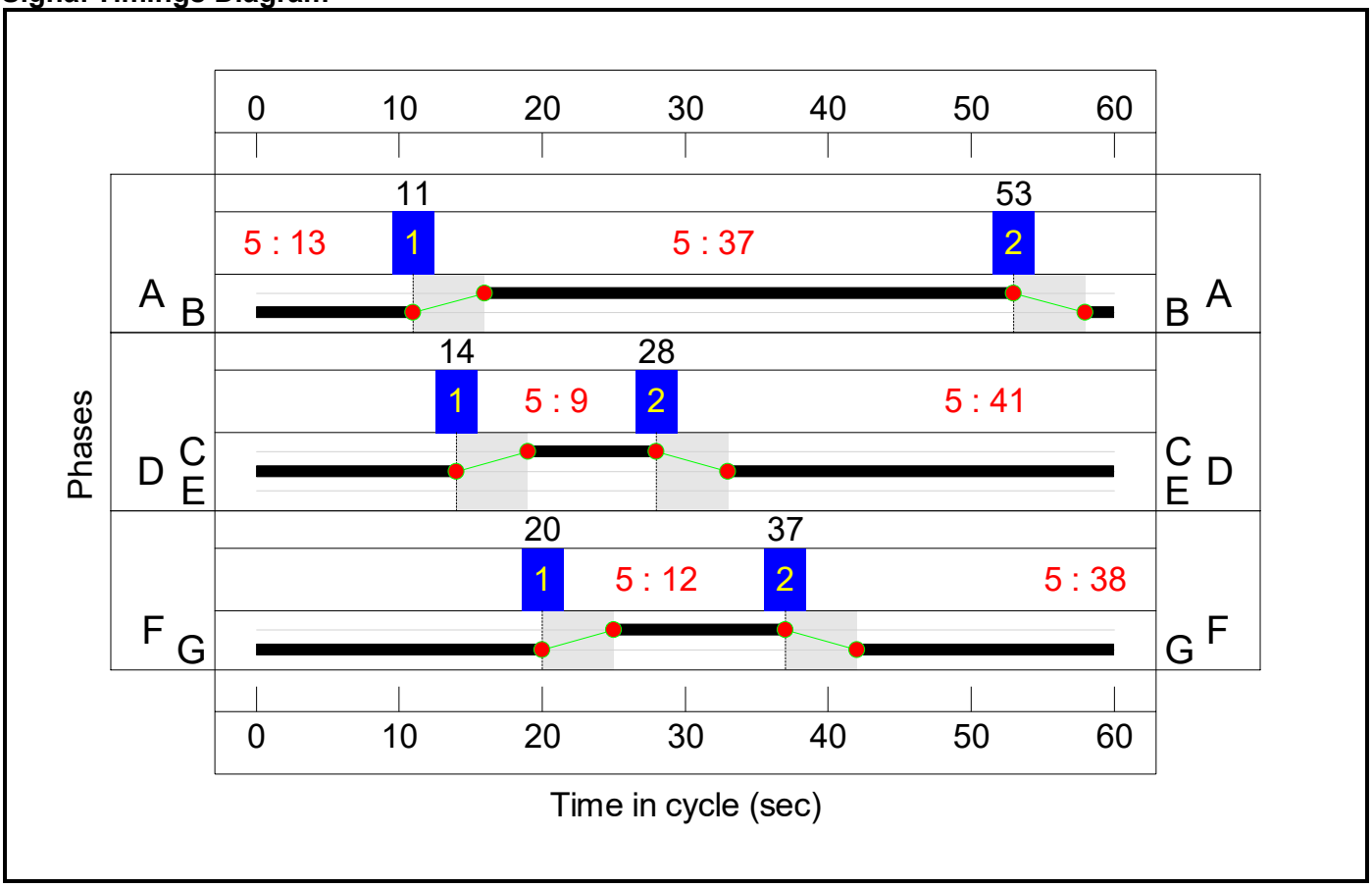
Stage	1	2
Duration	9	41
Change Point	14	28

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	20	37

Full Input Data And Results

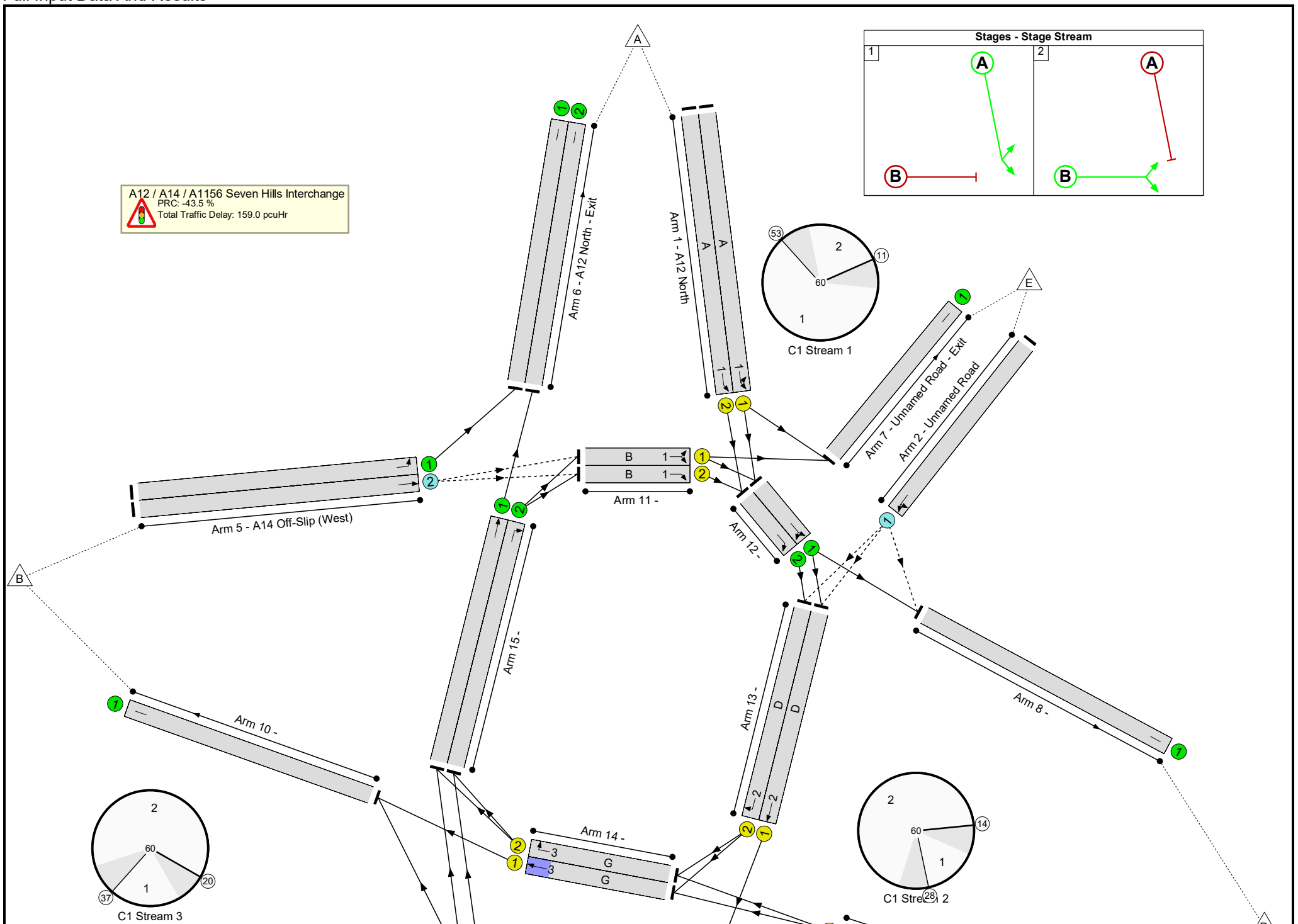
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**129.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**129.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	701	1866	1182	59.3%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1284	1866	1182	108.6%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	100	1871	289	34.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	257	1877	313	82.2%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	404	1877	313	129.1%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	365	1878	407	89.7%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	258	1878	407	63.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1637	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	135	1871	715	18.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1637	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	30	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	671	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1443	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	396	1886	440	89.2%
11/2	Right	U	1	N/A	B		1	13	-	12	1886	440	2.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1067	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1296	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	421	1877	1314	32.0%
13/2	Right	U	2	N/A	D		1	41	-	1371	1877	1314	96.6%
14/1	Ahead	U	3	N/A	G		1	38	-	1362	2007	1305	96.6%
14/2	Right	U	3	N/A	G		1	38	-	413	1872	1217	26.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**235**	**0**	**0**	**23.1**	**135.9**	**0.0**	**159.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**235**	**0**	**0**	**23.1**	**135.9**	**0.0**	**159.0**	**-**	**-**	**-**	**-**
1/1	701	701	-	-	-	1.3	0.7	-	2.0	10.2	6.8	0.7	7.5
1/2	1284	1182	-	-	-	6.6	56.8	-	63.3	177.6	23.4	56.8	80.1
2/1	100	100	100	0	0	0.1	0.3	-	0.4	14.3	1.0	0.3	1.3
3/1	257	257	-	-	-	1.7	2.1	-	3.9	54.1	4.1	2.1	6.2
3/2	404	313	-	-	-	5.2	47.7	-	52.9	471.4	8.3	47.7	56.0
4/1	365	365	-	-	-	2.3	3.7	-	6.0	59.4	5.9	3.7	9.6
4/2	258	258	-	-	-	1.5	0.9	-	2.4	33.3	3.9	0.9	4.7
5/1	1637	1637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	135	135	135	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
6/1	1637	1637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	671	671	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1341	1341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	393	393	-	-	-	1.5	3.6	-	5.1	46.6	6.4	3.6	10.0
11/2	12	12	-	-	-	0.1	0.0	-	0.1	22.2	0.2	0.0	0.2
12/1	1067	1067	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1194	1194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	421	421	-	-	-	0.4	0.2	-	0.6	5.4	2.4	0.2	2.6
13/2	1269	1269	-	-	-	0.5	9.8	-	10.3	29.2	11.1	9.8	20.9
14/1	1260	1260	-	-	-	0.7	9.8	-	10.5	30.0	5.3	9.8	15.1

Full Input Data And Results

14/2	322	322	-	-	-	1.2	0.2	-	1.4	15.4	5.3	0.2	5.5
15/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	270	270	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

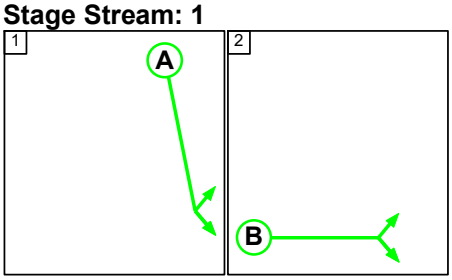
C1	Stream: 1 PRC for Signalled Lanes (%):	-20.7	Total Delay for Signalled Lanes (pcuHr):	70.46	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-43.5	Total Delay for Signalled Lanes (pcuHr):	67.68	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	-7.3	Total Delay for Signalled Lanes (pcuHr):	20.29	Cycle Time (s):	60
	PRC Over All Lanes (%):	-43.5	Total Delay Over All Lanes(pcuHr):	158.95		

Full Input Data And Results

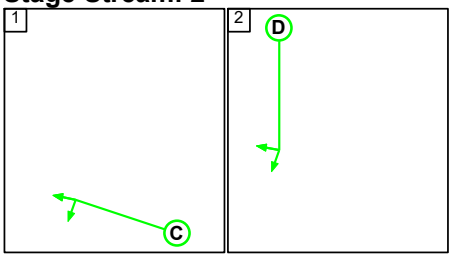
Scenario 9: '23RC 15:00-16:00' (FG9: '23RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

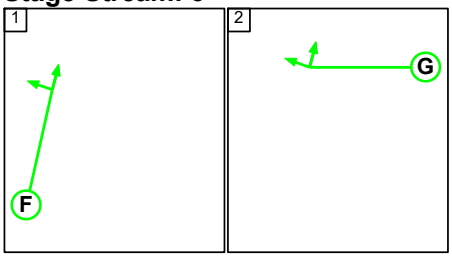
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	16	1

Stage Stream: 2

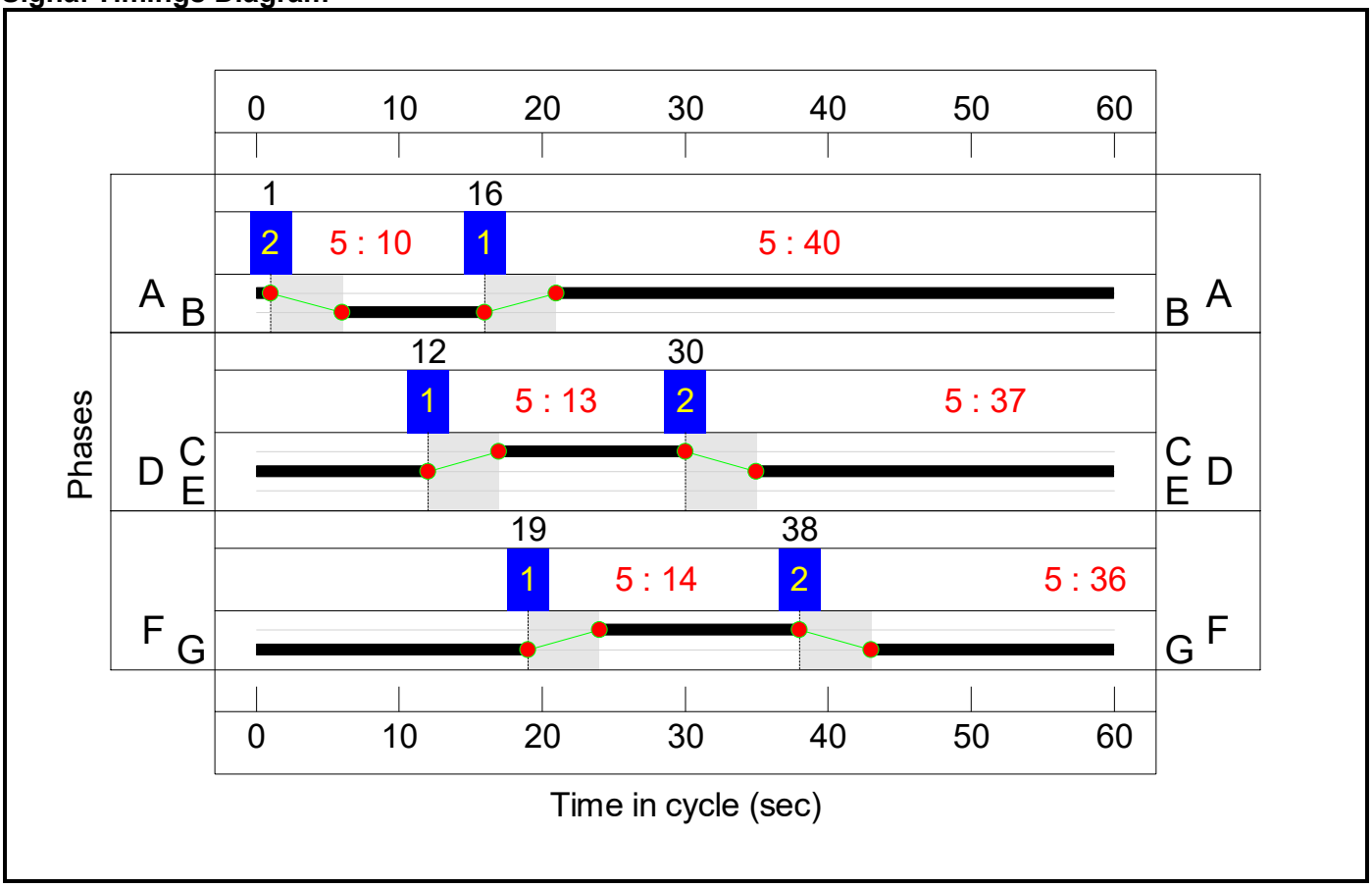
Stage	1	2
Duration	13	37
Change Point	12	30

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	19	38

Full Input Data And Results

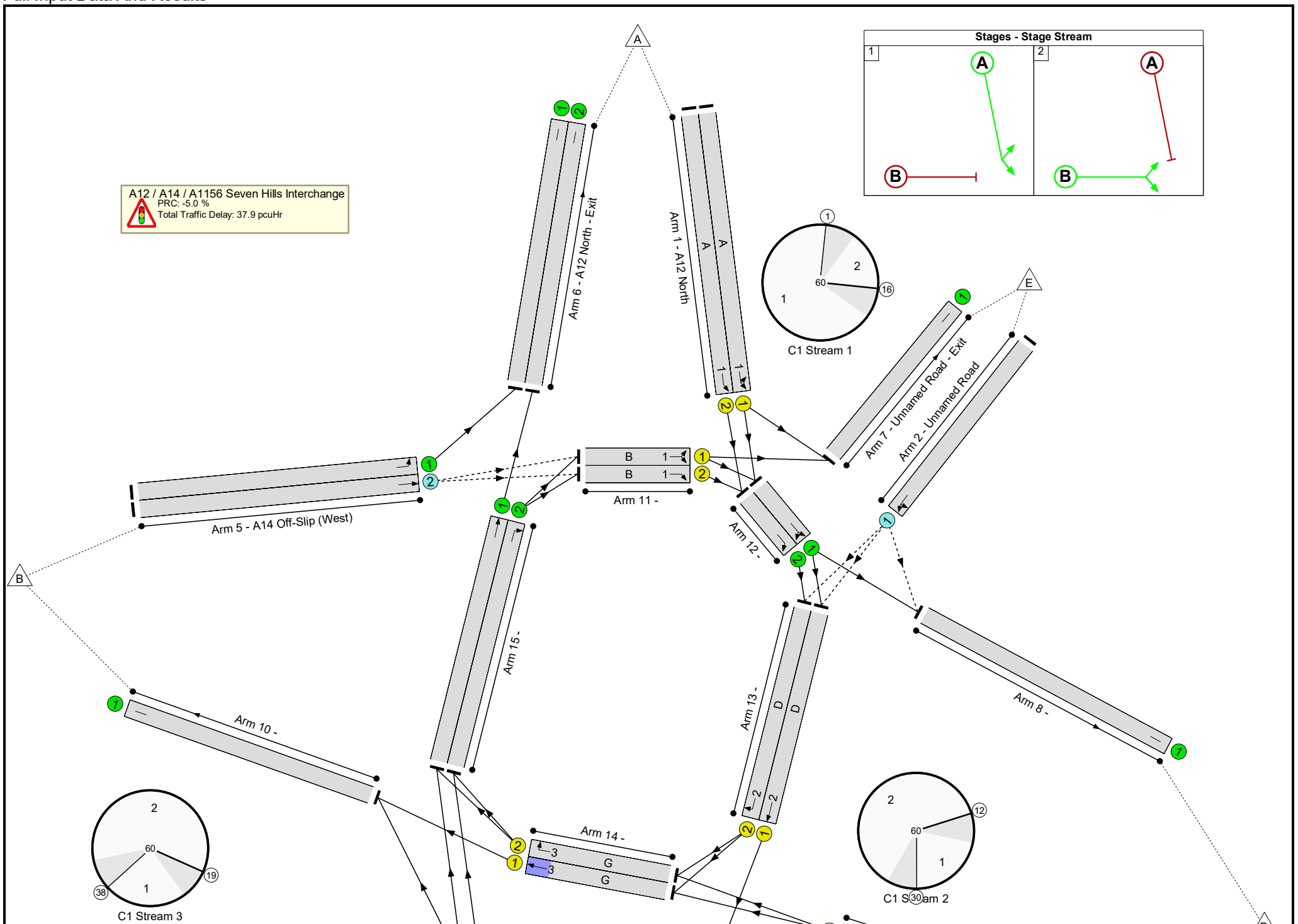
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**94.5%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**94.5%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	655	1866	1275	51.4%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1086	1866	1275	85.2%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	38	1871	376	10.1%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	235	1877	438	53.7%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	381	1877	438	87.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	383	1878	470	81.6%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	181	1878	470	38.6%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1290	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	93	1871	713	13.0%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1290	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	607	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1199	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	271	1886	346	78.4%
11/2	Right	U	1	N/A	B		1	10	-	4	1886	346	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	871	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1090	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	372	1877	1189	31.3%
13/2	Right	U	2	N/A	D		1	37	-	1123	1877	1189	94.5%
14/1	Ahead	U	3	N/A	G		1	36	-	1116	2007	1238	90.2%
14/2	Right	U	3	N/A	G		1	36	-	388	1872	1154	33.6%
15/1	Ahead	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**131**	**0**	**0**	**14.9**	**23.0**	**0.0**	**37.9**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**131**	**0**	**0**	**14.9**	**23.0**	**0.0**	**37.9**	**-**	**-**	**-**	**-**
1/1	655	655	-	-	-	0.8	0.5	-	1.4	7.5	5.3	0.5	5.8
1/2	1086	1086	-	-	-	2.2	2.8	-	5.0	16.4	13.6	2.8	16.4
2/1	38	38	38	0	0	0.0	0.1	-	0.1	6.6	0.1	0.1	0.2
3/1	235	235	-	-	-	1.3	0.6	-	1.9	29.0	3.4	0.6	4.0
3/2	381	381	-	-	-	2.3	3.0	-	5.4	50.7	6.0	3.0	9.1
4/1	383	383	-	-	-	2.3	2.1	-	4.4	41.0	6.0	2.1	8.1
4/2	181	181	-	-	-	0.9	0.3	-	1.3	24.9	2.5	0.3	2.8
5/1	1290	1290	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	93	93	93	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1290	1290	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	607	607	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1199	1199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	271	271	-	-	-	1.3	1.7	-	3.1	40.8	4.4	1.7	6.1
11/2	4	4	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	871	871	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1090	1090	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	372	372	-	-	-	0.3	0.2	-	0.6	5.5	1.6	0.2	1.9
13/2	1123	1123	-	-	-	1.2	7.0	-	8.2	26.4	6.8	7.0	13.9
14/1	1116	1116	-	-	-	0.4	4.3	-	4.6	15.0	1.7	4.3	6.0

Full Input Data And Results

14/2	388	388	-	-	-	1.8	0.3	-	2.0	18.7	6.4	0.3	6.7
15/1	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

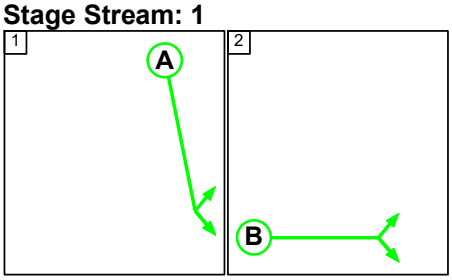
C1	Stream: 1 PRC for Signalled Lanes (%):	5.7	Total Delay for Signalled Lanes (pcuHr):	9.43	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-5.0	Total Delay for Signalled Lanes (pcuHr):	16.06	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-0.2	Total Delay for Signalled Lanes (pcuHr):	12.28	Cycle Time (s): 60
	PRC Over All Lanes (%):	-5.0	Total Delay Over All Lanes(pcuHr):	37.91	

Full Input Data And Results

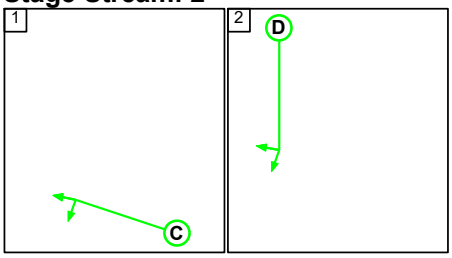
Scenario 10: '23RC 17:00-18:00' (FG10: '23RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

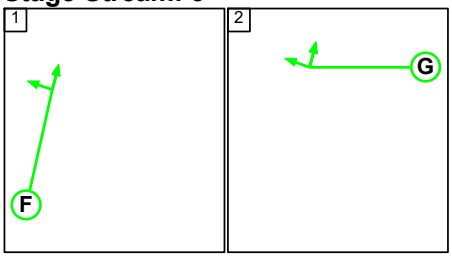
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	4	47

Stage Stream: 2

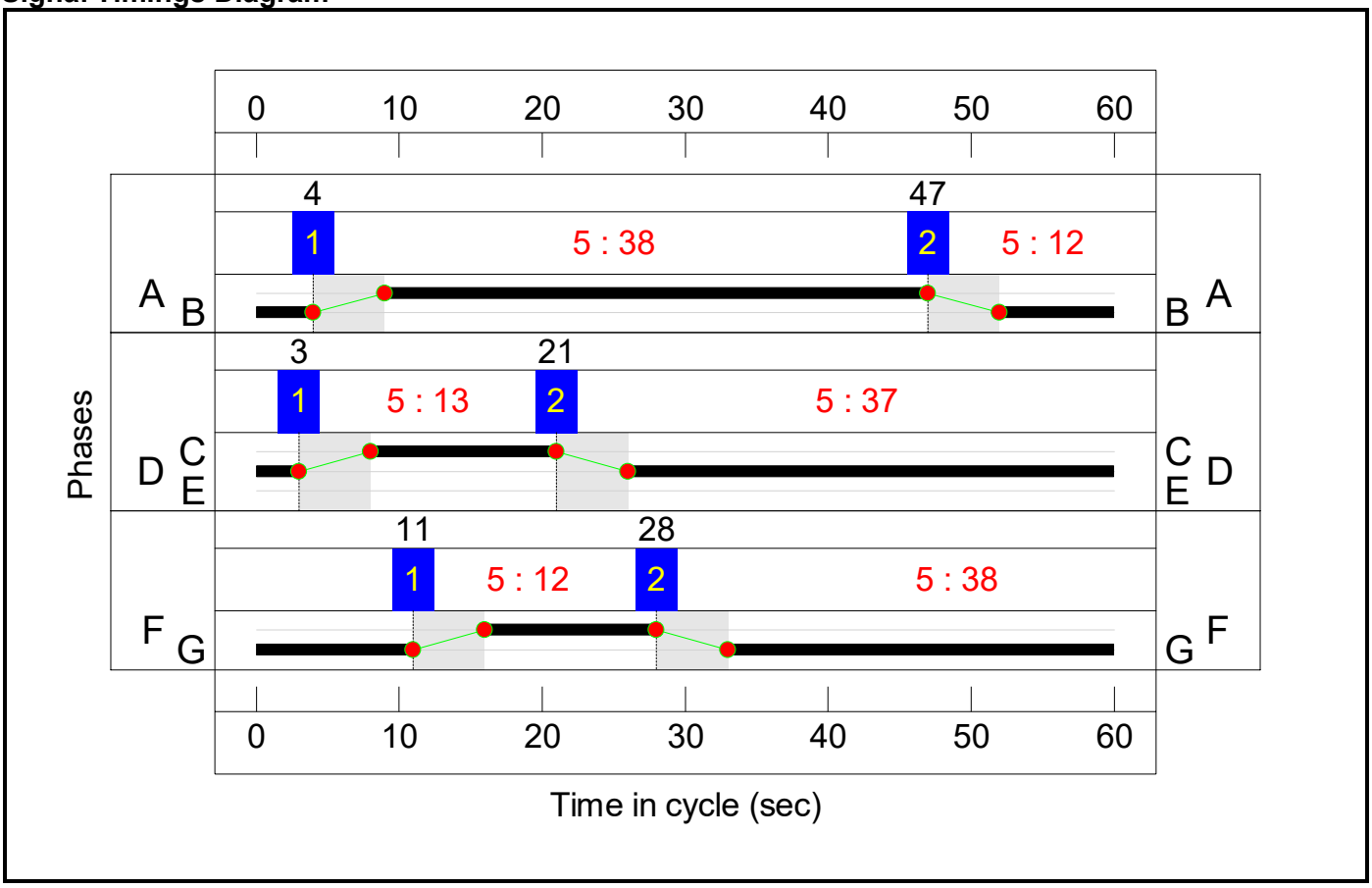
Stage	1	2
Duration	13	37
Change Point	3	21

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	11	28

Full Input Data And Results

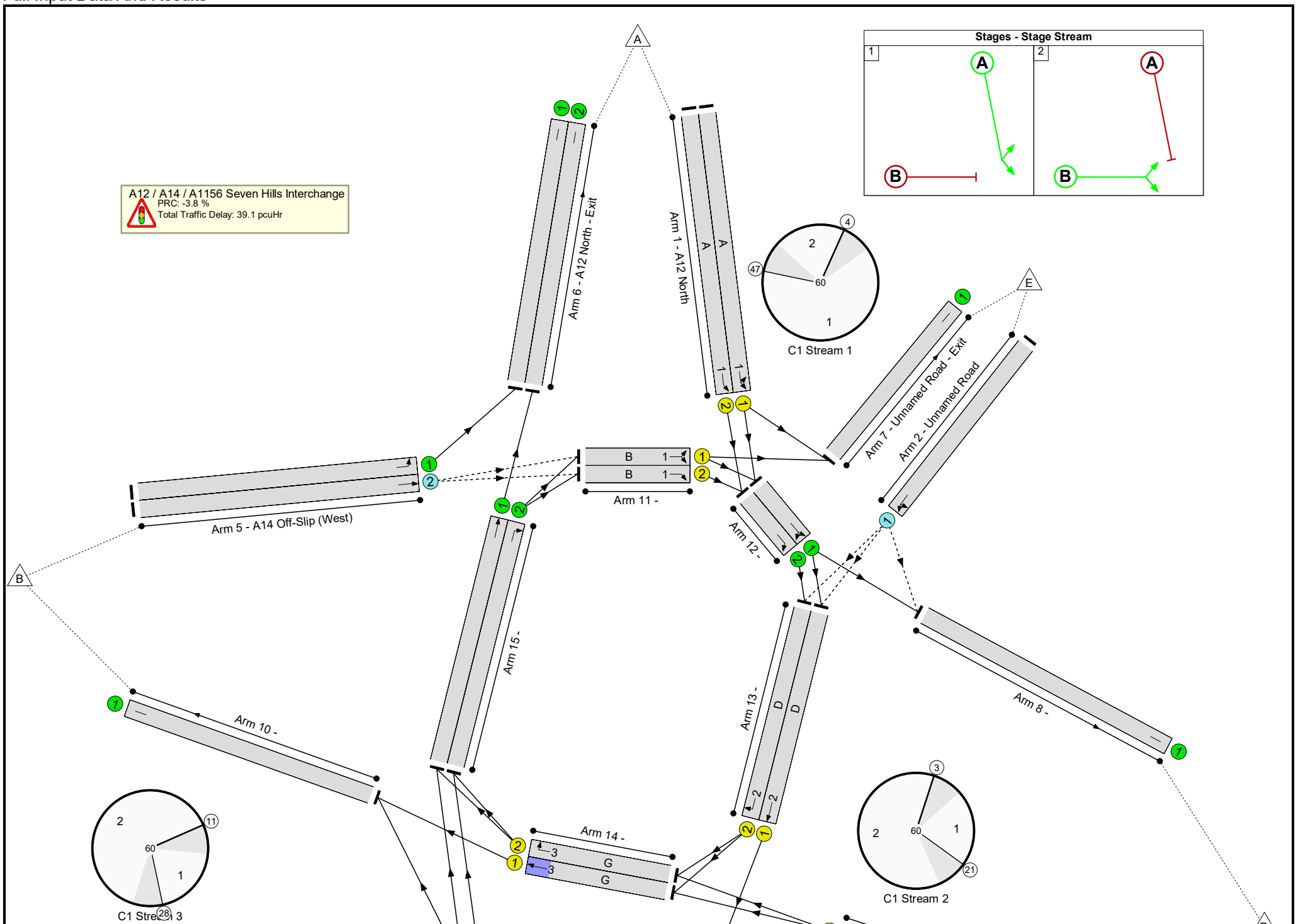
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.5%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.5%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	646	1866	1213	53.3%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1085	1866	1213	89.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	28	1871	355	7.9%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	318	1877	438	72.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	382	1877	438	87.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	311	1878	407	76.4%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	240	1878	407	59.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1352	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	116	1871	717	16.2%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1352	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	617	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	607	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1187	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	351	1886	409	85.9%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	947	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1090	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	347	1877	1189	29.2%
13/2	Right	U	2	N/A	D		1	37	-	1111	1877	1189	93.5%
14/1	Ahead	U	3	N/A	G		1	38	-	1110	2007	1305	85.1%
14/2	Right	U	3	N/A	G		1	38	-	383	1872	1217	31.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	617	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**144**	**0**	**0**	**15.5**	**23.5**	**0.0**	**39.1**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**144**	**0**	**0**	**15.5**	**23.5**	**0.0**	**39.1**	**-**	**-**	**-**	**-**
1/1	646	646	-	-	-	1.0	0.6	-	1.6	8.8	5.7	0.6	6.3
1/2	1085	1085	-	-	-	2.6	4.0	-	6.6	22.0	15.1	4.0	19.1
2/1	28	28	28	0	0	0.0	0.0	-	0.1	6.8	0.1	0.0	0.2
3/1	318	318	-	-	-	1.9	1.3	-	3.2	35.9	4.9	1.3	6.2
3/2	382	382	-	-	-	2.3	3.1	-	5.4	51.1	6.0	3.1	9.1
4/1	311	311	-	-	-	1.9	1.6	-	3.5	40.2	4.8	1.6	6.4
4/2	240	240	-	-	-	1.4	0.7	-	2.1	31.8	3.5	0.7	4.2
5/1	1352	1352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	116	116	116	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1352	1352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	617	617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	607	607	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1187	1187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	351	351	-	-	-	1.4	2.8	-	4.2	42.9	5.7	2.8	8.5
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	947	947	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1090	1090	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	347	347	-	-	-	0.4	0.2	-	0.6	5.9	2.1	0.2	2.3
13/2	1111	1111	-	-	-	0.7	6.2	-	6.9	22.2	4.8	6.2	10.9
14/1	1110	1110	-	-	-	0.2	2.8	-	3.0	9.7	0.7	2.8	3.4

Full Input Data And Results

14/2	383	383	-	-	-	1.6	0.2	-	1.9	17.7	6.4	0.2	6.6
15/1	617	617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

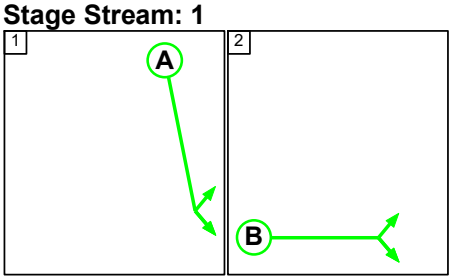
C1	Stream: 1 PRC for Signalled Lanes (%):	0.6	Total Delay for Signalled Lanes (pcuHr):	12.43	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-3.8	Total Delay for Signalled Lanes (pcuHr):	16.02	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	5.8	Total Delay for Signalled Lanes (pcuHr):	10.46	Cycle Time (s): 60
	PRC Over All Lanes (%):	-3.8	Total Delay Over All Lanes(pcuHr):	39.06	

Full Input Data And Results

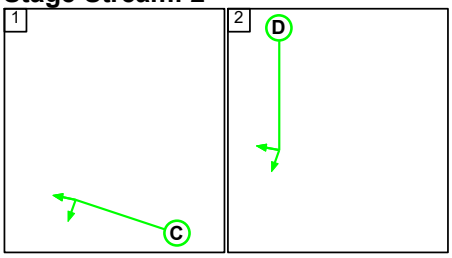
Scenario 11: '23EY 06:00-07:00' (FG11: '23EY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

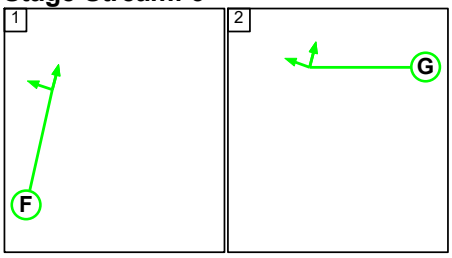
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

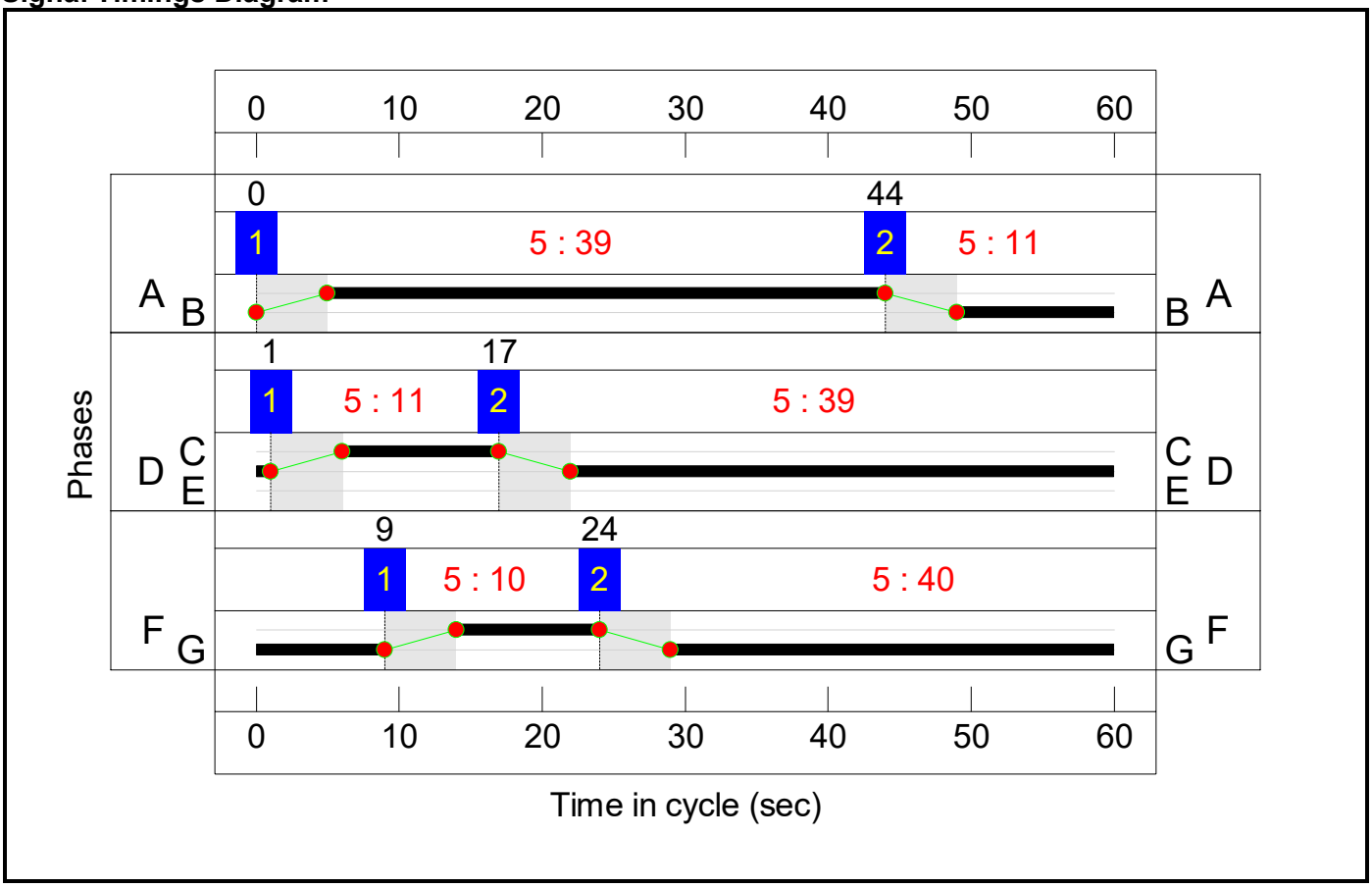
Stage	1	2
Duration	11	39
Change Point	1	17

Stage Stream: 3

Stage	1	2
Duration	10	40
Change Point	9	24

Full Input Data And Results

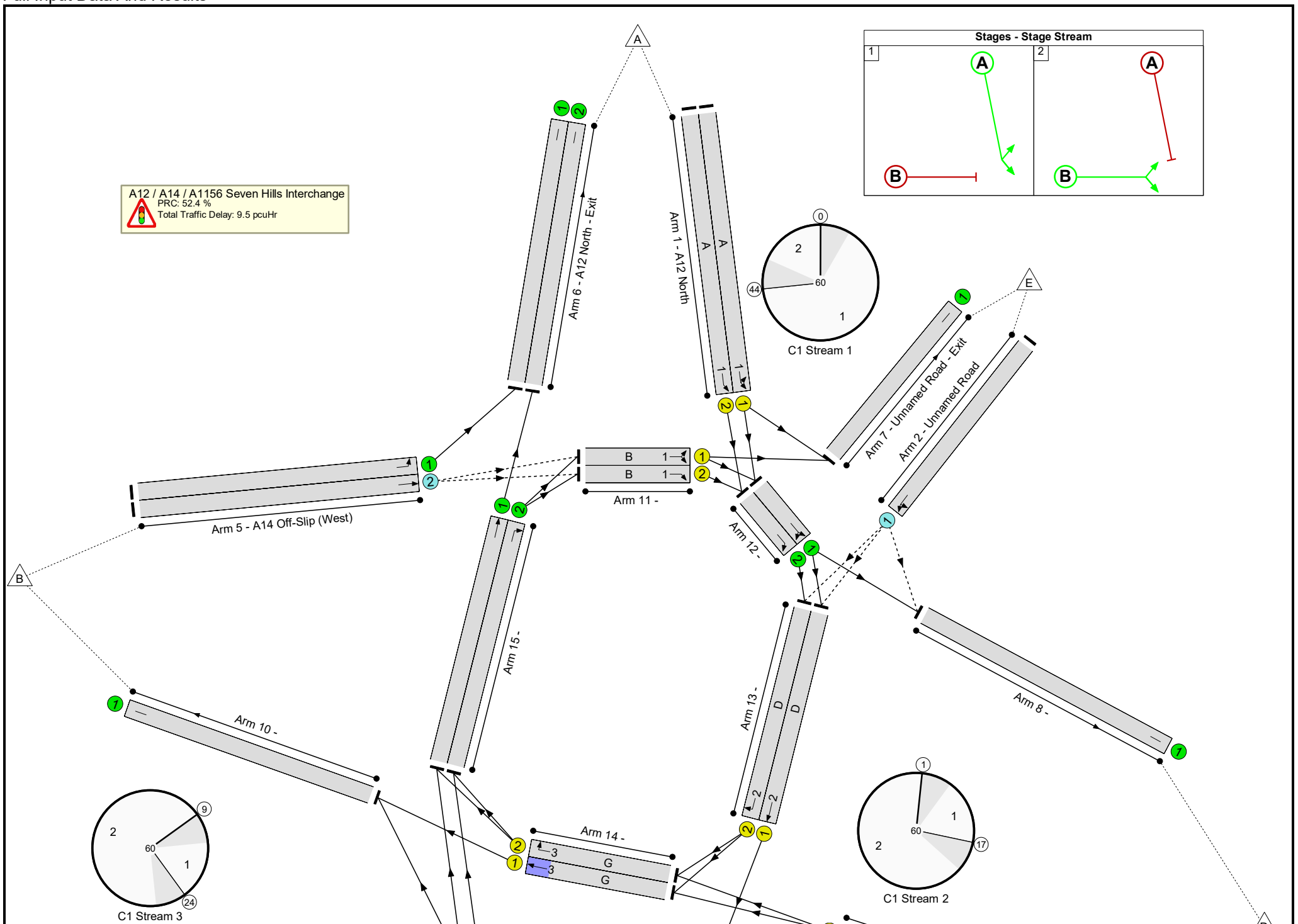
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**59.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**59.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	296	1866	1244	23.8%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	690	1866	1244	55.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	620	4.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	74	1877	375	19.7%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	189	1877	375	50.3%
4/1	A1156 Left Ahead	U	3	N/A	F		1	10	-	36	1878	344	10.5%
4/2	A1156 Ahead	U	3	N/A	F		1	10	-	144	1878	344	41.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	38	1871	877	4.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	216	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	159	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	172	1886	377	45.6%
11/2	Right	U	1	N/A	B		1	11	-	21	1886	377	5.6%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	443	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	711	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	85	1877	1251	6.8%
13/2	Right	U	2	N/A	D		1	39	-	739	1877	1251	59.1%
14/1	Ahead	U	3	N/A	G		1	40	-	730	2007	1371	53.2%
14/2	Right	U	3	N/A	G		1	40	-	198	1872	1279	15.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	216	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	155	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**67**	**0**	**0**	**5.7**	**3.7**	**0.0**	**9.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**67**	**0**	**0**	**5.7**	**3.7**	**0.0**	**9.5**	**-**	**-**	**-**	**-**
1/1	296	296	-	-	-	0.3	0.2	-	0.5	5.9	1.9	0.2	2.0
1/2	690	690	-	-	-	1.0	0.6	-	1.6	8.5	5.9	0.6	6.6
2/1	29	29	29	0	0	0.0	0.0	-	0.0	3.1	0.0	0.0	0.0
3/1	74	74	-	-	-	0.4	0.1	-	0.5	26.0	1.0	0.1	1.1
3/2	189	189	-	-	-	1.1	0.5	-	1.6	31.0	2.8	0.5	3.3
4/1	36	36	-	-	-	0.2	0.1	-	0.3	26.3	0.5	0.1	0.5
4/2	144	144	-	-	-	0.9	0.4	-	1.2	30.6	2.1	0.4	2.5
5/1	714	714	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	38	38	38	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.0
6/1	714	714	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	216	216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	172	172	-	-	-	0.5	0.4	-	0.9	18.9	2.5	0.4	2.9
11/2	21	21	-	-	-	0.1	0.0	-	0.1	24.7	0.3	0.0	0.3
12/1	443	443	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	711	711	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	85	85	-	-	-	0.0	0.0	-	0.1	3.3	0.2	0.0	0.2
13/2	739	739	-	-	-	0.4	0.7	-	1.1	5.2	2.2	0.7	2.9
14/1	730	730	-	-	-	0.1	0.6	-	0.7	3.3	0.3	0.6	0.9

Full Input Data And Results

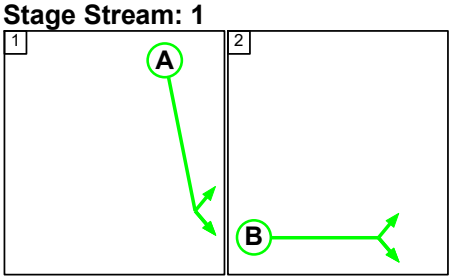
14/2	198	198	-	-	-	0.7	0.1	-	0.8	14.4	3.2	0.1	3.3
15/1	216	216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	155	155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	62.3	Total Delay for Signalled Lanes (pcuHr):	3.16	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	52.4	Total Delay for Signalled Lanes (pcuHr):	3.31	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	69.1	Total Delay for Signalled Lanes (pcuHr):	2.94	Cycle Time (s): 60
	PRC Over All Lanes (%):	52.4	Total Delay Over All Lanes(pcuHr):	9.46	

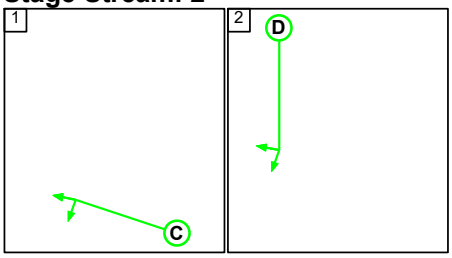
Full Input Data And Results
Scenario 12: '23EY 07:00-08:00' (FG12: '23EY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

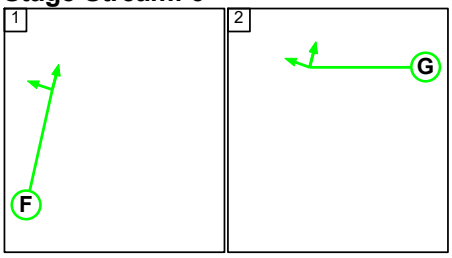
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	5	47

Stage Stream: 2

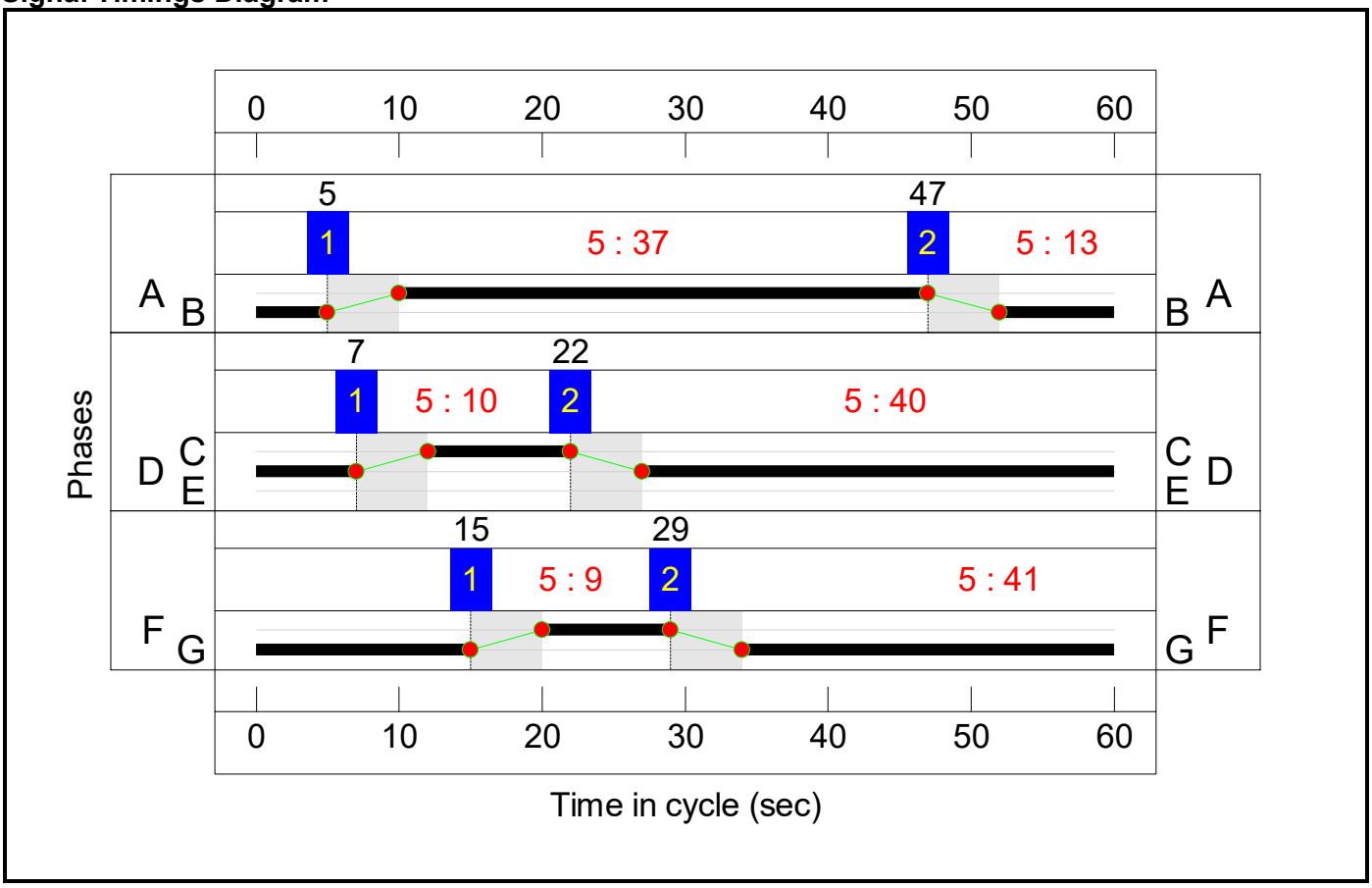
Stage	1	2
Duration	10	40
Change Point	7	22

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	15	29

Full Input Data And Results

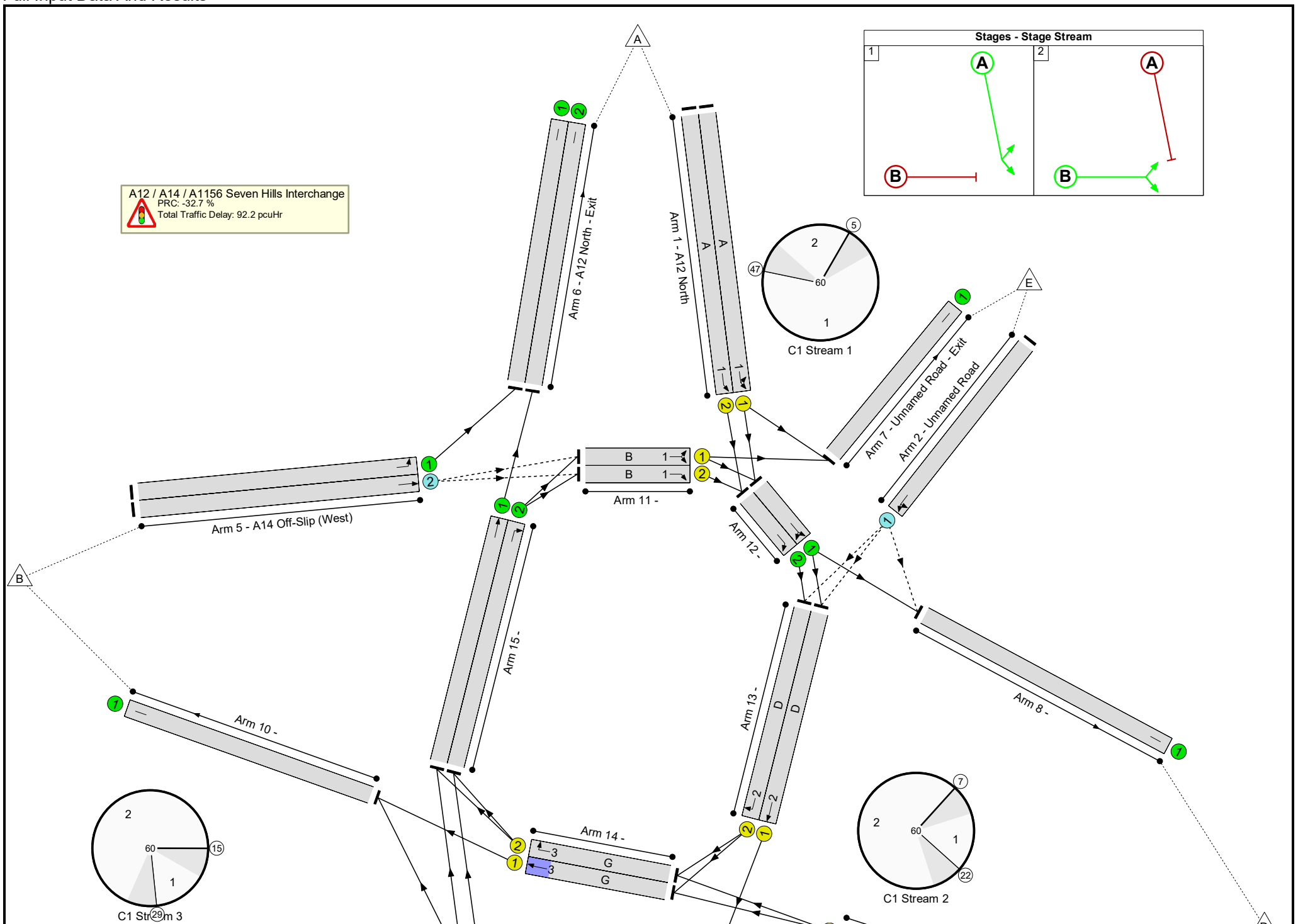
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**119.4%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**119.4%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	536	1866	1182	45.4%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1197	1866	1182	101.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	55	1871	368	14.9%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	190	1877	344	55.2%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	411	1877	344	119.4%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	227	1878	313	72.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	186	1878	313	59.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1447	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	113	1871	770	14.7%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1447	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	563	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	508	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1313	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	307	1886	440	69.2%
11/2	Right	U	1	N/A	B		1	13	-	6	1886	440	1.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	779	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1203	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	318	1877	1283	24.8%
13/2	Right	U	2	N/A	D		1	40	-	1252	1877	1283	96.4%
14/1	Ahead	U	3	N/A	G		1	41	-	1254	2007	1405	88.1%
14/2	Right	U	3	N/A	G		1	41	-	409	1872	1310	26.2%
15/1	Ahead	U	N/A	N/A	-		-	-	-	563	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	200	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**168**	**0**	**0**	**16.7**	**75.5**	**0.0**	**92.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**168**	**0**	**0**	**16.7**	**75.5**	**0.0**	**92.2**	**-**	**-**	**-**	**-**
1/1	536	536	-	-	-	0.8	0.4	-	1.3	8.4	4.5	0.4	4.9
1/2	1197	1182	-	-	-	4.0	21.5	-	25.5	76.8	20.2	21.5	41.7
2/1	55	55	55	0	0	0.0	0.1	-	0.1	6.7	0.2	0.1	0.3
3/1	190	190	-	-	-	1.2	0.6	-	1.8	33.9	2.9	0.6	3.5
3/2	411	344	-	-	-	4.7	36.3	-	40.9	358.7	8.0	36.3	44.2
4/1	227	227	-	-	-	1.5	1.3	-	2.8	44.0	3.5	1.3	4.8
4/2	186	186	-	-	-	1.2	0.7	-	1.9	37.2	2.8	0.7	3.6
5/1	1447	1447	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	113	113	113	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
6/1	1447	1447	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	62	62	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	508	508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1297	1297	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	305	305	-	-	-	1.1	1.1	-	2.2	25.9	4.7	1.1	5.8
11/2	6	6	-	-	-	0.0	0.0	-	0.0	22.2	0.1	0.0	0.1
12/1	779	779	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1188	1188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	318	318	-	-	-	0.3	0.2	-	0.4	4.7	1.6	0.2	1.7
13/2	1237	1237	-	-	-	0.5	9.5	-	10.0	29.2	12.6	9.5	22.1
14/1	1238	1238	-	-	-	0.2	3.6	-	3.8	11.0	0.8	3.6	4.4

Full Input Data And Results

14/2	343	343	-	-	-	1.2	0.2	-	1.4	14.3	5.7	0.2	5.9
15/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

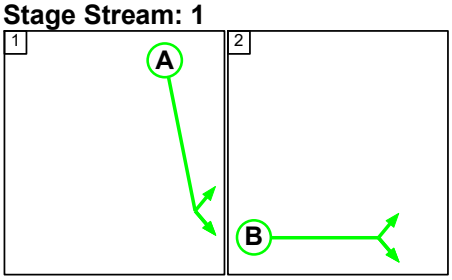
C1	Stream: 1 PRC for Signalled Lanes (%):	-12.5	Total Delay for Signalled Lanes (pcuHr):	29.03	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-32.7	Total Delay for Signalled Lanes (pcuHr):	53.18	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	2.1	Total Delay for Signalled Lanes (pcuHr):	9.84	Cycle Time (s):	60
	PRC Over All Lanes (%):	-32.7	Total Delay Over All Lanes(pcuHr):	92.23		

Full Input Data And Results

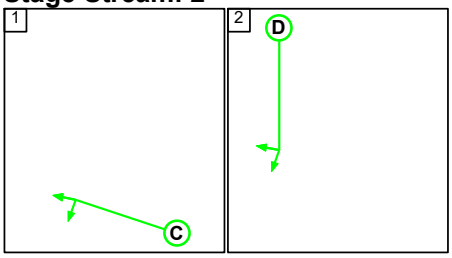
Scenario 13: '23EY 08:00-09:00' (FG13: '23EY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

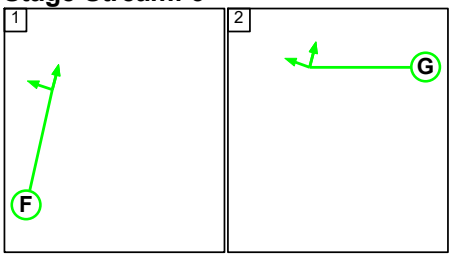
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	0	42

Stage Stream: 2

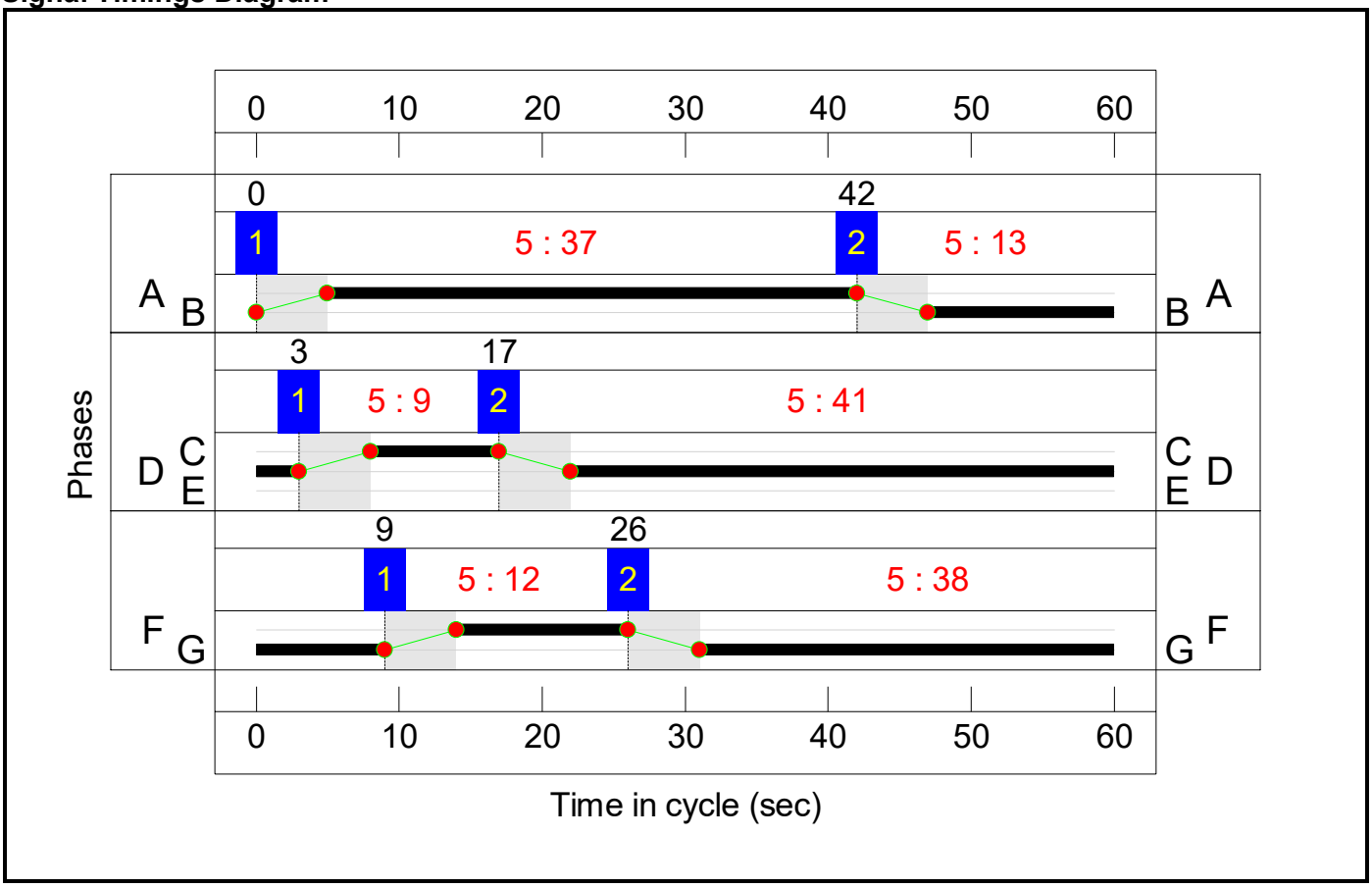
Stage	1	2
Duration	9	41
Change Point	3	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	9	26

Full Input Data And Results

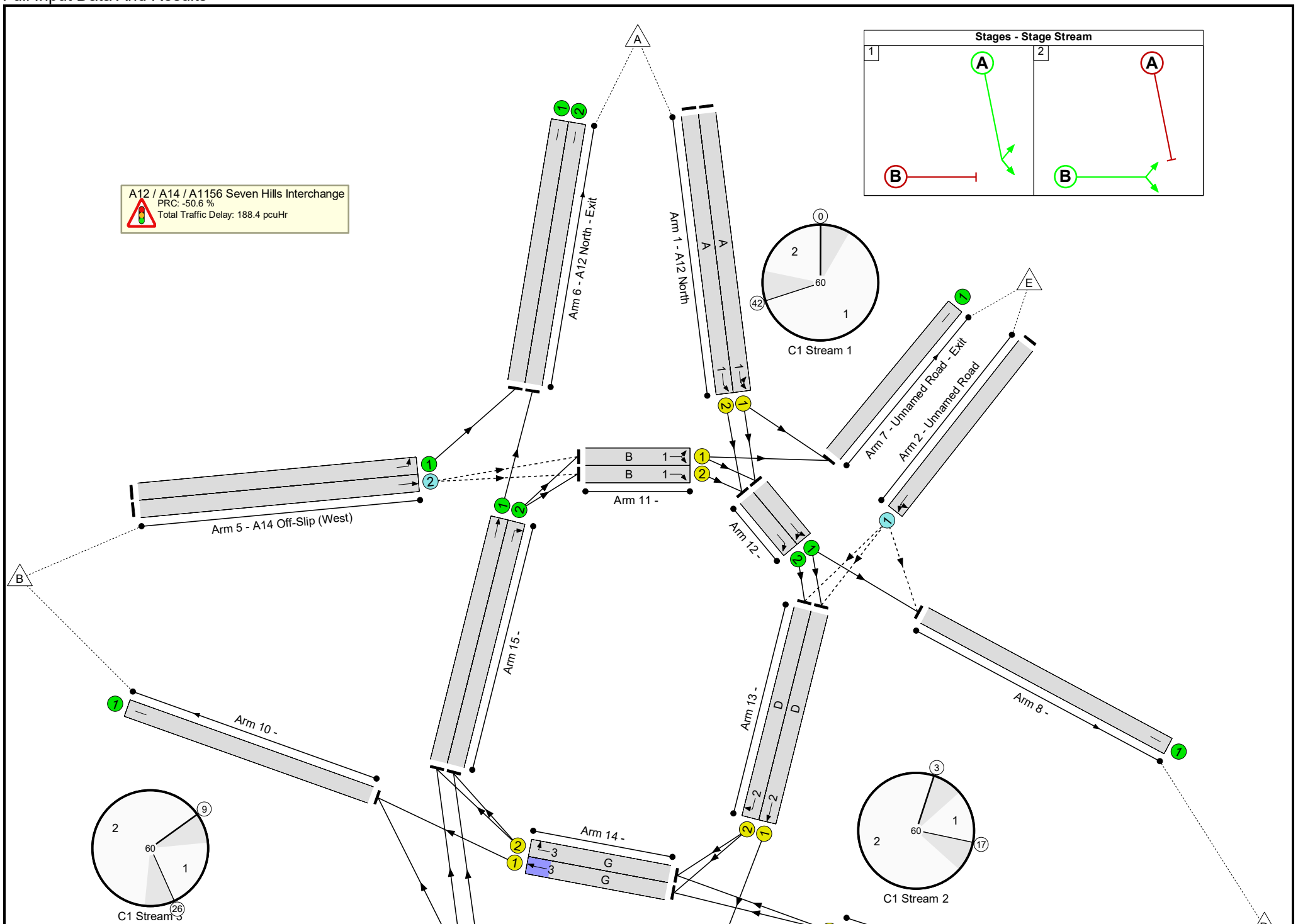
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**135.5%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**135.5%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	722	1866	1182	61.1%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1316	1866	1182	111.4%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	100	1871	278	36.0%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	258	1877	313	82.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	424	1877	313	135.5%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	368	1878	407	90.4%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	272	1878	407	66.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1742	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	143	1871	710	20.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1742	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	30	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	691	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1478	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	418	1886	440	94.1%
11/2	Right	U	1	N/A	B		1	13	-	12	1886	440	2.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1110	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1328	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	444	1877	1314	33.8%
13/2	Right	U	2	N/A	D		1	41	-	1403	1877	1314	96.6%
14/1	Ahead	U	3	N/A	G		1	38	-	1394	2007	1305	96.6%
14/2	Right	U	3	N/A	G		1	38	-	433	1872	1217	26.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**243**	**0**	**0**	**25.4**	**163.0**	**0.0**	**188.4**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**243**	**0**	**0**	**25.4**	**163.0**	**0.0**	**188.4**	**-**	**-**	**-**	**-**
1/1	722	722	-	-	-	1.3	0.8	-	2.1	10.5	7.0	0.8	7.8
1/2	1316	1182	-	-	-	7.5	71.7	-	79.2	216.7	24.2	71.7	95.9
2/1	100	100	100	0	0	0.2	0.3	-	0.4	15.5	1.0	0.3	1.3
3/1	258	258	-	-	-	1.7	2.2	-	3.9	54.6	4.1	2.2	6.3
3/2	424	313	-	-	-	6.2	57.4	-	63.6	540.3	8.9	57.4	66.3
4/1	368	368	-	-	-	2.3	3.9	-	6.3	61.4	5.9	3.9	9.9
4/2	272	272	-	-	-	1.6	1.0	-	2.6	34.7	4.1	1.0	5.1
5/1	1742	1742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	143	143	143	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
6/1	1742	1742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	595	595	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	26	26	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	691	691	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1344	1344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	414	414	-	-	-	1.6	5.6	-	7.2	62.3	6.8	5.6	12.4
11/2	12	12	-	-	-	0.1	0.0	-	0.1	22.2	0.2	0.0	0.2
12/1	1110	1110	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1194	1194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	444	444	-	-	-	0.4	0.3	-	0.7	5.5	2.7	0.3	3.0
13/2	1269	1269	-	-	-	0.5	9.8	-	10.3	29.2	10.6	9.8	20.4
14/1	1260	1260	-	-	-	0.7	9.8	-	10.5	30.0	5.3	9.8	15.1

Full Input Data And Results

14/2	322	322	-	-	-	1.2	0.2	-	1.4	15.4	5.3	0.2	5.5
15/1	595	595	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	283	283	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

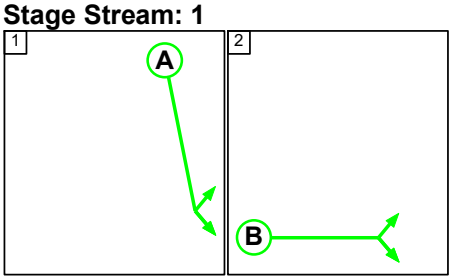
C1	Stream: 1 PRC for Signalled Lanes (%):	-23.7	Total Delay for Signalled Lanes (pcuHr):	88.58	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-50.6	Total Delay for Signalled Lanes (pcuHr):	78.51	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-7.3	Total Delay for Signalled Lanes (pcuHr):	20.78	Cycle Time (s): 60
	PRC Over All Lanes (%):	-50.6	Total Delay Over All Lanes(pcuHr):	188.43	

Full Input Data And Results

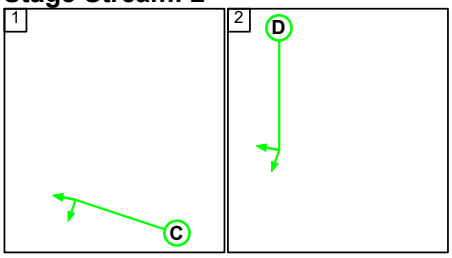
Scenario 14: '23EY 15:00-16:00' (FG14: '23EY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

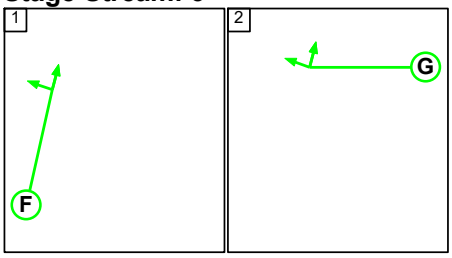
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	0	45

Stage Stream: 2

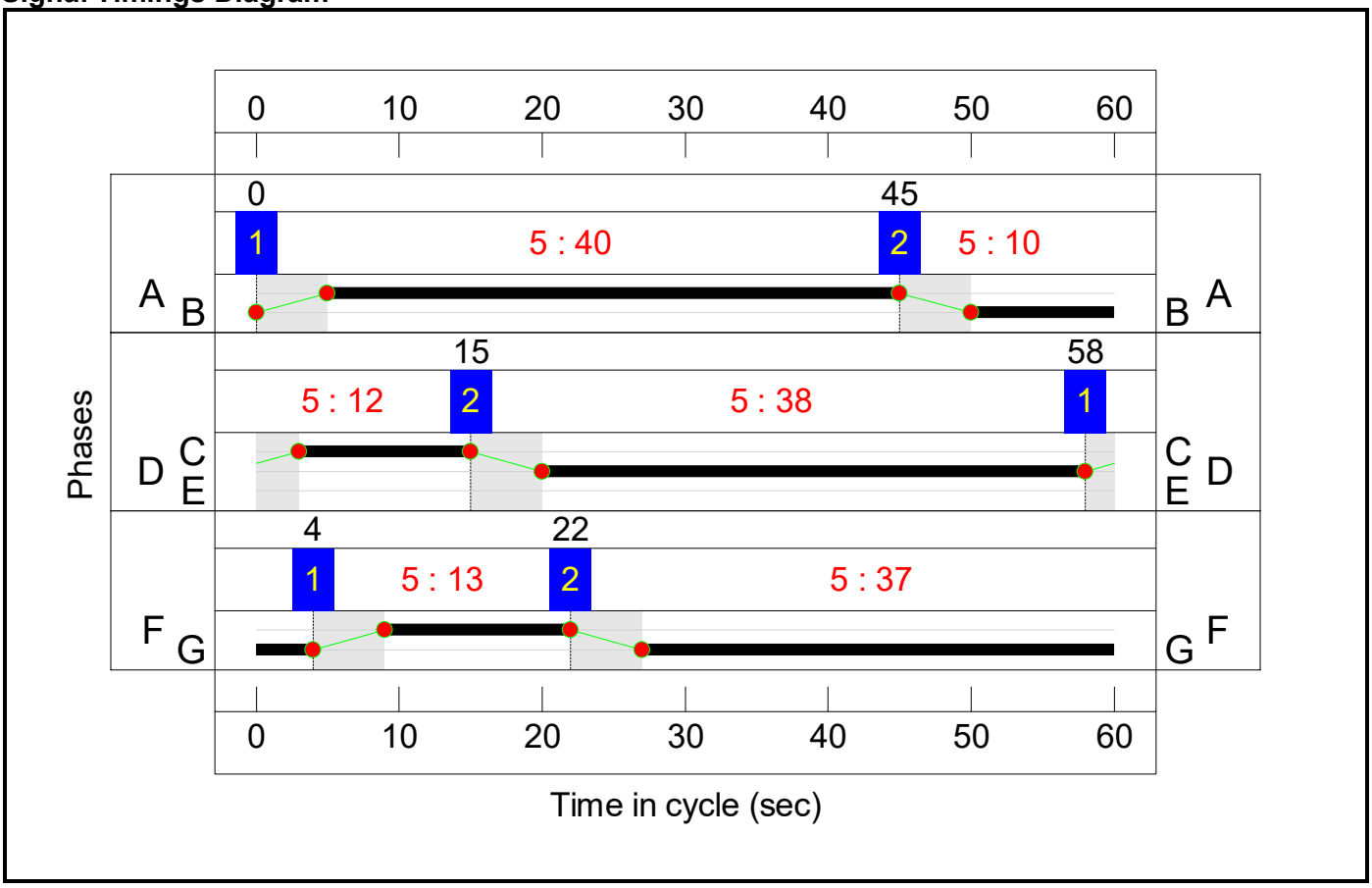
Stage	1	2
Duration	12	38
Change Point	58	15

Stage Stream: 3

Stage	1	2
Duration	13	37
Change Point	4	22

Full Input Data And Results

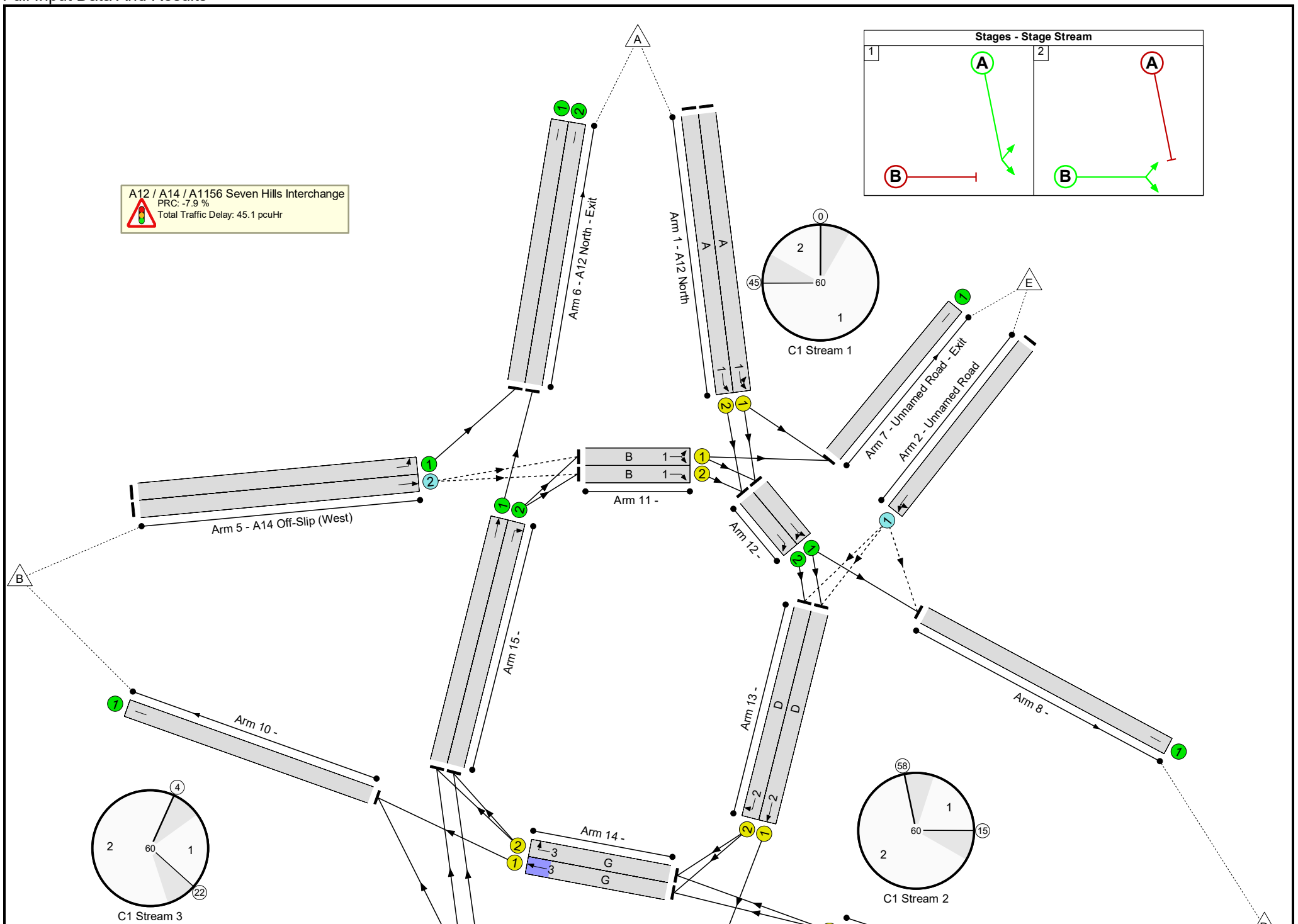
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	673	1866	1275	52.8%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1119	1866	1275	87.8%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	38	1871	360	10.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	12	-	235	1877	407	57.8%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	12	-	395	1877	407	97.1%
4/1	A1156 Left Ahead	U	3	N/A	F		1	13	-	385	1878	438	87.9%
4/2	A1156 Ahead	U	3	N/A	F		1	13	-	181	1878	438	41.3%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1329	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	95	1871	708	13.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1329	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	521	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1234	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	273	1886	346	79.0%
11/2	Right	U	1	N/A	B		1	10	-	4	1886	346	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	891	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1123	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	38	-	375	1877	1220	30.7%
13/2	Right	U	2	N/A	D		1	38	-	1156	1877	1220	94.8%
14/1	Ahead	U	3	N/A	G		1	37	-	1149	2007	1271	90.4%
14/2	Right	U	3	N/A	G		1	37	-	402	1872	1186	33.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**133**	**0**	**0**	**15.2**	**29.8**	**0.0**	**45.1**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**133**	**0**	**0**	**15.2**	**29.8**	**0.0**	**45.1**	**-**	**-**	**-**	**-**
1/1	673	673	-	-	-	0.9	0.6	-	1.4	7.7	5.4	0.6	6.0
1/2	1119	1119	-	-	-	2.3	3.4	-	5.8	18.6	14.6	3.4	18.0
2/1	38	38	38	0	0	0.0	0.1	-	0.1	6.9	0.2	0.1	0.2
3/1	235	235	-	-	-	1.4	0.7	-	2.1	31.5	3.5	0.7	4.1
3/2	395	395	-	-	-	2.6	7.4	-	10.0	91.1	6.5	7.4	13.9
4/1	385	385	-	-	-	2.4	3.2	-	5.6	52.4	6.1	3.2	9.3
4/2	181	181	-	-	-	1.0	0.4	-	1.3	26.5	2.5	0.4	2.9
5/1	1329	1329	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	95	95	95	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1329	1329	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	701	701	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	521	521	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1234	1234	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	273	273	-	-	-	1.3	1.8	-	3.1	40.9	4.4	1.8	6.2
11/2	4	4	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	891	891	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1123	1123	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	375	375	-	-	-	0.3	0.2	-	0.5	5.0	1.6	0.2	1.8
13/2	1156	1156	-	-	-	1.0	7.3	-	8.3	25.9	6.3	7.3	13.6
14/1	1149	1149	-	-	-	0.5	4.4	-	4.9	15.3	1.8	4.4	6.1

Full Input Data And Results

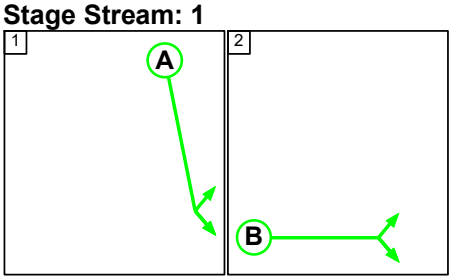
14/2	402	402	-	-	-	1.6	0.3	-	1.9	16.7	6.6	0.3	6.9
15/1	701	701	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	2.6	Total Delay for Signalled Lanes (pcuHr):	10.34	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-7.9	Total Delay for Signalled Lanes (pcuHr):	20.90	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-0.4	Total Delay for Signalled Lanes (pcuHr):	13.66	Cycle Time (s): 60
	PRC Over All Lanes (%):	-7.9	Total Delay Over All Lanes(pcuHr):	45.05	

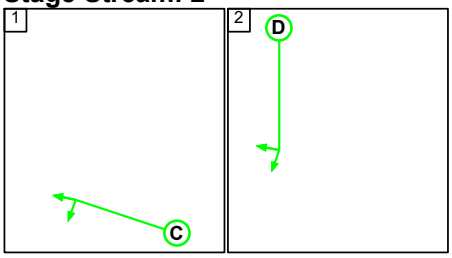
Full Input Data And Results
Scenario 15: '23EY 17:00-18:00' (FG15: '23EY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

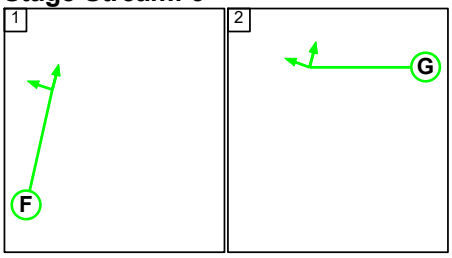
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

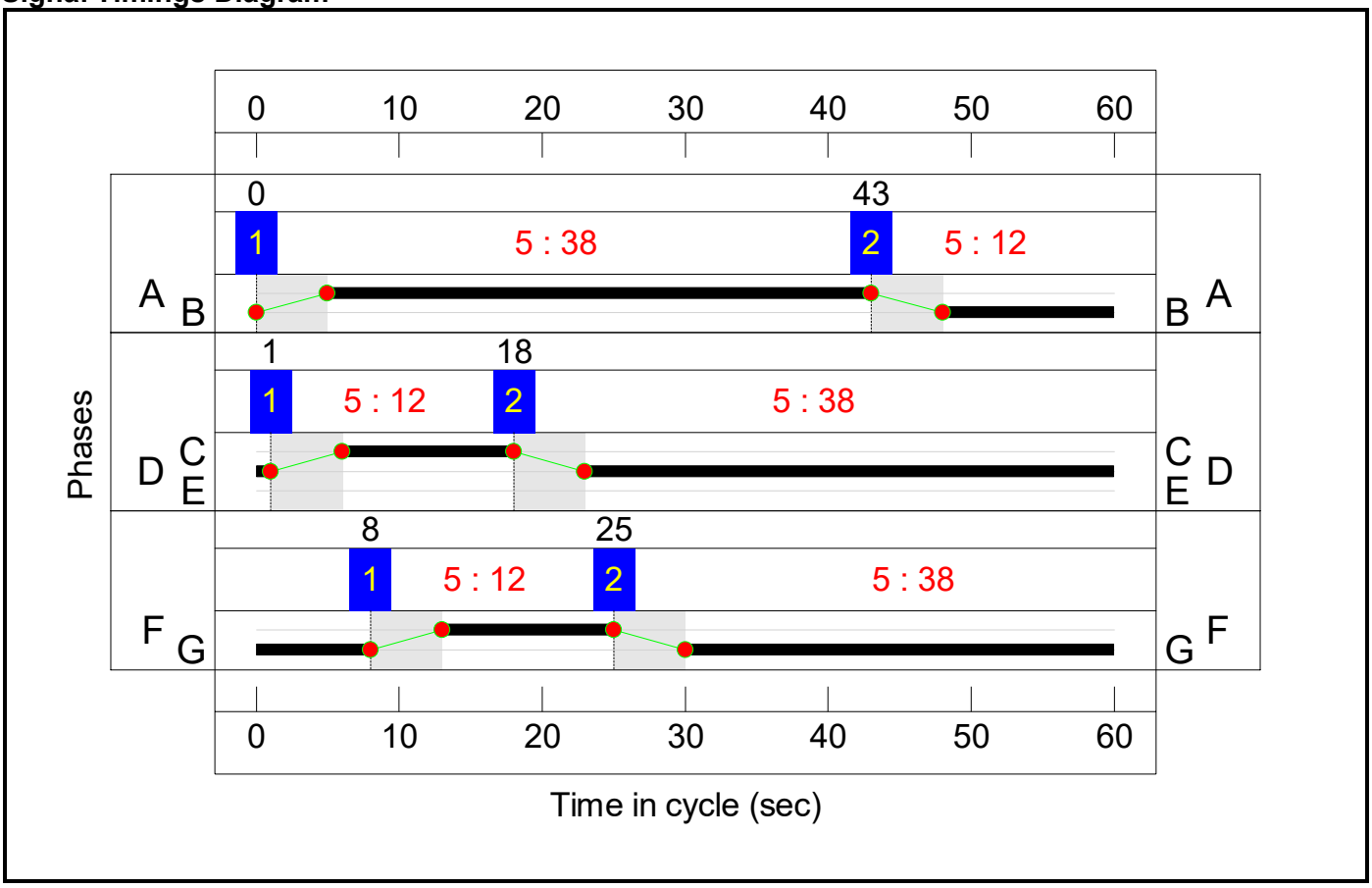
Stage	1	2
Duration	12	38
Change Point	1	18

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	8	25

Full Input Data And Results

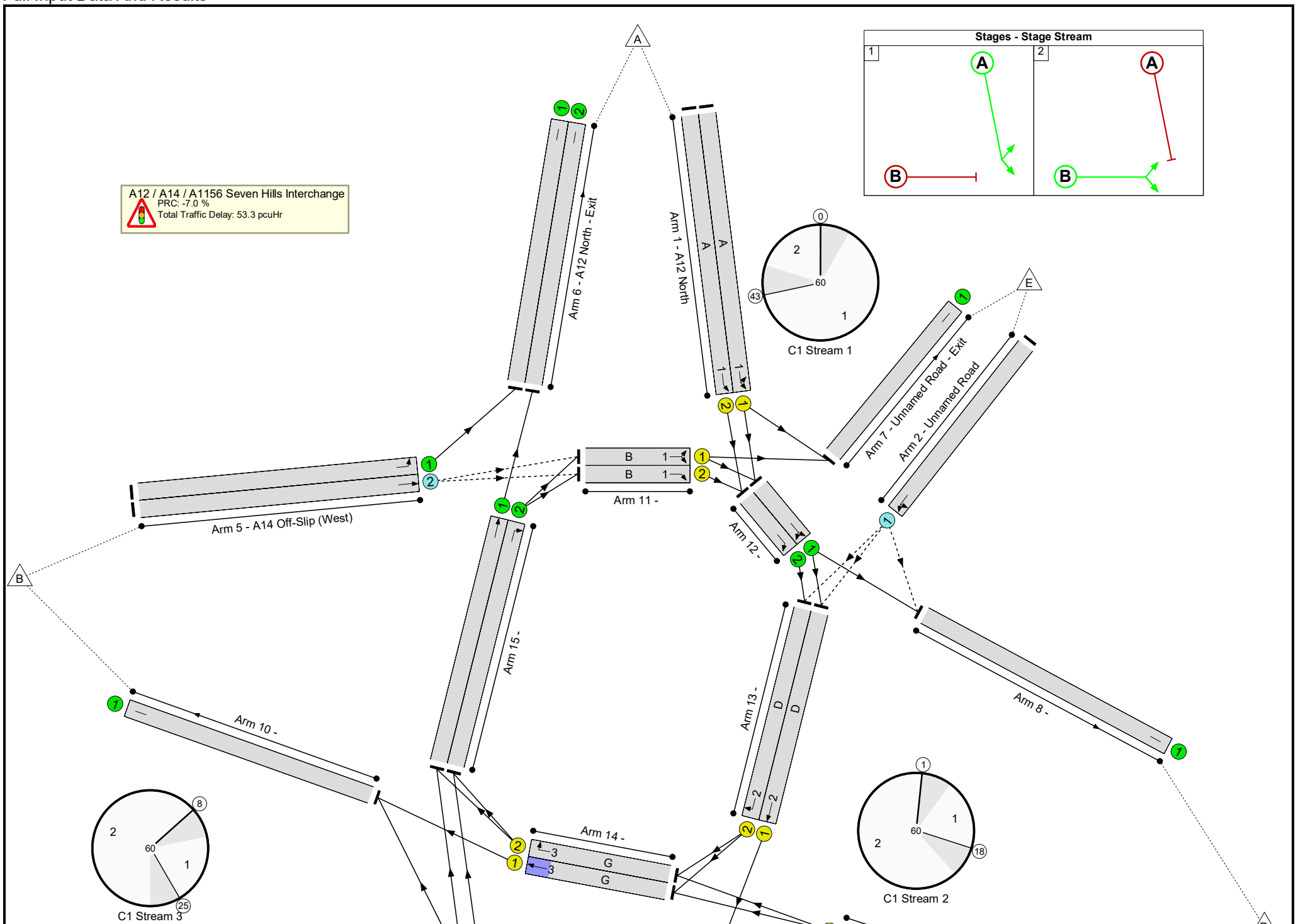
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.3%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.3%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	669	1866	1213	55.2%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1149	1866	1213	94.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	28	1871	327	8.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	12	-	329	1877	407	80.9%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	12	-	387	1877	407	95.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	355	1878	407	87.2%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	243	1878	407	59.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1367	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	116	1871	704	16.5%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1367	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	676	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1263	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	354	1886	409	86.6%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1154	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	38	-	347	1877	1220	28.4%
13/2	Right	U	2	N/A	D		1	38	-	1175	1877	1220	96.3%
14/1	Ahead	U	3	N/A	G		1	38	-	1174	2007	1305	90.0%
14/2	Right	U	3	N/A	G		1	38	-	388	1872	1217	31.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**144**	**0**	**0**	**16.5**	**36.8**	**0.0**	**53.3**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**144**	**0**	**0**	**16.5**	**36.8**	**0.0**	**53.3**	**-**	**-**	**-**	**-**
1/1	669	669	-	-	-	1.1	0.6	-	1.7	9.0	5.9	0.6	6.6
1/2	1149	1149	-	-	-	3.1	7.3	-	10.4	32.5	17.2	7.3	24.6
2/1	28	28	28	0	0	0.0	0.0	-	0.1	7.5	0.1	0.0	0.2
3/1	329	329	-	-	-	2.0	2.0	-	4.1	44.4	5.1	2.0	7.1
3/2	387	387	-	-	-	2.5	6.1	-	8.6	79.7	6.3	6.1	12.4
4/1	355	355	-	-	-	2.2	3.1	-	5.3	53.7	5.6	3.1	8.7
4/2	243	243	-	-	-	1.4	0.7	-	2.2	32.0	3.6	0.7	4.3
5/1	1367	1367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	116	116	116	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
6/1	1367	1367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	633	633	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	676	676	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1263	1263	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	354	354	-	-	-	1.4	2.9	-	4.3	43.7	5.8	2.9	8.7
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	973	973	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	347	347	-	-	-	0.3	0.2	-	0.5	5.7	2.1	0.2	2.3
13/2	1175	1175	-	-	-	0.6	9.2	-	9.8	30.0	6.8	9.2	16.0
14/1	1174	1174	-	-	-	0.3	4.2	-	4.5	13.9	1.0	4.2	5.2

Full Input Data And Results

14/2	388	388	-	-	-	1.6	0.2	-	1.8	16.7	6.5	0.2	6.7
15/1	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	243	243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

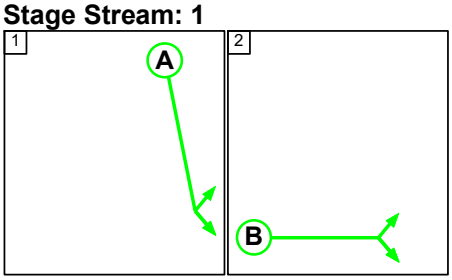
C1	Stream: 1 PRC for Signalled Lanes (%):	-5.3	Total Delay for Signalled Lanes (pcuHr):	16.38	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-7.0	Total Delay for Signalled Lanes (pcuHr):	22.98	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	13.80	Cycle Time (s):	60
	PRC Over All Lanes (%):	-7.0	Total Delay Over All Lanes(pcuHr):	53.31		

Full Input Data And Results

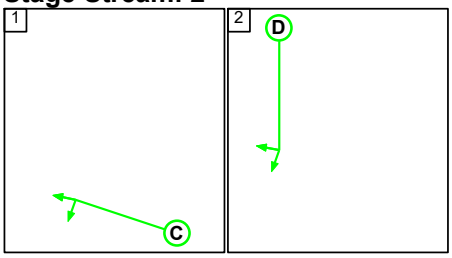
Scenario 16: '28RC 06:00-07:00' (FG16: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

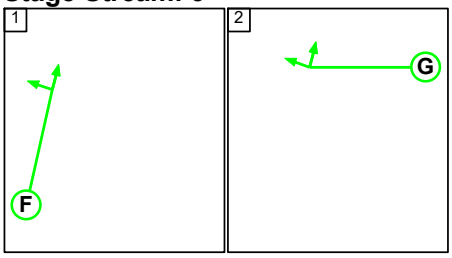
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

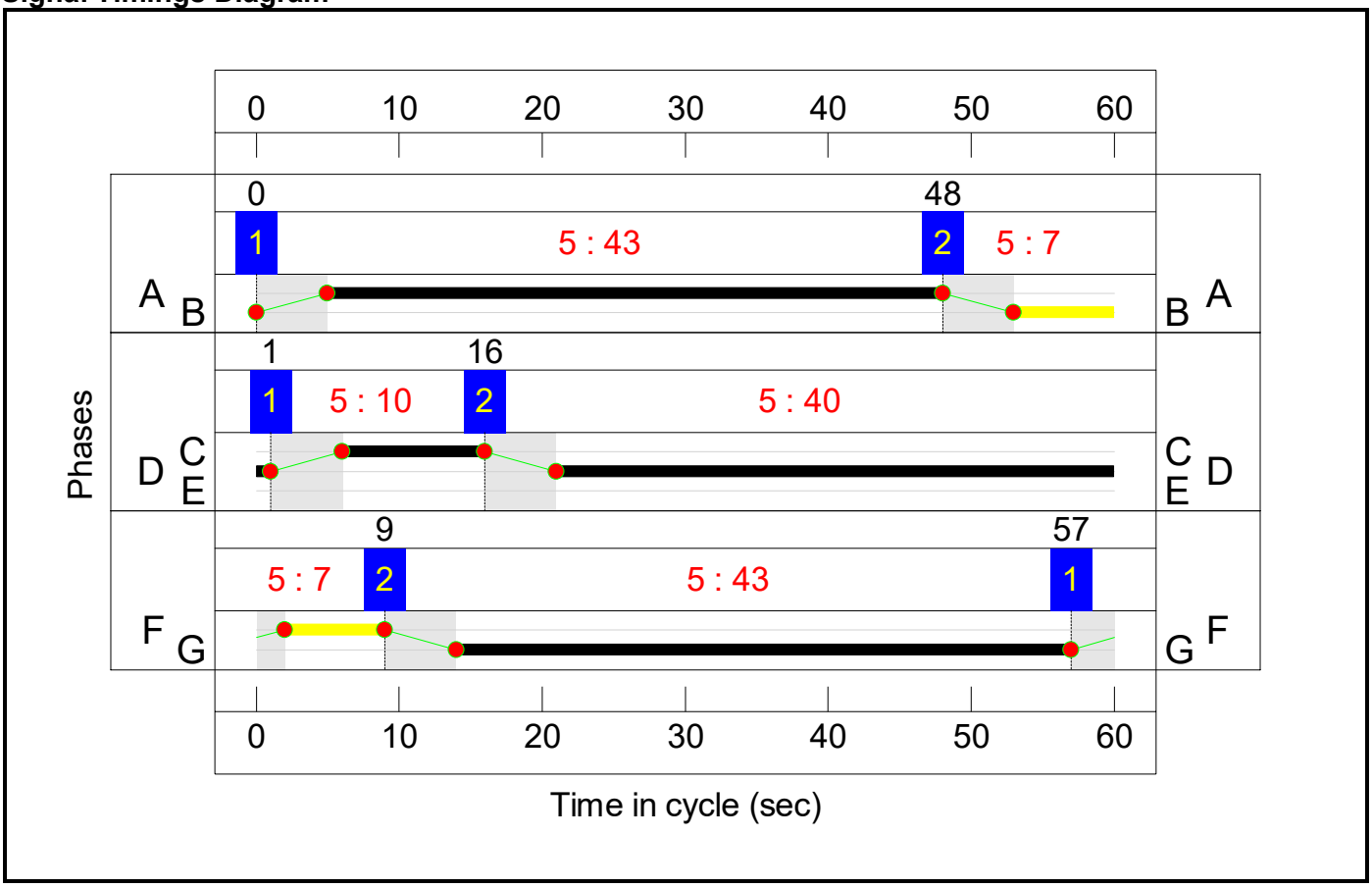
Stage	1	2
Duration	10	40
Change Point	1	16

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	57	9

Full Input Data And Results

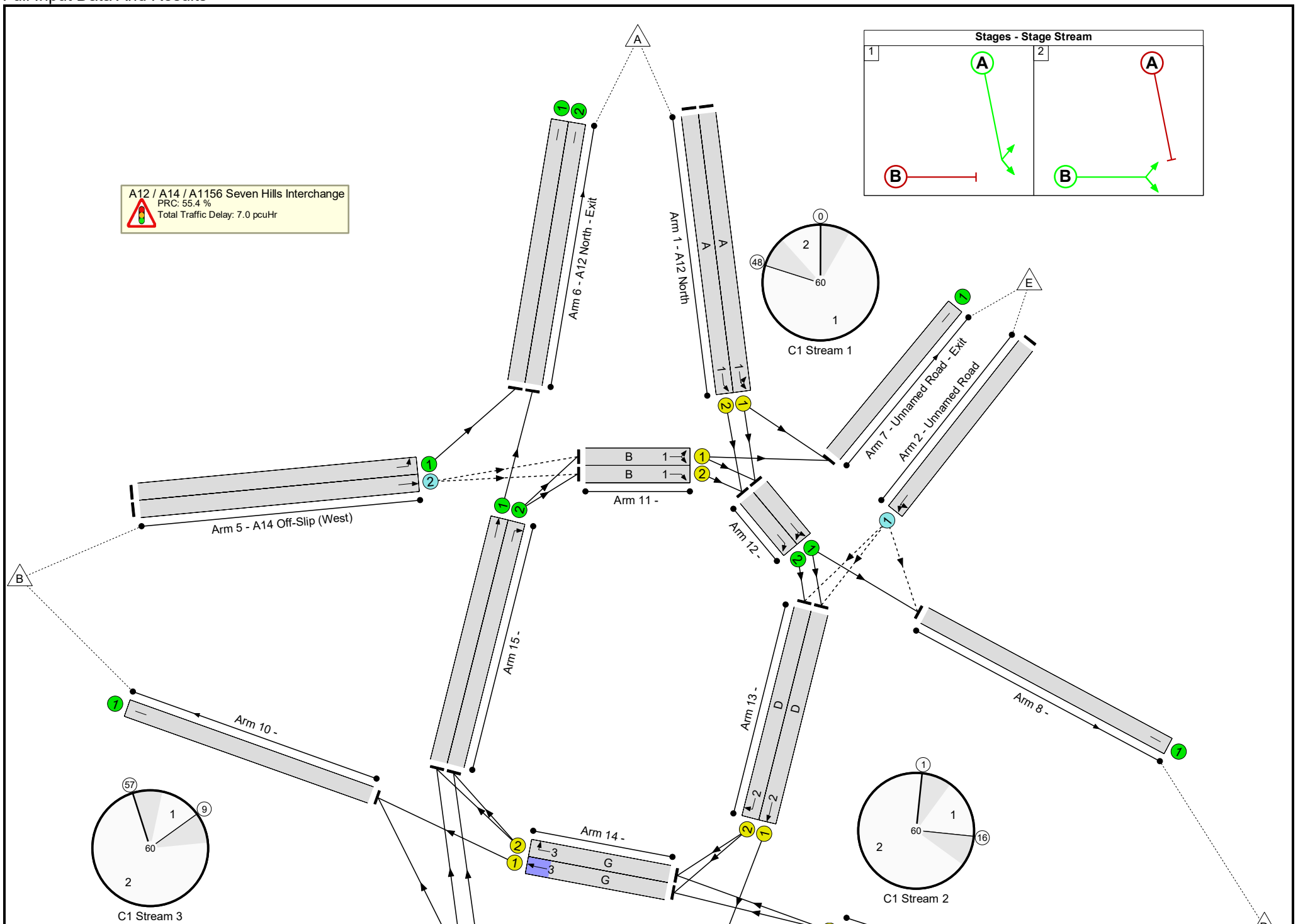
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**57.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**57.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	43	-	306	1866	1368	22.4%
1/2	A12 North Ahead	U	1	N/A	A		1	43	-	693	1866	1368	50.6%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	662	4.5%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	79	1877	344	23.0%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	182	1877	344	52.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	36	1878	250	14.4%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	36	1871	926	3.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	208	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	741	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	7	-	29	1886	251	11.5%
11/2	Right	U	1	N/A	B		1	7	-	21	1886	251	8.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	308	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	86	1877	1283	6.7%
13/2	Right	U	2	N/A	D		1	40	-	743	1877	1283	57.9%
14/1	Ahead	U	3	N/A	G		1	43	-	734	2007	1472	49.9%
14/2	Right	U	3	N/A	G		1	43	-	191	1872	1373	13.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	208	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**66**	**0**	**0**	**4.1**	**2.9**	**0.0**	**7.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**66**	**0**	**0**	**4.1**	**2.9**	**0.0**	**7.0**	**-**	**-**	**-**	**-**
1/1	306	306	-	-	-	0.2	0.1	-	0.4	4.3	1.6	0.1	1.8
1/2	693	693	-	-	-	0.7	0.5	-	1.2	6.1	4.8	0.5	5.3
2/1	30	30	30	0	0	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
3/1	79	79	-	-	-	0.5	0.1	-	0.6	27.7	1.1	0.1	1.3
3/2	182	182	-	-	-	1.1	0.6	-	1.7	33.2	2.7	0.6	3.3
4/1	36	36	-	-	-	0.2	0.1	-	0.3	31.4	0.5	0.1	0.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	36	36	36	0	0	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
6/1	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	208	208	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	741	741	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	29	29	-	-	-	0.1	0.1	-	0.2	25.4	0.4	0.1	0.5
11/2	21	21	-	-	-	0.1	0.0	-	0.2	30.8	0.3	0.0	0.3
12/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	714	714	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	86	86	-	-	-	0.1	0.0	-	0.1	3.6	0.2	0.0	0.3
13/2	743	743	-	-	-	0.5	0.7	-	1.2	5.8	3.3	0.7	4.0
14/1	734	734	-	-	-	0.5	0.5	-	1.0	5.0	2.7	0.5	3.2

Full Input Data And Results

14/2	191	191	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	208	208	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

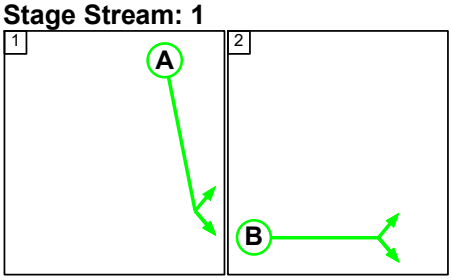
C1	Stream: 1 PRC for Signalled Lanes (%):	77.7	Total Delay for Signalled Lanes (pcuHr):	1.91	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	55.4	Total Delay for Signalled Lanes (pcuHr):	3.58	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	80.5	Total Delay for Signalled Lanes (pcuHr):	1.43	Cycle Time (s):	60
	PRC Over All Lanes (%):	55.4	Total Delay Over All Lanes(pcuHr):	6.97		

Full Input Data And Results

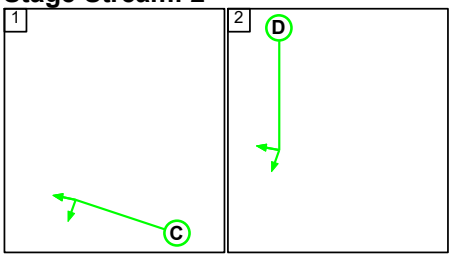
Scenario 17: '28RC 07:00-08:00' (FG17: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

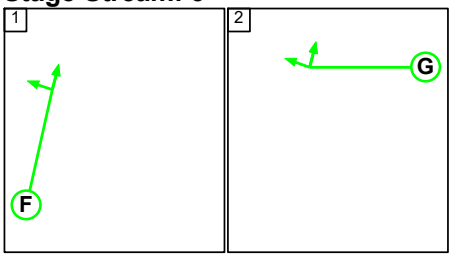
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	52	39

Stage Stream: 2

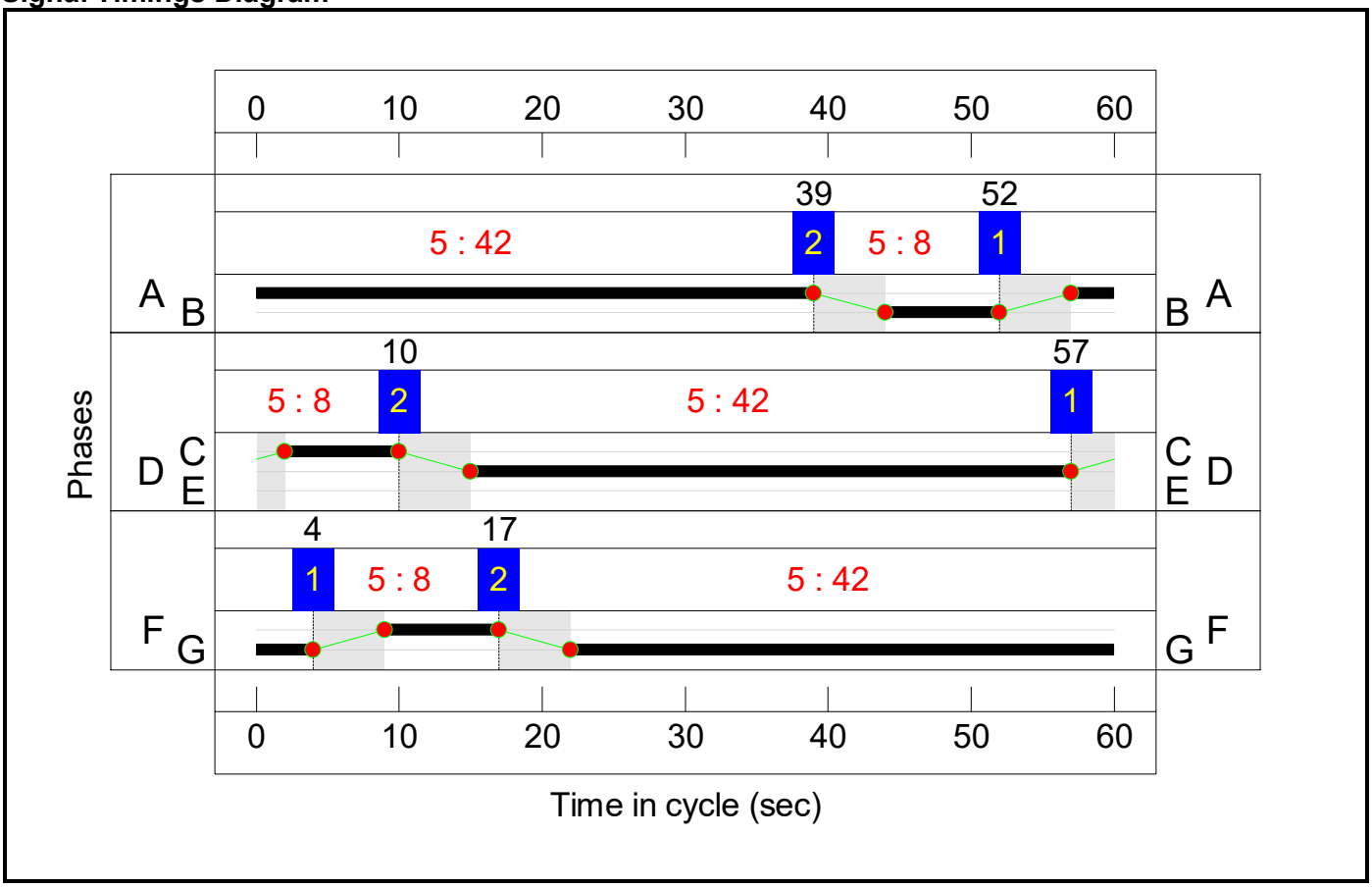
Stage	1	2
Duration	8	42
Change Point	57	10

Stage Stream: 3

Stage	1	2
Duration	8	42
Change Point	4	17

Full Input Data And Results

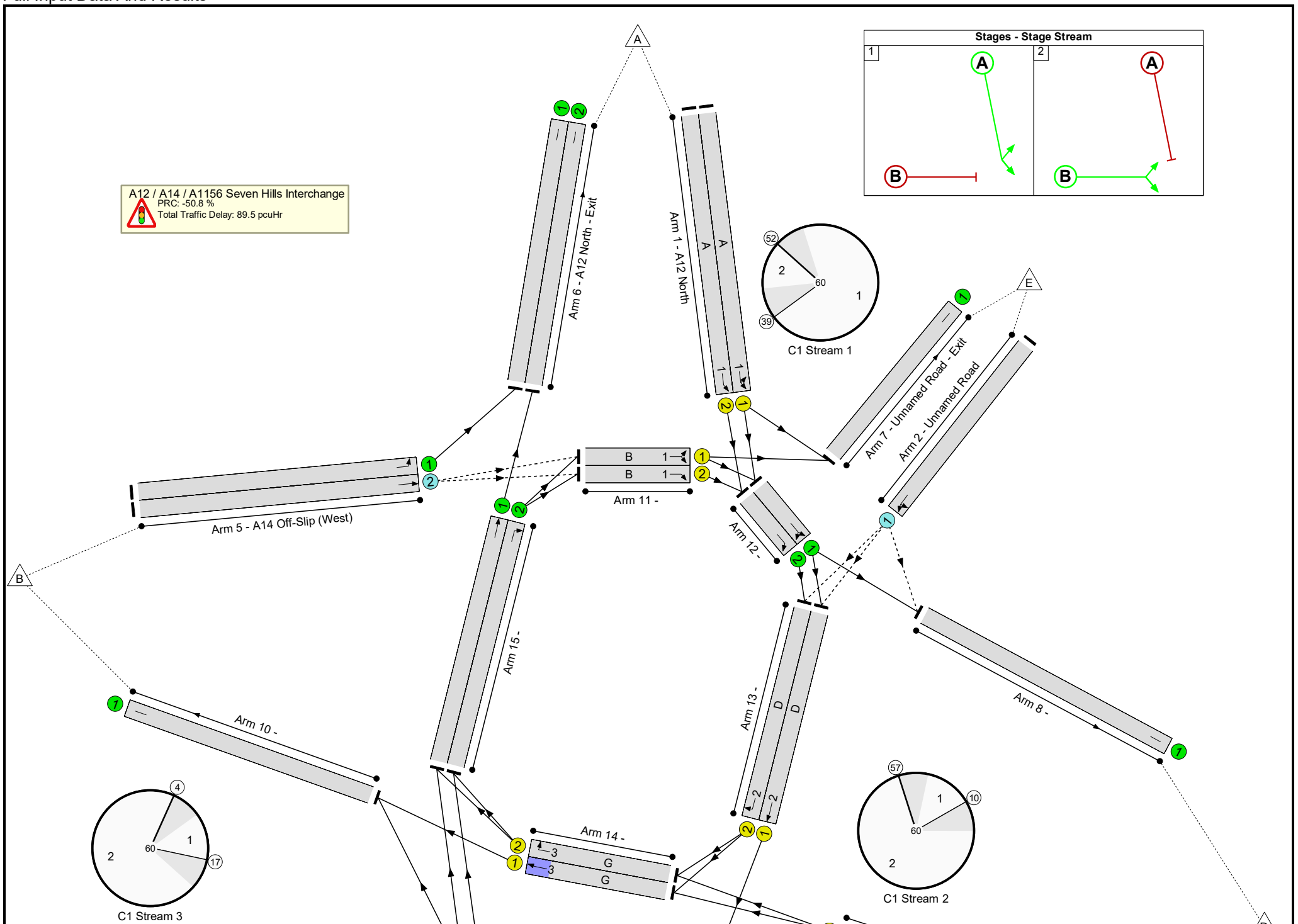
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**135.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**135.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	42	-	501	1866	1337	37.5%
1/2	A12 North Ahead	U	1	N/A	A		1	42	-	1220	1866	1337	91.2%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	59	1871	386	15.3%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	8	-	204	1877	282	72.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	8	-	382	1877	282	135.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	8	-	227	1878	282	80.6%
4/2	A1156 Ahead	U	3	N/A	F		1	8	-	107	1878	282	38.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1391	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	109	1871	816	13.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1391	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	533	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1339	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	8	-	225	1886	283	78.1%
11/2	Right	U	1	N/A	B		1	8	-	6	1886	283	2.1%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	657	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1226	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	42	-	269	1877	1345	20.0%
13/2	Right	U	2	N/A	D		1	42	-	1278	1877	1345	95.0%
14/1	Ahead	U	3	N/A	G		1	42	-	1280	2007	1438	88.9%
14/2	Right	U	3	N/A	G		1	42	-	380	1872	1342	20.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	533	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	122	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**168**	**0**	**0**	**15.2**	**74.4**	**0.0**	**89.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**168**	**0**	**0**	**15.2**	**74.4**	**0.0**	**89.5**	**-**	**-**	**-**	**-**
1/1	501	501	-	-	-	0.5	0.3	-	0.8	5.4	3.2	0.3	3.5
1/2	1220	1220	-	-	-	2.4	4.8	-	7.2	21.1	16.6	4.8	21.4
2/1	59	59	59	0	0	0.0	0.1	-	0.1	5.9	0.1	0.1	0.2
3/1	204	204	-	-	-	1.4	1.3	-	2.7	46.8	3.2	1.3	4.5
3/2	382	282	-	-	-	5.8	52.1	-	57.9	545.6	8.3	52.1	60.4
4/1	227	227	-	-	-	1.6	1.9	-	3.5	55.4	3.7	1.9	5.6
4/2	107	107	-	-	-	0.7	0.3	-	1.0	33.3	1.6	0.3	1.9
5/1	1391	1391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	109	109	109	0	0	0.0	0.1	-	0.1	2.5	0.0	0.1	0.1
6/1	1391	1391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	438	438	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	65	65	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1338	1338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	221	221	-	-	-	1.1	1.7	-	2.8	45.4	3.5	1.7	5.2
11/2	6	6	-	-	-	0.0	0.0	-	0.0	28.6	0.1	0.0	0.1
12/1	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1226	1226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	269	269	-	-	-	0.2	0.1	-	0.3	4.2	1.4	0.1	1.6
13/2	1278	1278	-	-	-	0.5	7.7	-	8.2	23.2	18.2	7.7	26.0
14/1	1279	1279	-	-	-	0.2	3.8	-	4.1	11.4	0.9	3.8	4.8

Full Input Data And Results

14/2	281	281	-	-	-	0.8	0.1	-	0.9	12.2	4.6	0.1	4.8
15/1	438	438	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	118	118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

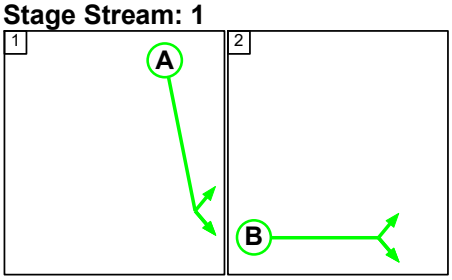
C1	Stream: 1 PRC for Signalled Lanes (%):	-1.4	Total Delay for Signalled Lanes (pcuHr):	10.76	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-50.8	Total Delay for Signalled Lanes (pcuHr):	69.10	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	1.2	Total Delay for Signalled Lanes (pcuHr):	9.49	Cycle Time (s): 60
	PRC Over All Lanes (%):	-50.8	Total Delay Over All Lanes(pcuHr):	89.53	

Full Input Data And Results

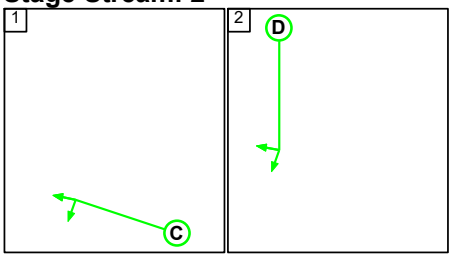
Scenario 18: '28RC 08:00-09:00' (FG18: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

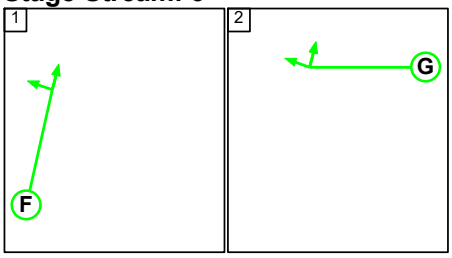
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	1	43

Stage Stream: 2

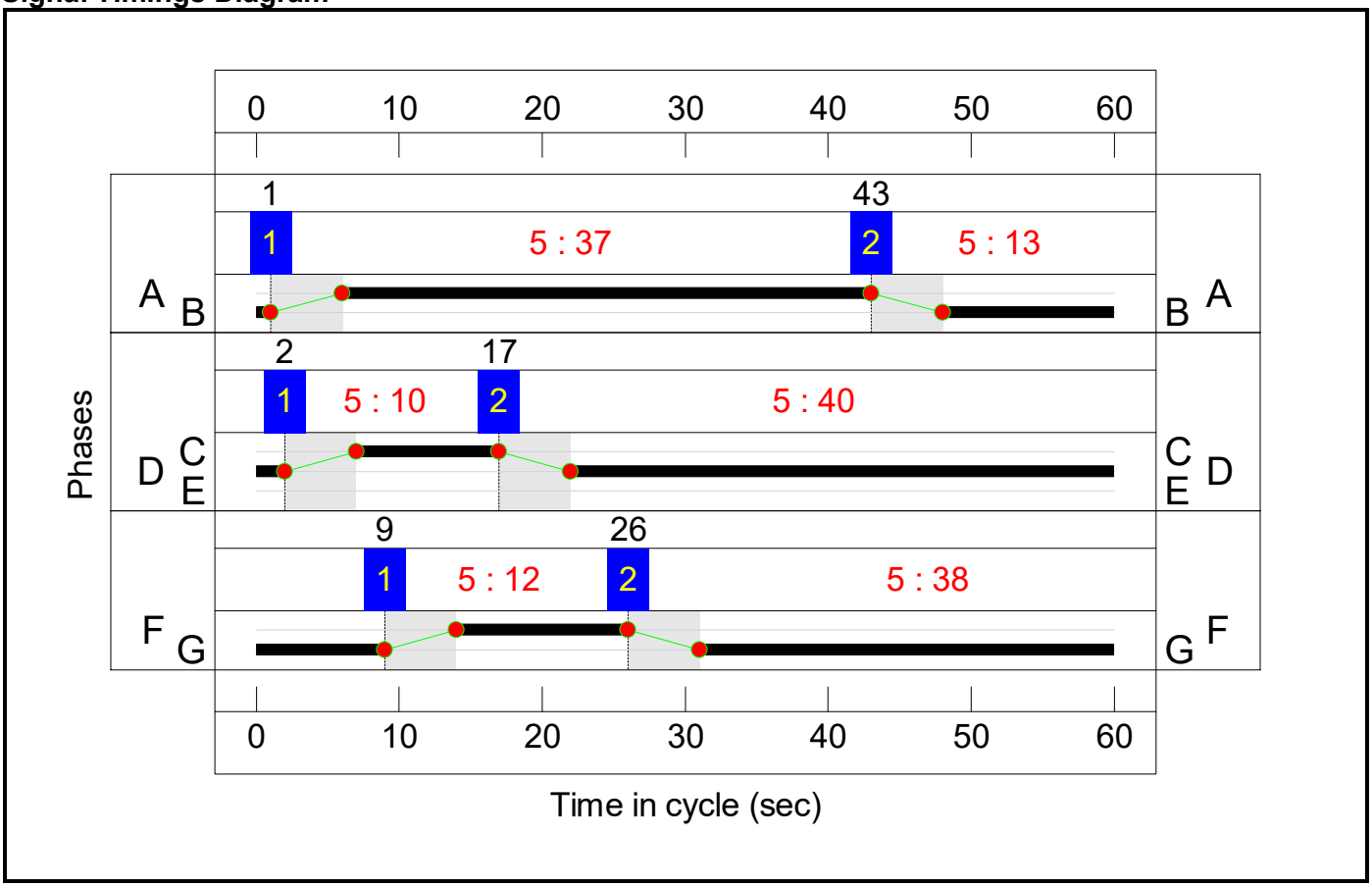
Stage	1	2
Duration	10	40
Change Point	2	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	9	26

Full Input Data And Results

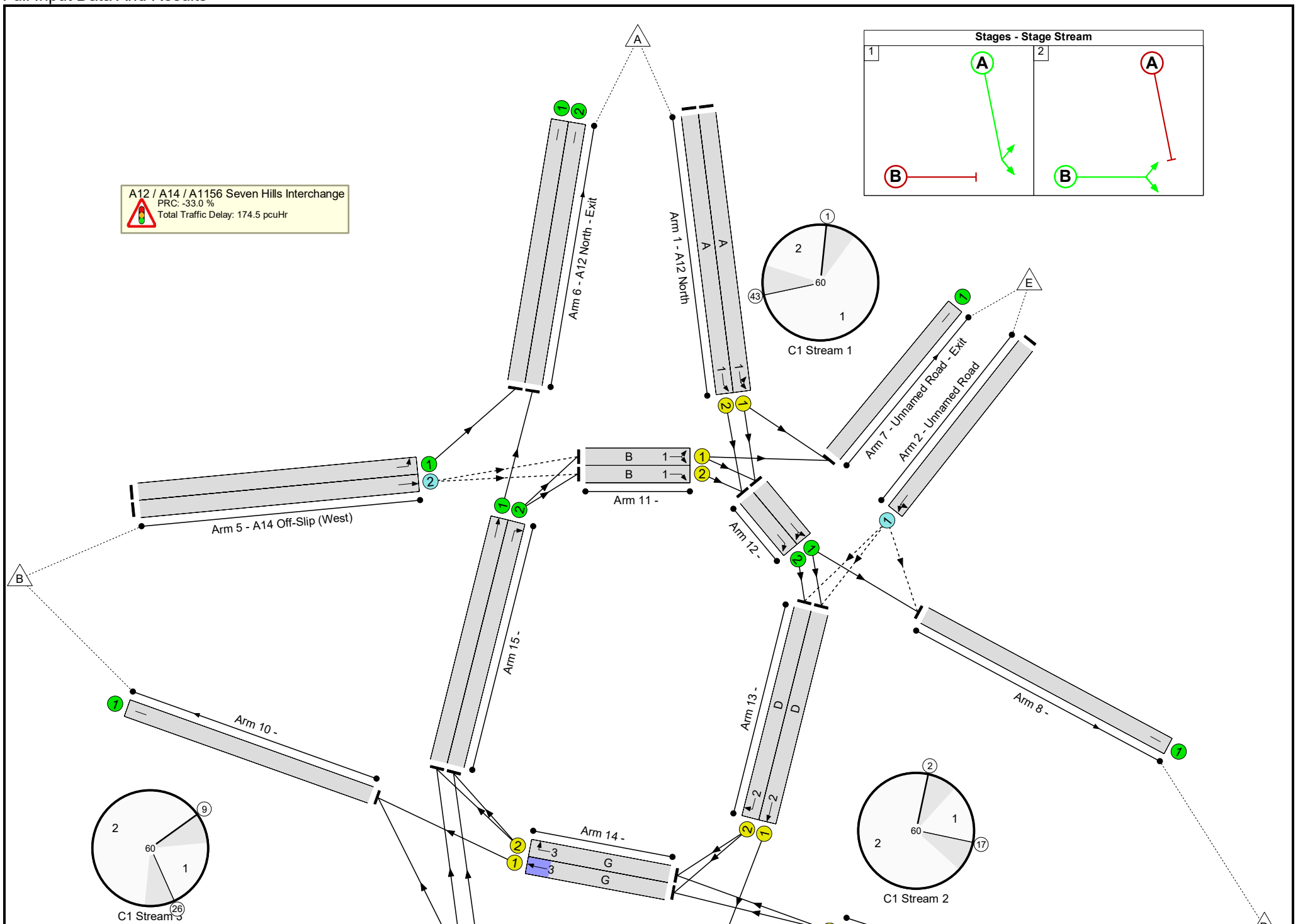
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**119.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**119.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	808	1866	1182	68.4%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1332	1866	1182	112.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	106	1871	304	34.9%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	270	1877	344	78.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	412	1877	344	119.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	365	1878	407	89.7%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	148	1878	407	36.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1678	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	136	1871	741	18.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1678	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	33	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	571	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	789	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1495	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	288	1886	440	64.8%
11/2	Right	U	1	N/A	B		1	13	-	12	1886	440	2.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1063	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1344	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	519	1877	1283	40.5%
13/2	Right	U	2	N/A	D		1	40	-	1423	1877	1283	99.2%
14/1	Ahead	U	3	N/A	G		1	38	-	1414	2007	1305	96.9%
14/2	Right	U	3	N/A	G		1	38	-	421	1872	1217	29.0%
15/1	Ahead	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	164	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**242**	**0**	**0**	**24.0**	**150.5**	**0.0**	**174.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**242**	**0**	**0**	**24.0**	**150.5**	**0.0**	**174.5**	**-**	**-**	**-**	**-**
1/1	808	808	-	-	-	1.6	1.1	-	2.7	11.9	8.5	1.1	9.6
1/2	1332	1182	-	-	-	8.0	79.3	-	87.3	235.9	24.7	79.3	104.0
2/1	106	106	106	0	0	0.2	0.3	-	0.5	17.3	1.1	0.3	1.4
3/1	270	270	-	-	-	1.8	1.7	-	3.5	46.6	4.3	1.7	6.0
3/2	412	344	-	-	-	4.8	36.7	-	41.5	363.0	8.0	36.7	44.7
4/1	365	365	-	-	-	2.3	3.7	-	6.0	59.4	5.9	3.7	9.6
4/2	148	148	-	-	-	0.8	0.3	-	1.1	26.9	2.1	0.3	2.4
5/1	1678	1678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	136	136	136	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1678	1678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	624	624	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	30	30	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	789	789	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1345	1345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	285	285	-	-	-	1.2	0.9	-	2.1	26.3	4.4	0.9	5.3
11/2	12	12	-	-	-	0.1	0.0	-	0.1	22.2	0.2	0.0	0.2
12/1	1063	1063	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1194	1194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	519	519	-	-	-	0.5	0.3	-	0.8	5.6	2.8	0.3	3.1
13/2	1273	1273	-	-	-	0.8	15.6	-	16.3	46.2	9.0	15.6	24.5
14/1	1264	1264	-	-	-	0.6	10.3	-	10.9	31.1	3.7	10.3	14.0

Full Input Data And Results

14/2	353	353	-	-	-	1.4	0.2	-	1.6	16.5	5.8	0.2	6.0
15/1	624	624	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	161	161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

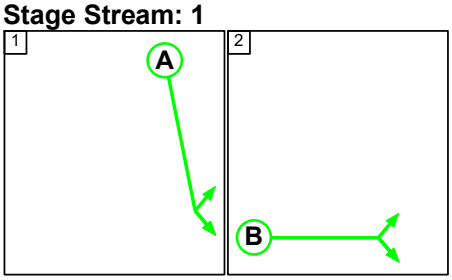
C1	Stream: 1 PRC for Signalled Lanes (%):	-25.2	Total Delay for Signalled Lanes (pcuHr):	92.10	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-33.0	Total Delay for Signalled Lanes (pcuHr):	62.17	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	-7.6	Total Delay for Signalled Lanes (pcuHr):	19.64	Cycle Time (s):	60
	PRC Over All Lanes (%):	-33.0	Total Delay Over All Lanes(pcuHr):	174.54		

Full Input Data And Results

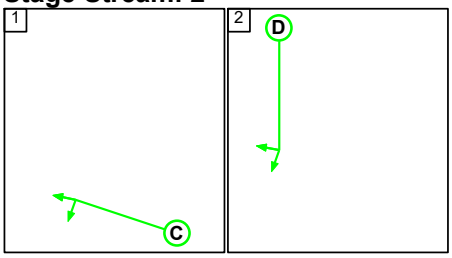
Scenario 19: '28RC 15:00-16:00' (FG19: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

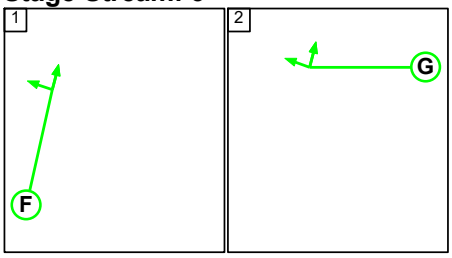
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	3	49

Stage Stream: 2

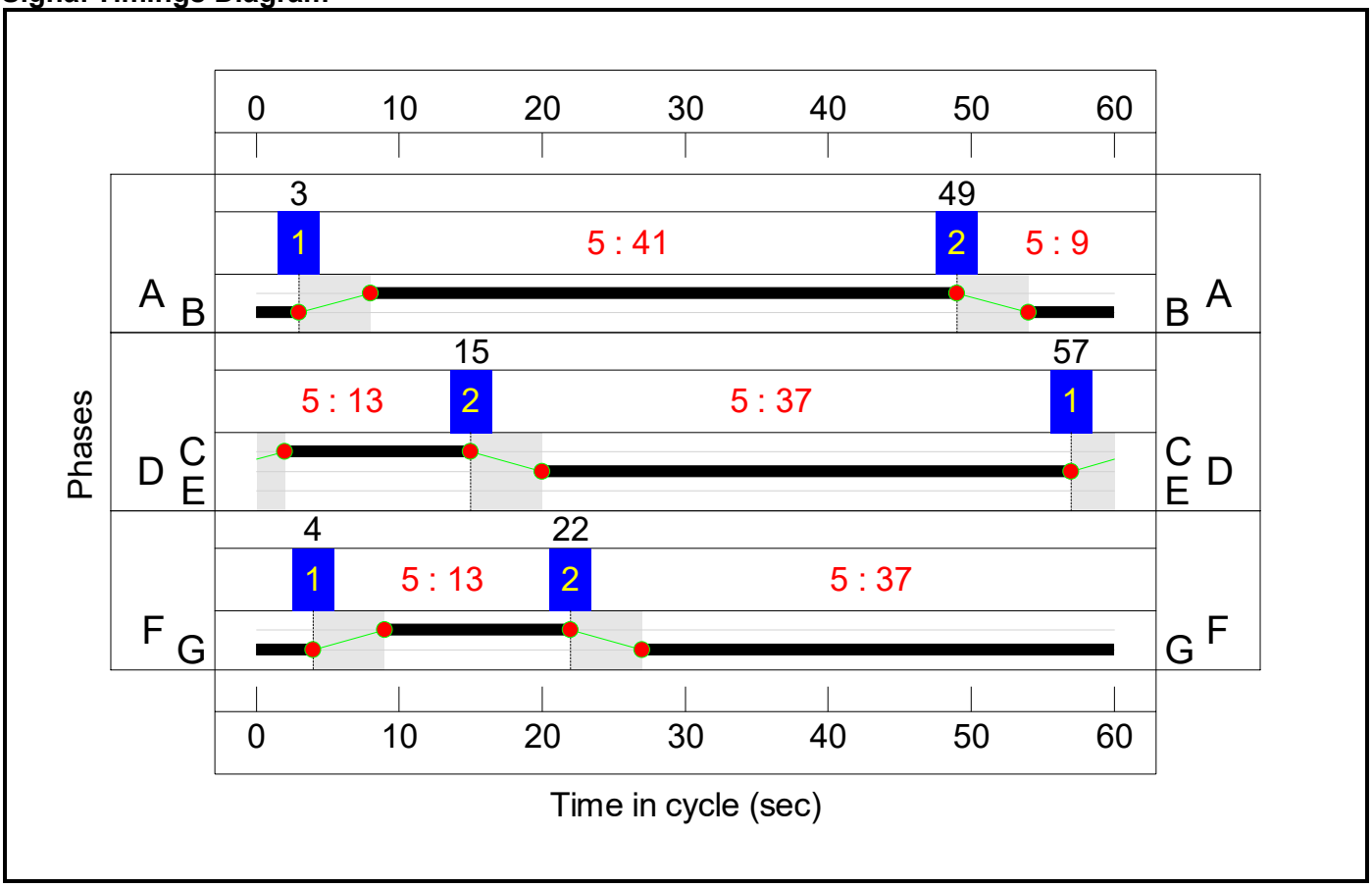
Stage	1	2
Duration	13	37
Change Point	57	15

Stage Stream: 3

Stage	1	2
Duration	13	37
Change Point	4	22

Full Input Data And Results

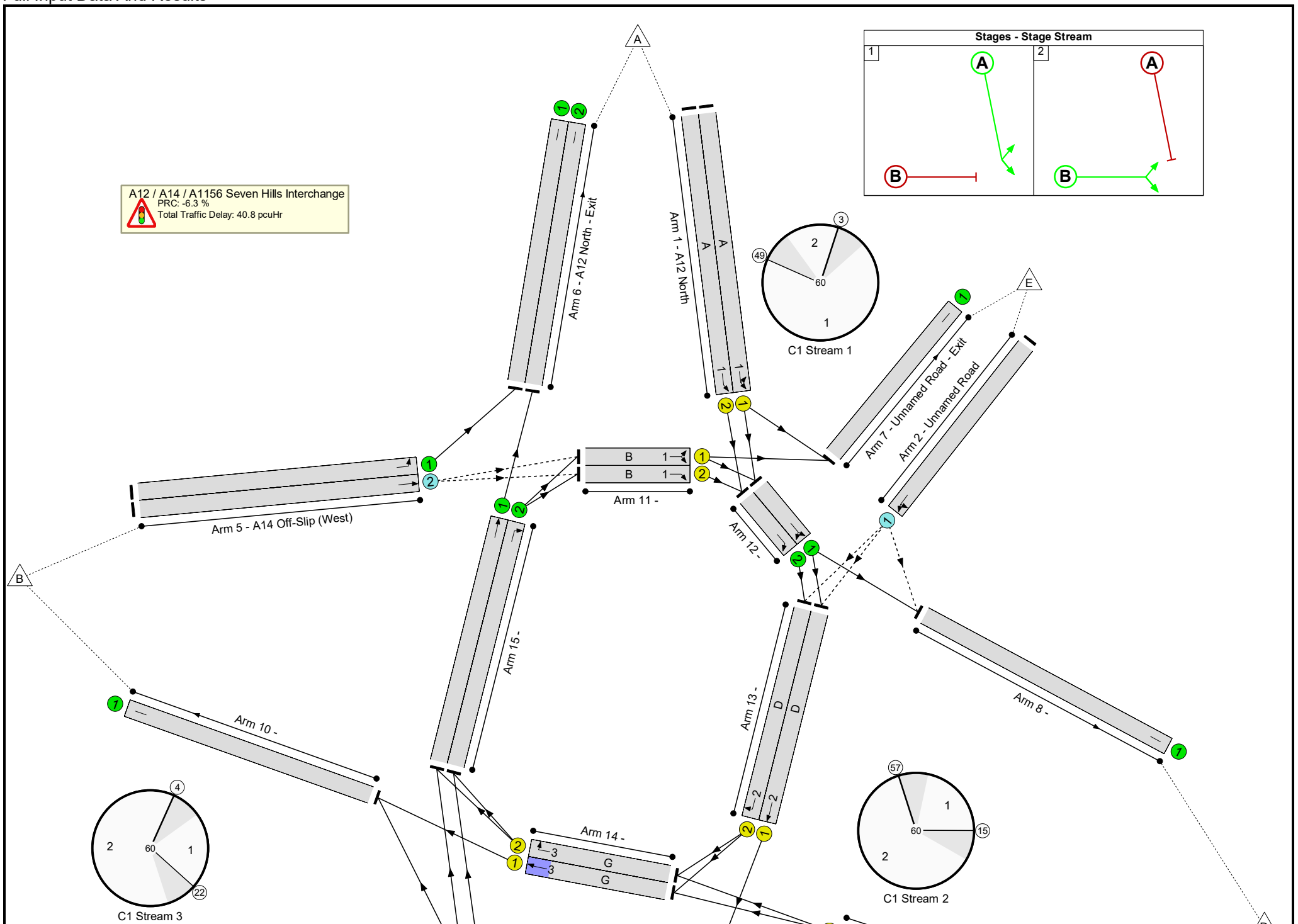
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	720	1866	1306	55.1%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	1098	1866	1306	84.1%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	41	1871	373	11.0%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	267	1877	438	61.0%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	401	1877	438	91.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	13	-	383	1878	438	87.4%
4/2	A1156 Ahead	U	3	N/A	F		1	13	-	126	1878	438	28.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1347	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	96	1871	724	13.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1347	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1213	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	219	1886	314	69.7%
11/2	Right	U	1	N/A	B		1	9	-	4	1886	314	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	880	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	422	1877	1189	35.5%
13/2	Right	U	2	N/A	D		1	37	-	1137	1877	1189	95.6%
14/1	Ahead	U	3	N/A	G		1	37	-	1130	2007	1271	88.9%
14/2	Right	U	3	N/A	G		1	37	-	408	1872	1186	34.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**137**	**0**	**0**	**15.2**	**25.6**	**0.0**	**40.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**137**	**0**	**0**	**15.2**	**25.6**	**0.0**	**40.8**	**-**	**-**	**-**	**-**
1/1	720	720	-	-	-	0.9	0.6	-	1.5	7.5	5.8	0.6	6.4
1/2	1098	1098	-	-	-	2.0	2.6	-	4.6	15.0	13.1	2.6	15.7
2/1	41	41	41	0	0	0.0	0.1	-	0.1	7.1	0.2	0.1	0.3
3/1	267	267	-	-	-	1.5	0.8	-	2.3	31.0	3.9	0.8	4.7
3/2	401	401	-	-	-	2.5	4.4	-	6.9	61.8	6.5	4.4	10.8
4/1	383	383	-	-	-	2.4	3.1	-	5.5	51.5	6.1	3.1	9.2
4/2	126	126	-	-	-	0.7	0.2	-	0.9	24.7	1.7	0.2	1.9
5/1	1347	1347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	96	96	96	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1347	1347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1213	1213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	219	219	-	-	-	1.2	1.1	-	2.3	38.6	3.5	1.1	4.6
11/2	4	4	-	-	-	0.0	0.0	-	0.0	27.0	0.1	0.0	0.1
12/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	422	422	-	-	-	0.4	0.3	-	0.7	6.0	2.0	0.3	2.3
13/2	1137	1137	-	-	-	1.5	8.3	-	9.8	31.1	7.9	8.3	16.2
14/1	1130	1130	-	-	-	0.3	3.8	-	4.1	13.2	1.0	3.8	4.8

Full Input Data And Results

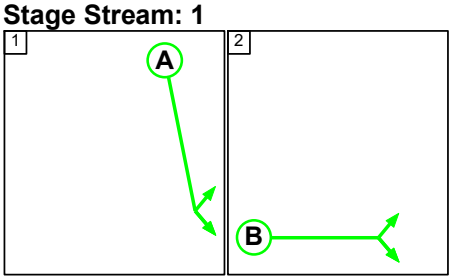
14/2	408	408	-	-	-	1.7	0.3	-	2.0	17.7	6.7	0.3	7.0
15/1	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	7.1	Total Delay for Signalled Lanes (pcuHr):	8.44	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-6.3	Total Delay for Signalled Lanes (pcuHr):	19.71	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	1.2	Total Delay for Signalled Lanes (pcuHr):	12.48	Cycle Time (s): 60
	PRC Over All Lanes (%):	-6.3	Total Delay Over All Lanes(pcuHr):	40.79	

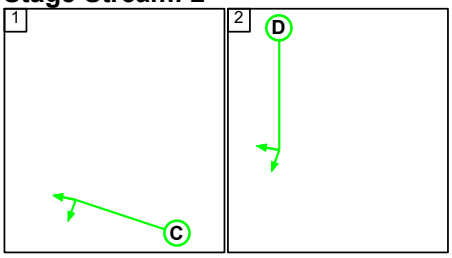
Full Input Data And Results
Scenario 20: '28RC 17:00-18:00' (FG20: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

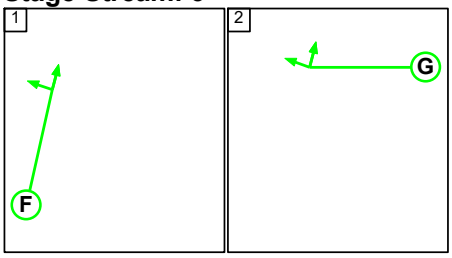
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

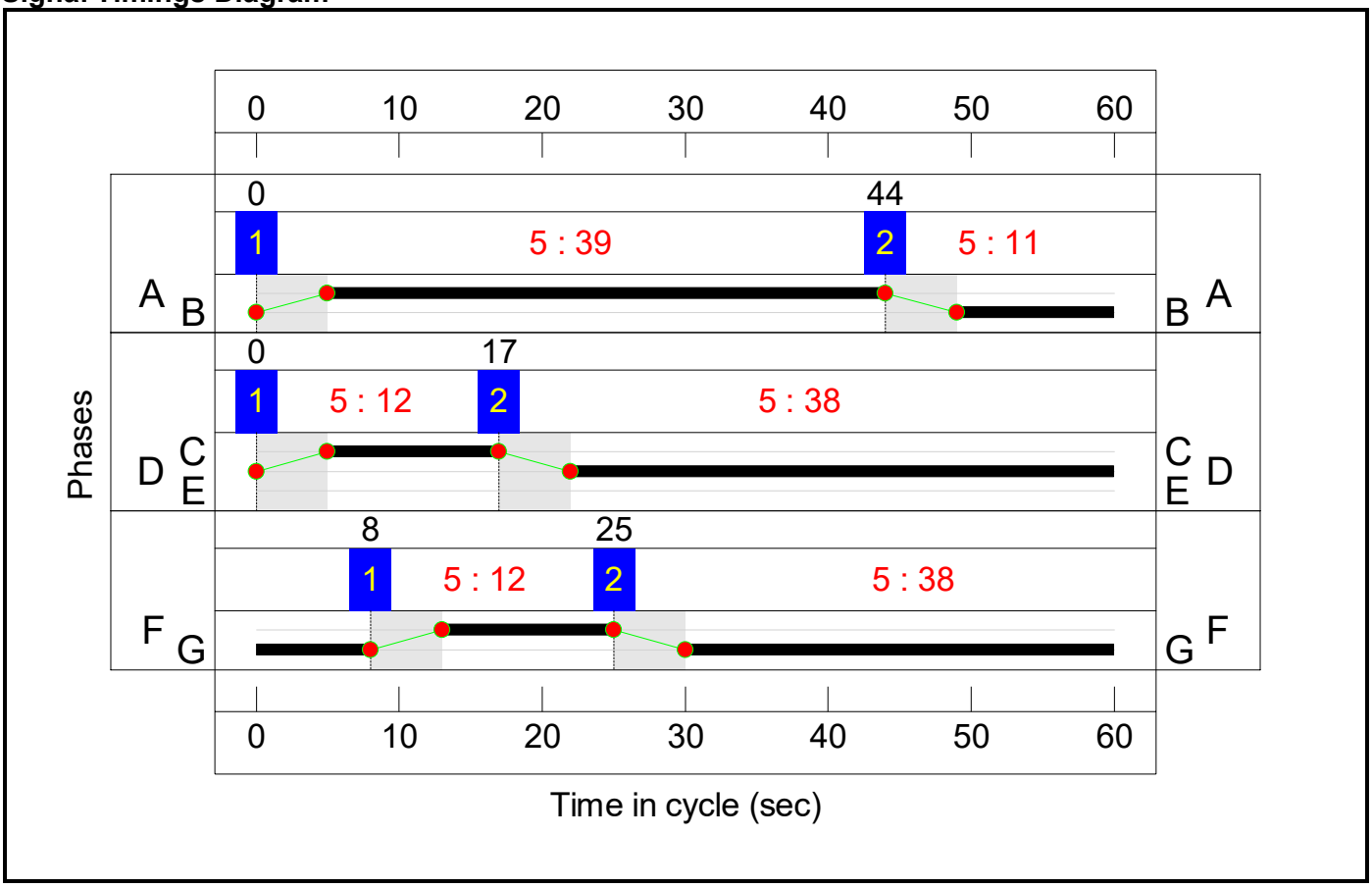
Stage	1	2
Duration	12	38
Change Point	0	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	8	25

Full Input Data And Results

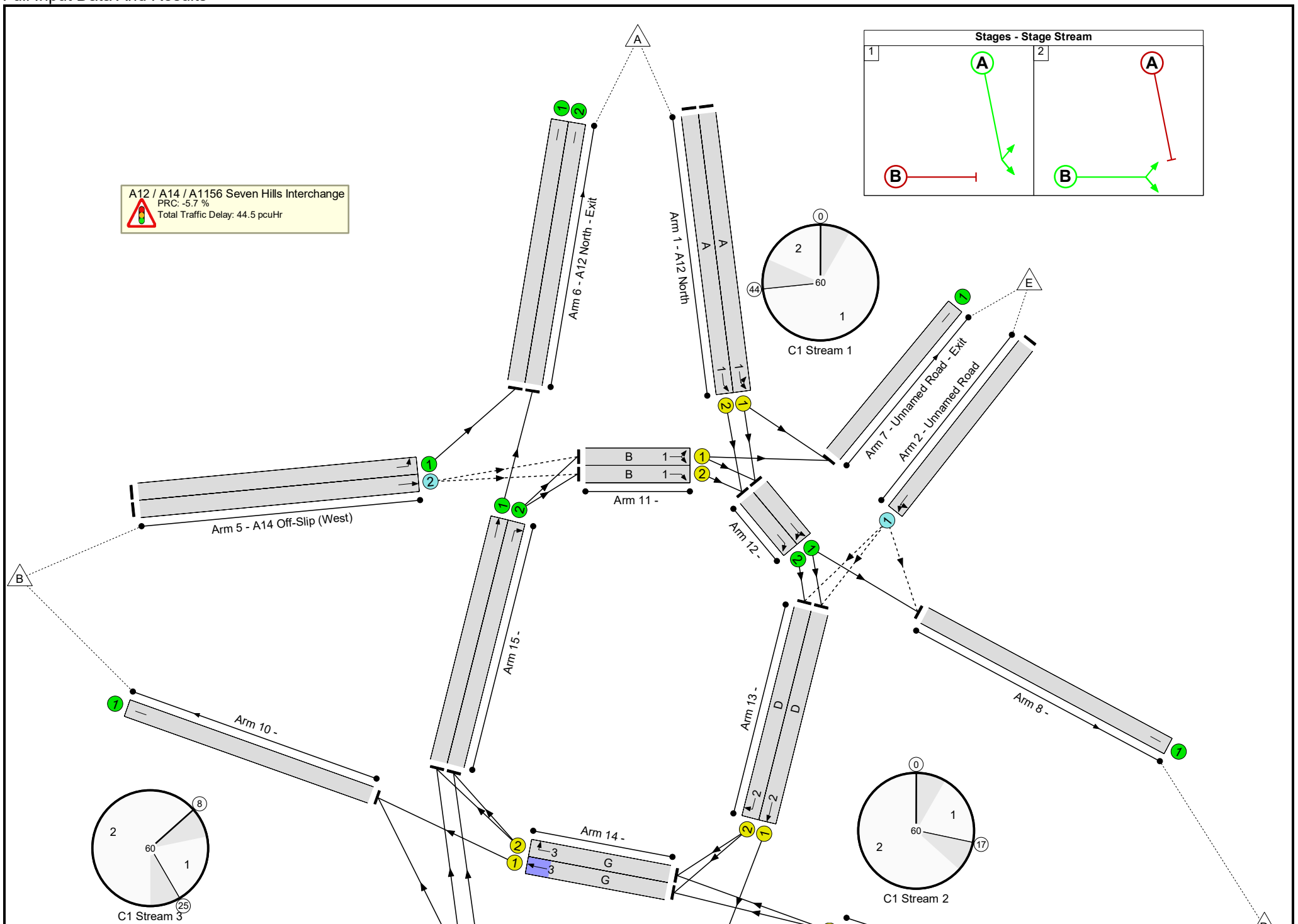
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.2%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.2%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	727	1866	1244	58.4%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	1121	1866	1244	90.1%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	330	8.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	12	-	316	1877	407	77.7%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	12	-	387	1877	407	95.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	311	1878	407	76.4%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	218	1878	407	53.6%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1520	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	117	1871	723	16.2%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1520	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	52	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	593	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1224	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	330	1886	377	87.5%
11/2	Right	U	1	N/A	B		1	11	-	5	1886	377	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1005	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1126	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	38	-	419	1877	1220	34.3%
13/2	Right	U	2	N/A	D		1	38	-	1148	1877	1220	94.1%
14/1	Ahead	U	3	N/A	G		1	38	-	1147	2007	1305	87.9%
14/2	Right	U	3	N/A	G		1	38	-	388	1872	1217	31.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**146**	**0**	**0**	**15.7**	**28.8**	**0.0**	**44.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**146**	**0**	**0**	**15.7**	**28.8**	**0.0**	**44.5**	**-**	**-**	**-**	**-**
1/1	727	727	-	-	-	1.1	0.7	-	1.8	8.9	6.5	0.7	7.2
1/2	1121	1121	-	-	-	2.6	4.3	-	6.9	22.0	15.6	4.3	19.8
2/1	29	29	29	0	0	0.0	0.0	-	0.1	7.9	0.1	0.0	0.2
3/1	316	316	-	-	-	1.9	1.7	-	3.6	41.3	4.9	1.7	6.6
3/2	387	387	-	-	-	2.5	6.1	-	8.6	79.7	6.3	6.1	12.4
4/1	311	311	-	-	-	1.9	1.6	-	3.5	40.2	4.8	1.6	6.4
4/2	218	218	-	-	-	1.3	0.6	-	1.8	30.3	3.2	0.6	3.8
5/1	1520	1520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	117	117	117	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1520	1520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1224	1224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	330	330	-	-	-	1.4	3.1	-	4.5	48.7	5.4	3.1	8.5
11/2	5	5	-	-	-	0.0	0.0	-	0.0	24.4	0.1	0.0	0.1
12/1	1005	1005	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	419	419	-	-	-	0.4	0.3	-	0.6	5.5	2.3	0.3	2.5
13/2	1148	1148	-	-	-	0.7	6.7	-	7.4	23.2	5.8	6.7	12.5
14/1	1147	1147	-	-	-	0.2	3.5	-	3.7	11.6	0.8	3.5	4.3

Full Input Data And Results

14/2	388	388	-	-	-	1.7	0.2	-	1.9	17.7	6.5	0.2	6.7
15/1	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

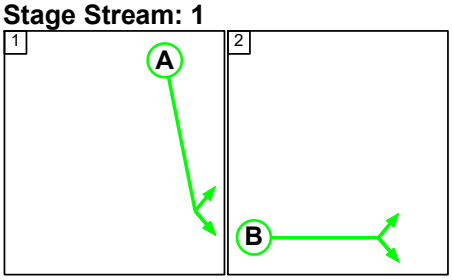
C1	Stream: 1 PRC for Signalled Lanes (%):	-0.1	Total Delay for Signalled Lanes (pcuHr):	13.17	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-5.7	Total Delay for Signalled Lanes (pcuHr):	20.23	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	10.93	Cycle Time (s): 60
	PRC Over All Lanes (%):	-5.7	Total Delay Over All Lanes(pcuHr):	44.49	

Full Input Data And Results

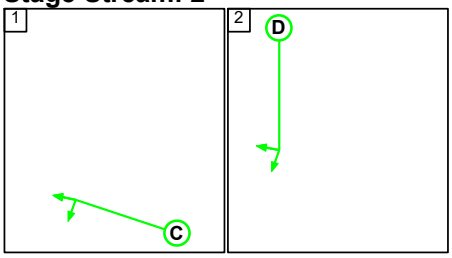
Scenario 21: '28PC 06:00-07:00' (FG21: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

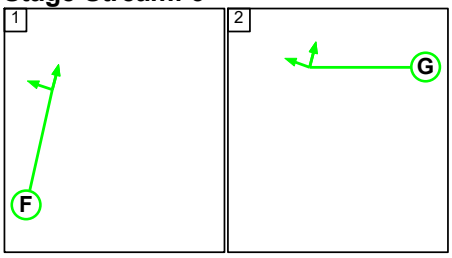
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

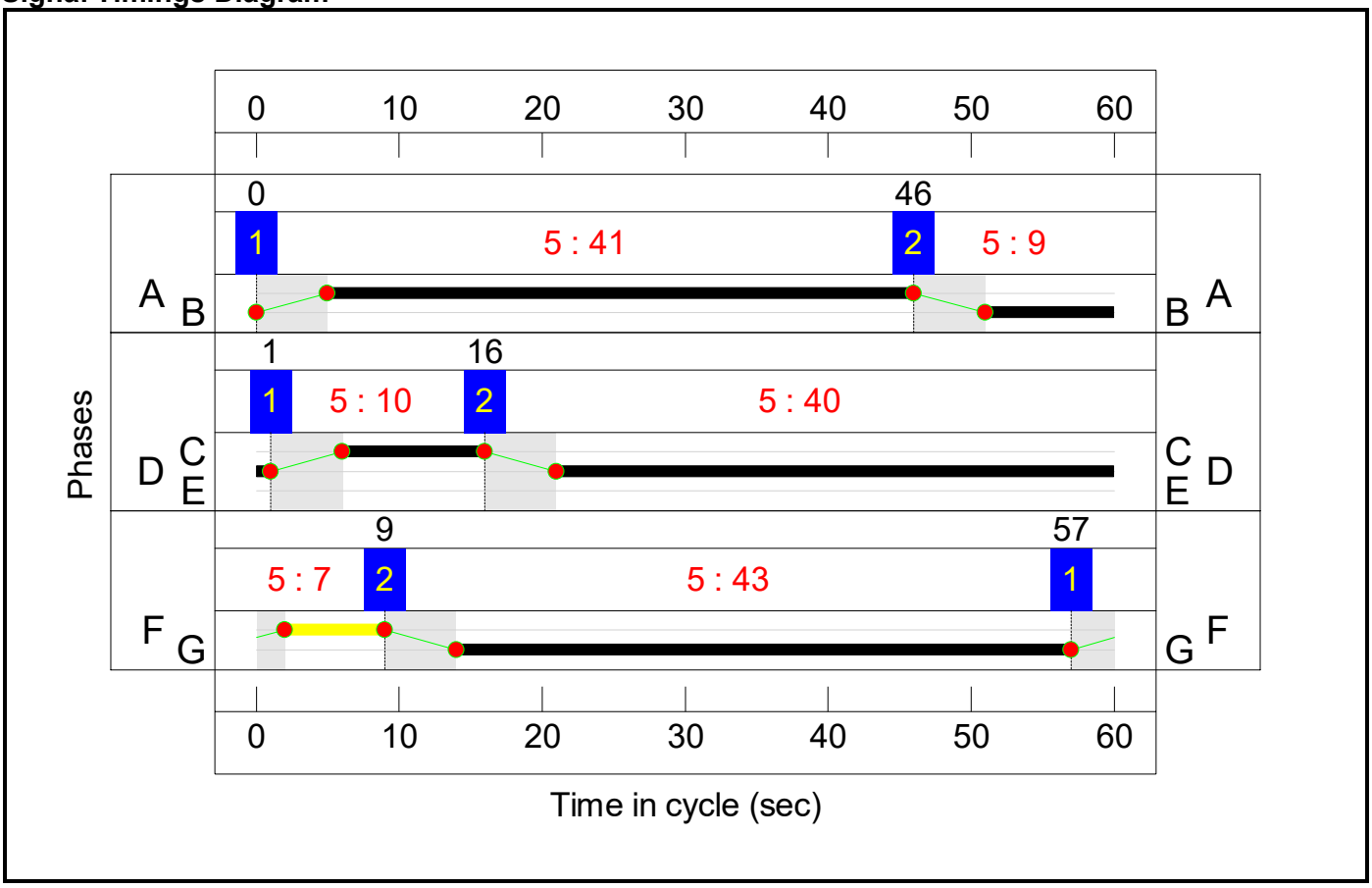
Stage	1	2
Duration	10	40
Change Point	1	16

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	57	9

Full Input Data And Results

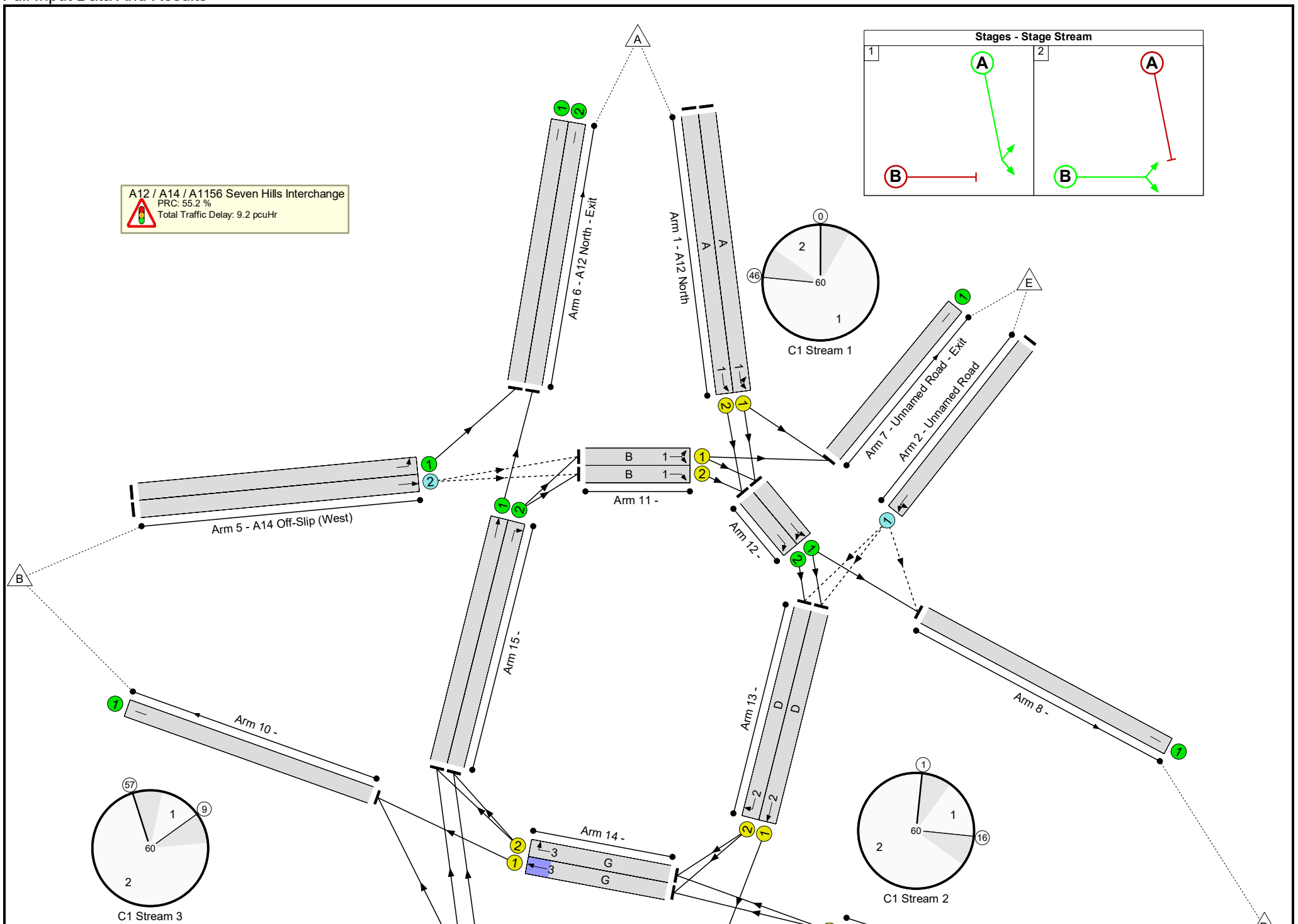
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**58.0%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**58.0%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	306	1866	1306	23.4%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	694	1866	1306	53.1%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	626	4.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	79	1877	344	23.0%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	195	1877	344	56.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	87	1878	250	34.7%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	146	1871	905	16.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	272	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	275	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	742	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	139	1886	314	44.2%
11/2	Right	U	1	N/A	B		1	9	-	21	1886	314	6.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	196	1877	1283	15.3%
13/2	Right	U	2	N/A	D		1	40	-	744	1877	1283	58.0%
14/1	Ahead	U	3	N/A	G		1	43	-	735	2007	1472	49.9%
14/2	Right	U	3	N/A	G		1	43	-	204	1872	1373	14.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	272	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**176**	**0**	**0**	**5.5**	**3.7**	**0.0**	**9.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**176**	**0**	**0**	**5.5**	**3.7**	**0.0**	**9.2**	**-**	**-**	**-**	**-**
1/1	306	306	-	-	-	0.3	0.2	-	0.4	5.0	1.8	0.2	1.9
1/2	694	694	-	-	-	0.8	0.6	-	1.4	7.2	5.4	0.6	6.0
2/1	30	30	30	0	0	0.0	0.0	-	0.0	3.1	0.0	0.0	0.0
3/1	79	79	-	-	-	0.5	0.1	-	0.6	27.7	1.1	0.1	1.3
3/2	195	195	-	-	-	1.2	0.6	-	1.9	34.3	2.9	0.6	3.6
4/1	87	87	-	-	-	0.6	0.3	-	0.8	34.7	1.3	0.3	1.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	146	146	146	0	0	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
6/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	275	275	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	139	139	-	-	-	0.8	0.4	-	1.2	31.5	2.1	0.4	2.4
11/2	21	21	-	-	-	0.1	0.0	-	0.2	27.4	0.3	0.0	0.3
12/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	196	196	-	-	-	0.3	0.1	-	0.4	6.5	1.9	0.1	2.0
13/2	744	744	-	-	-	0.4	0.7	-	1.1	5.4	2.3	0.7	3.0
14/1	735	735	-	-	-	0.5	0.5	-	1.0	5.0	2.7	0.5	3.2

Full Input Data And Results

14/2	204	204	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

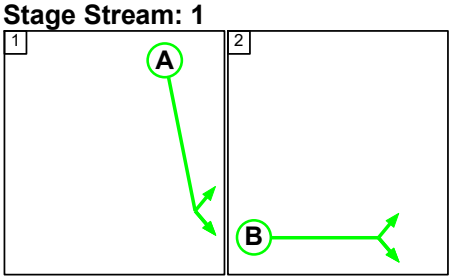
C1	Stream: 1 PRC for Signalled Lanes (%):	69.4	Total Delay for Signalled Lanes (pcuHr):	3.20	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	55.2	Total Delay for Signalled Lanes (pcuHr):	3.93	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	80.2	Total Delay for Signalled Lanes (pcuHr):	1.97	Cycle Time (s):	60
	PRC Over All Lanes (%):	55.2	Total Delay Over All Lanes(pcuHr):	9.22		

Full Input Data And Results

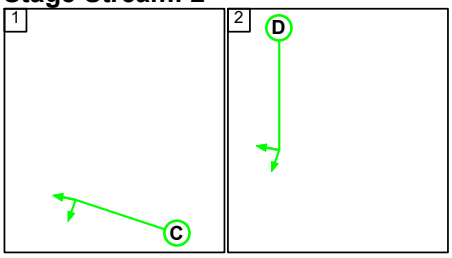
Scenario 22: '28PC 07:00-08:00' (FG22: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

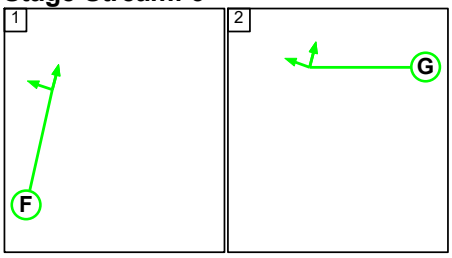
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	59	42

Stage Stream: 2

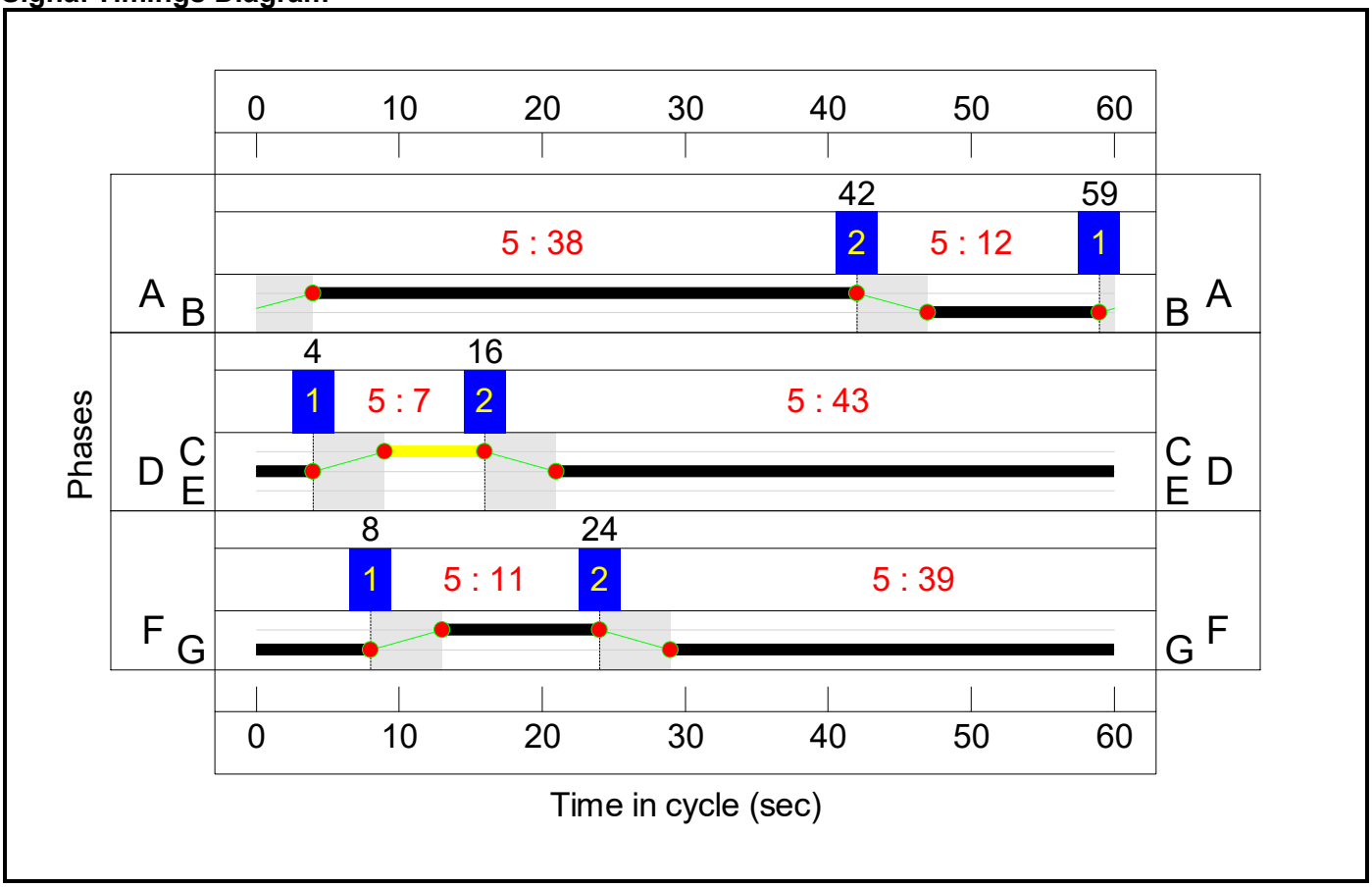
Stage	1	2
Duration	7	43
Change Point	4	16

Stage Stream: 3

Stage	1	2
Duration	11	39
Change Point	8	24

Full Input Data And Results

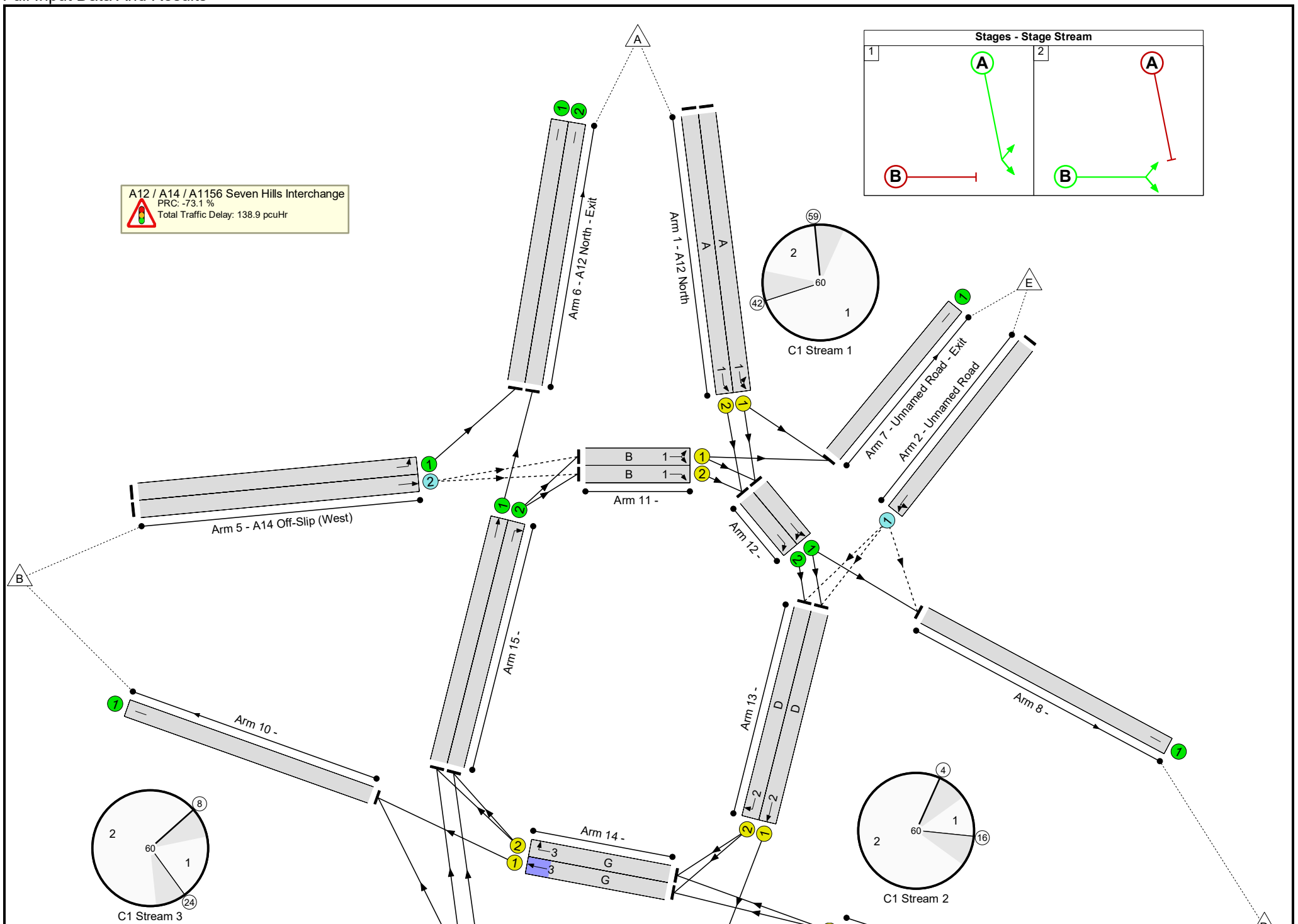
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**155.8%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**155.8%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	503	1866	1213	41.5%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1237	1866	1213	102.0%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	59	1871	362	16.3%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	7	-	204	1877	250	81.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	7	-	390	1877	250	155.8%
4/1	A1156 Left Ahead	U	3	N/A	F		1	11	-	351	1878	376	93.5%
4/2	A1156 Ahead	U	3	N/A	F		1	11	-	97	1878	376	25.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1430	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	212	1871	789	26.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1430	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	387	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1356	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	318	1886	409	76.5%
11/2	Right	U	1	N/A	B		1	12	-	6	1886	409	1.5%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	752	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1243	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	43	-	372	1877	1376	27.0%
13/2	Right	U	2	N/A	D		1	43	-	1295	1877	1376	92.3%
14/1	Ahead	U	3	N/A	G		1	39	-	1297	2007	1338	95.0%
14/2	Right	U	3	N/A	G		1	39	-	388	1872	1248	20.0%
15/1	Ahead	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**271**	**0**	**0**	**20.1**	**118.8**	**0.0**	**138.9**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**271**	**0**	**0**	**20.1**	**118.8**	**0.0**	**138.9**	**-**	**-**	**-**	**-**
1/1	503	503	-	-	-	0.7	0.4	-	1.1	7.6	3.9	0.4	4.3
1/2	1237	1213	-	-	-	4.2	24.6	-	28.9	84.0	21.0	24.6	45.6
2/1	59	59	59	0	0	0.0	0.1	-	0.1	6.6	0.2	0.1	0.3
3/1	204	204	-	-	-	1.4	2.0	-	3.5	61.1	3.3	2.0	5.3
3/2	390	250	-	-	-	6.9	71.2	-	78.1	721.4	9.1	71.2	80.3
4/1	351	351	-	-	-	2.3	5.1	-	7.4	75.5	5.8	5.1	10.8
4/2	97	97	-	-	-	0.5	0.2	-	0.7	26.7	1.3	0.2	1.5
5/1	1430	1430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	212	212	212	0	0	0.0	0.2	-	0.2	3.1	0.0	0.2	0.2
6/1	1430	1430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	64	64	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	387	387	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1330	1330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	313	313	-	-	-	1.6	1.6	-	3.2	36.4	4.9	1.6	6.5
11/2	6	6	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1219	1219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	372	372	-	-	-	0.5	0.2	-	0.7	6.6	3.4	0.2	3.6
13/2	1271	1271	-	-	-	0.3	5.5	-	5.7	16.3	12.6	5.5	18.0
14/1	1271	1271	-	-	-	0.8	7.7	-	8.5	24.1	4.7	7.7	12.4

Full Input Data And Results

14/2	250	250	-	-	-	0.7	0.1	-	0.9	12.3	4.1	0.1	4.2
15/1	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

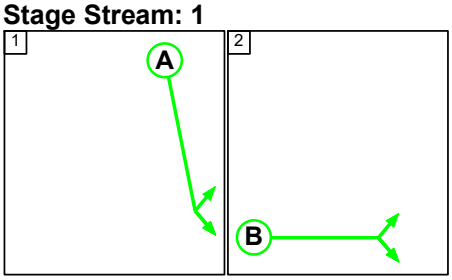
C1	Stream: 1 PRC for Signalled Lanes (%):	-13.3	Total Delay for Signalled Lanes (pcuHr):	33.12	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-73.1	Total Delay for Signalled Lanes (pcuHr):	88.03	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-5.6	Total Delay for Signalled Lanes (pcuHr):	17.45	Cycle Time (s): 60
	PRC Over All Lanes (%):	-73.1	Total Delay Over All Lanes(pcuHr):	138.89	

Full Input Data And Results

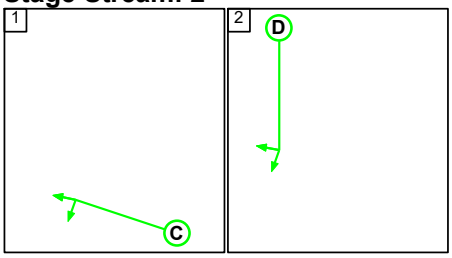
Scenario 23: '28PC 08:00-09:00' (FG23: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

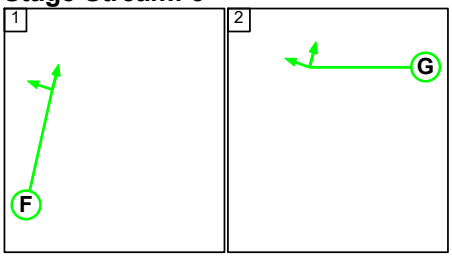
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	34	16
Change Point	58	37

Stage Stream: 2

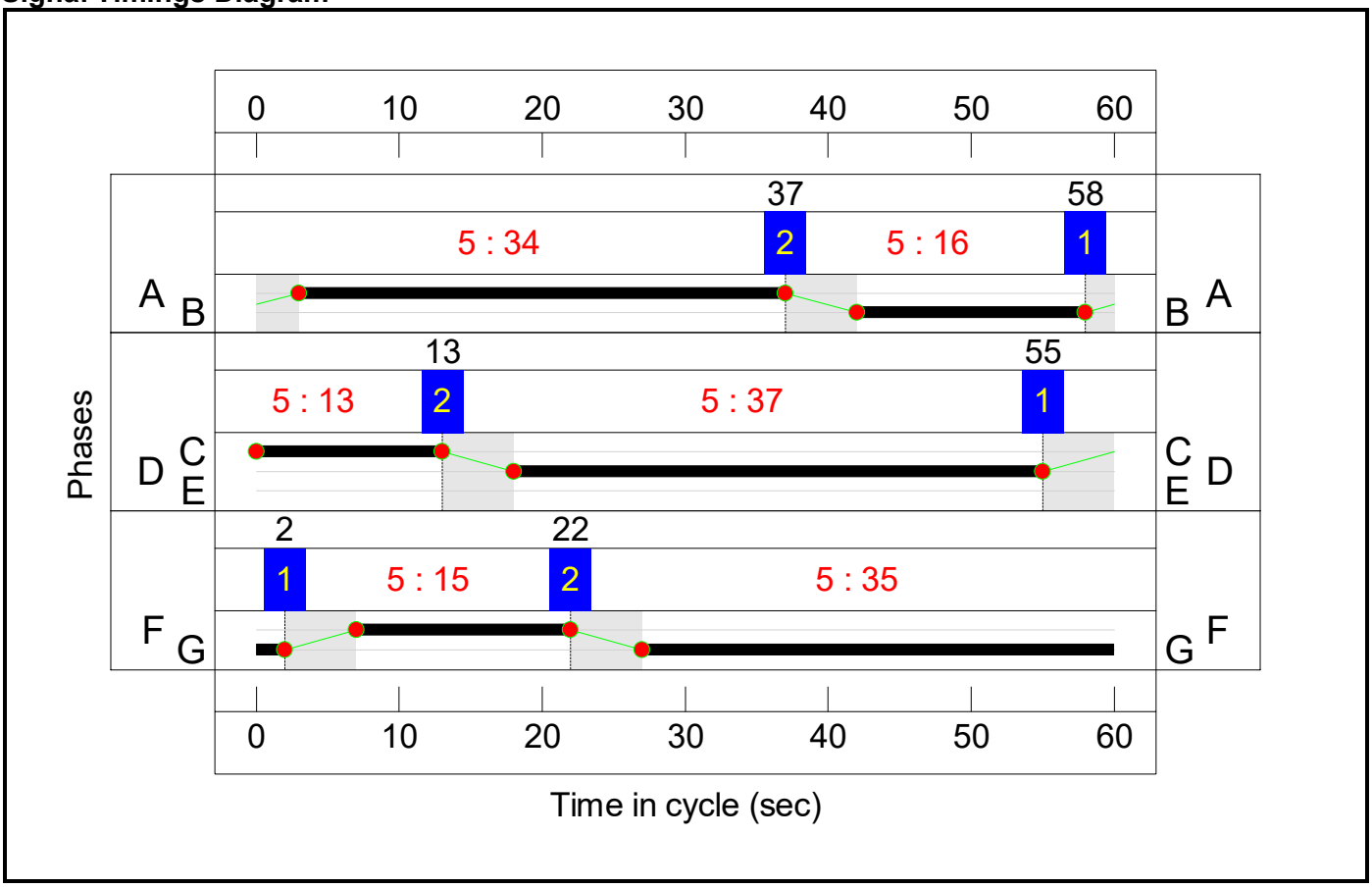
Stage	1	2
Duration	13	37
Change Point	55	13

Stage Stream: 3

Stage	1	2
Duration	15	35
Change Point	2	22

Full Input Data And Results

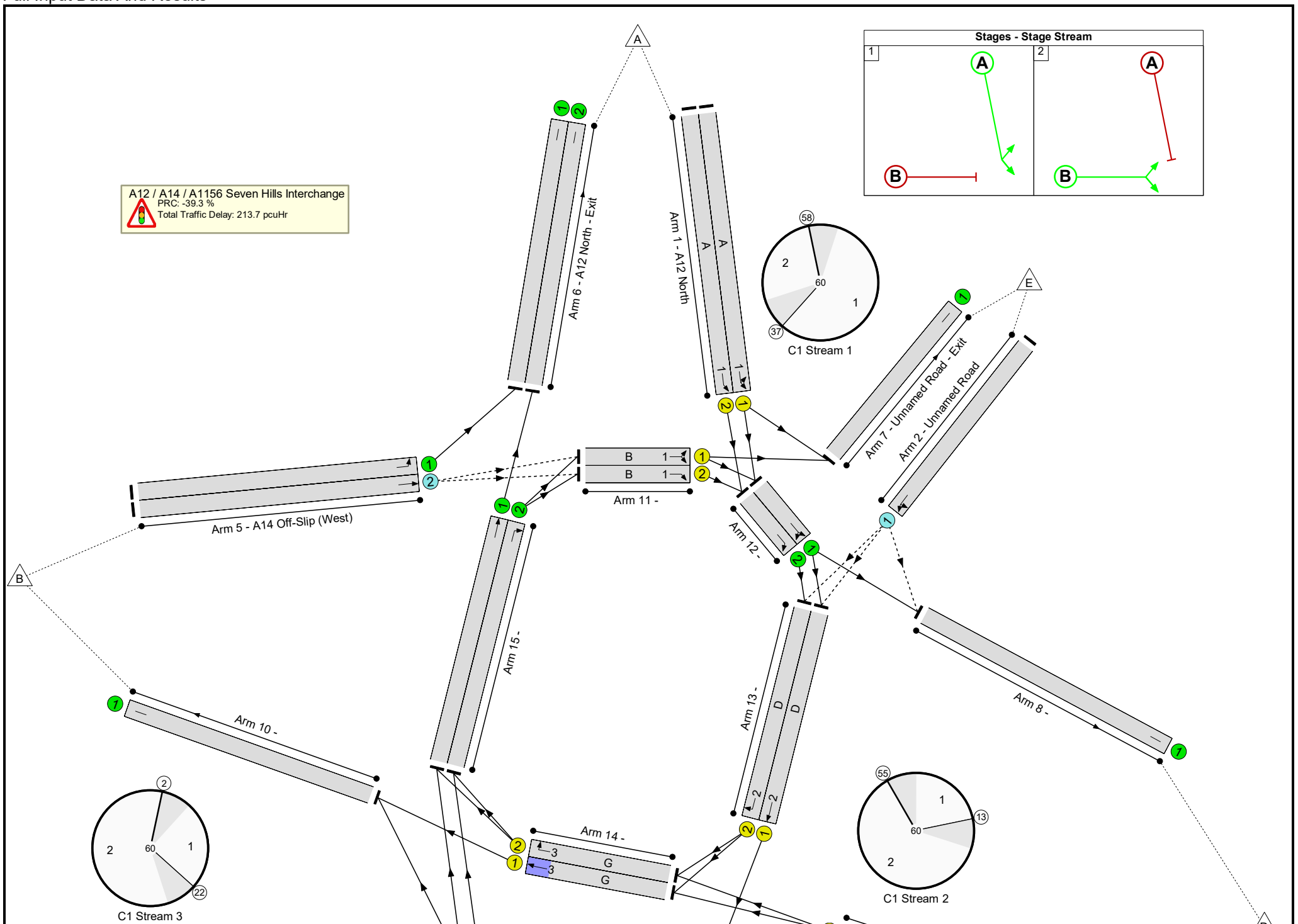
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.4%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.4%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	34	-	804	1866	1088	73.9%
1/2	A12 North Ahead	U	1	N/A	A		1	34	-	1365	1866	1088	125.4%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	106	1871	334	31.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	270	1877	438	61.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	414	1877	438	94.5%
4/1	A1156 Left Ahead	U	3	N/A	F		1	15	-	492	1878	501	98.2%
4/2	A1156 Ahead	U	3	N/A	F		1	15	-	112	1878	501	22.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1642	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	200	1871	688	29.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1642	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	33	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	837	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1528	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	16	-	316	1886	534	59.1%
11/2	Right	U	1	N/A	B		1	16	-	12	1886	534	2.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1377	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	567	1877	1189	47.7%
13/2	Right	U	2	N/A	D		1	37	-	1456	1877	1189	99.2%
14/1	Ahead	U	3	N/A	G		1	35	-	1447	2007	1204	97.2%
14/2	Right	U	3	N/A	G		1	35	-	423	1872	1123	37.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	128	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**306**	**0**	**0**	**28.2**	**185.5**	**0.0**	**213.7**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**306**	**0**	**0**	**28.2**	**185.5**	**0.0**	**213.7**	**-**	**-**	**-**	**-**
1/1	804	804	-	-	-	2.0	1.4	-	3.4	15.4	9.6	1.4	11.0
1/2	1365	1088	-	-	-	12.3	140.7	-	152.9	403.4	27.4	140.7	168.0
2/1	106	106	106	0	0	0.2	0.2	-	0.5	15.9	1.1	0.2	1.3
3/1	270	270	-	-	-	1.5	0.8	-	2.3	31.2	4.0	0.8	4.8
3/2	414	414	-	-	-	2.6	5.8	-	8.4	73.2	6.8	5.8	12.6
4/1	492	492	-	-	-	3.0	9.1	-	12.1	88.5	8.1	9.1	17.2
4/2	112	112	-	-	-	0.5	0.1	-	0.7	21.8	1.4	0.1	1.6
5/1	1642	1642	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	200	200	200	0	0	0.0	0.2	-	0.2	3.7	0.0	0.2	0.2
6/1	1642	1642	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	33	33	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	837	837	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1252	1252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	316	316	-	-	-	1.4	0.7	-	2.1	23.8	4.6	0.7	5.3
11/2	12	12	-	-	-	0.1	0.0	-	0.1	19.2	0.1	0.0	0.2
12/1	1087	1087	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	567	567	-	-	-	0.8	0.5	-	1.3	8.0	4.3	0.5	4.7
13/2	1180	1180	-	-	-	1.1	15.0	-	16.1	49.0	7.8	15.0	22.8
14/1	1171	1171	-	-	-	0.7	10.6	-	11.3	34.8	3.7	10.6	14.3

Full Input Data And Results

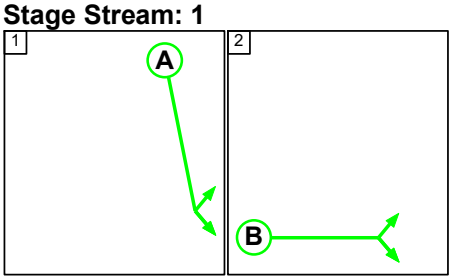
14/2	423	423	-	-	-	2.0	0.3	-	2.3	19.9	7.0	0.3	7.3
15/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	128	128	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-39.3	Total Delay for Signalled Lanes (pcuHr):	158.54	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-10.2	Total Delay for Signalled Lanes (pcuHr):	28.09	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	-9.2	Total Delay for Signalled Lanes (pcuHr):	26.43	Cycle Time (s):	60
	PRC Over All Lanes (%):	-39.3	Total Delay Over All Lanes(pcuHr):	213.74		

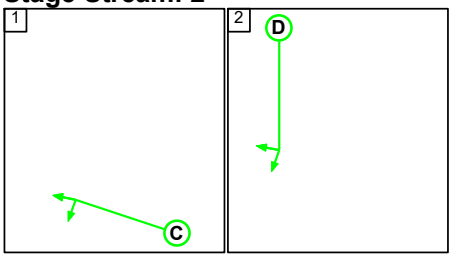
Full Input Data And Results
Scenario 24: '28PC 15:00-16:00' (FG24: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

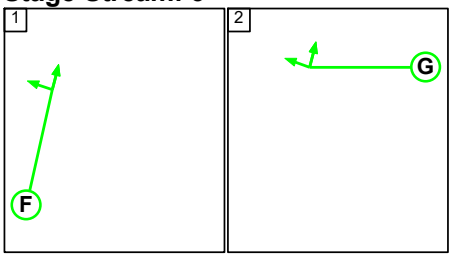
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	35	15
Change Point	0	40

Stage Stream: 2

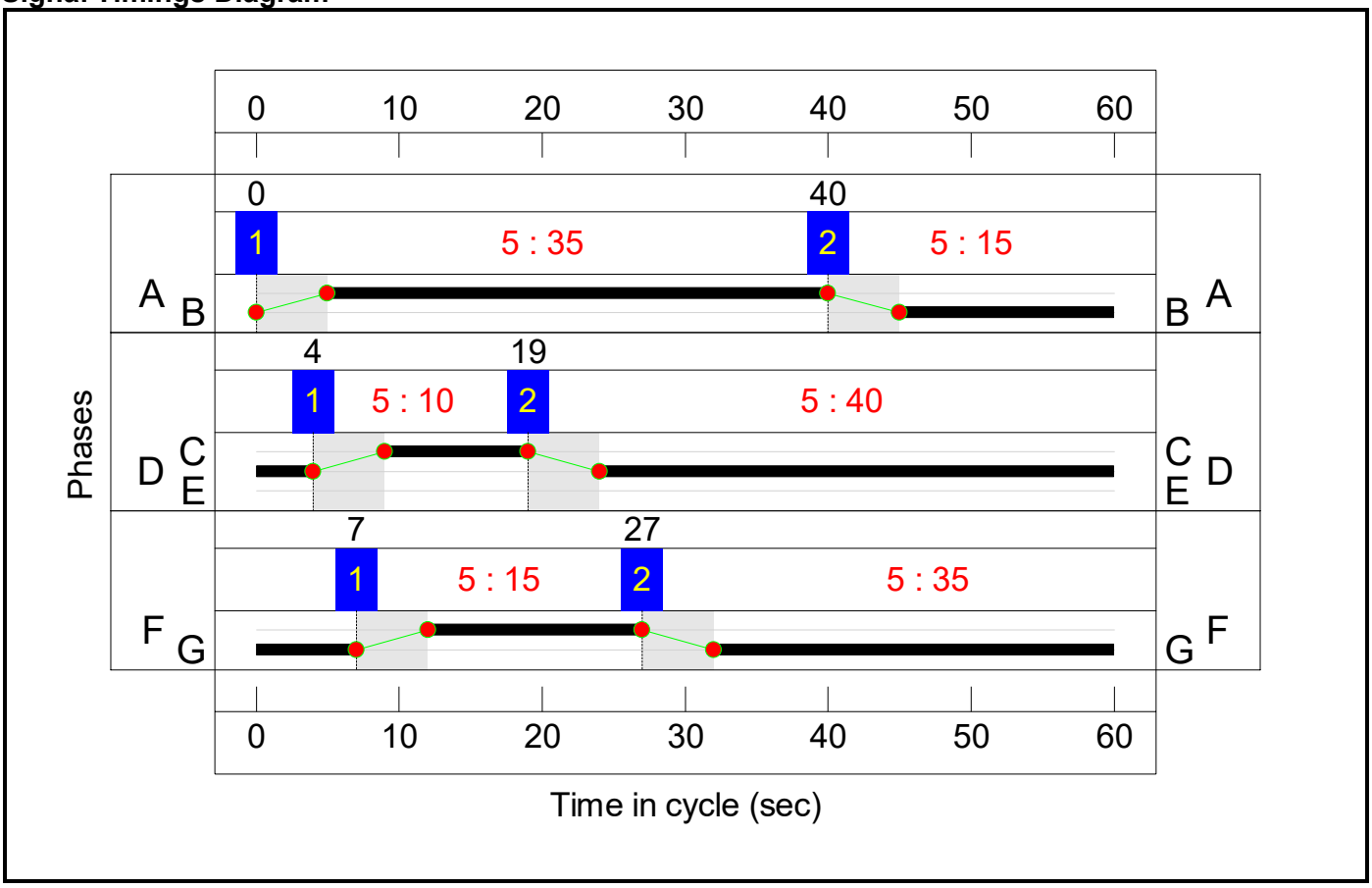
Stage	1	2
Duration	10	40
Change Point	4	19

Stage Stream: 3

Stage	1	2
Duration	15	35
Change Point	7	27

Full Input Data And Results

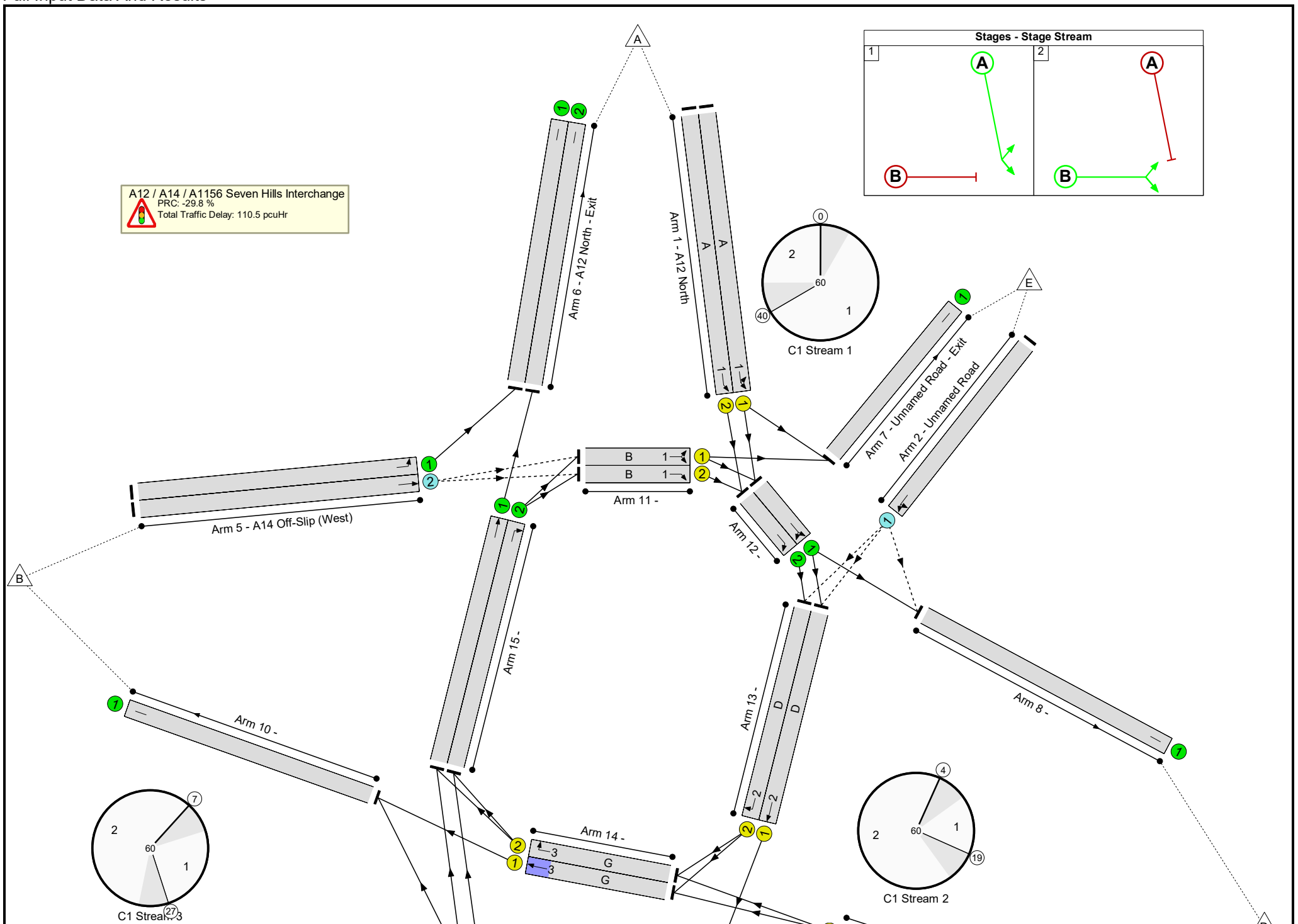
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.8%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.8%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	35	-	736	1866	1120	65.7%
1/2	A12 North Ahead	U	1	N/A	A		1	35	-	1171	1866	1120	104.6%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	41	1871	364	11.3%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	267	1877	344	77.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	402	1877	344	116.8%
4/1	A1156 Left Ahead	U	3	N/A	F		1	15	-	482	1878	501	96.2%
4/2	A1156 Ahead	U	3	N/A	F		1	15	-	129	1878	501	25.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1347	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	130	1871	710	18.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1347	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	807	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	717	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1286	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	15	-	256	1886	503	50.9%
11/2	Right	U	1	N/A	B		1	15	-	4	1886	503	0.8%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	933	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1175	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	450	1877	1283	35.1%
13/2	Right	U	2	N/A	D		1	40	-	1210	1877	1283	90.3%
14/1	Ahead	U	3	N/A	G		1	35	-	1203	2007	1204	95.6%
14/2	Right	U	3	N/A	G		1	35	-	409	1872	1123	31.3%
15/1	Ahead	U	N/A	N/A	-		-	-	-	807	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	130	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**171**	**0**	**0**	**20.3**	**90.2**	**0.0**	**110.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**171**	**0**	**0**	**20.3**	**90.2**	**0.0**	**110.5**	**-**	**-**	**-**	**-**
1/1	736	736	-	-	-	1.6	1.0	-	2.6	12.6	8.0	1.0	8.9
1/2	1171	1120	-	-	-	5.3	34.2	-	39.5	121.5	20.4	34.2	54.6
2/1	41	41	41	0	0	0.0	0.1	-	0.1	8.6	0.3	0.1	0.3
3/1	267	267	-	-	-	1.7	1.7	-	3.4	45.7	4.2	1.7	5.9
3/2	402	344	-	-	-	4.4	32.1	-	36.5	326.7	7.7	32.1	39.7
4/1	482	482	-	-	-	2.9	7.2	-	10.1	75.8	7.9	7.2	15.1
4/2	129	129	-	-	-	0.6	0.2	-	0.8	22.2	1.7	0.2	1.9
5/1	1347	1347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	130	130	130	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
6/1	1347	1347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1235	1235	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	256	256	-	-	-	0.9	0.5	-	1.4	20.2	3.7	0.5	4.2
11/2	4	4	-	-	-	0.0	0.0	-	0.0	20.1	0.0	0.0	0.1
12/1	933	933	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1124	1124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	450	450	-	-	-	0.3	0.3	-	0.6	4.6	1.9	0.3	2.1
13/2	1159	1159	-	-	-	0.3	4.4	-	4.6	14.4	8.4	4.4	12.8
14/1	1152	1152	-	-	-	0.9	8.3	-	9.2	28.7	4.7	8.3	13.1

Full Input Data And Results

14/2	351	351	-	-	-	1.3	0.2	-	1.5	15.8	5.8	0.2	6.0
15/1	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	130	130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

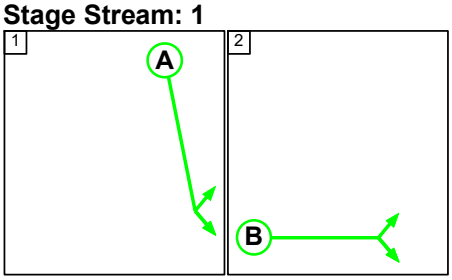
C1 Stream: 1 PRC for Signalled Lanes (%):	-16.2	Total Delay for Signalled Lanes (pcuHr):	43.55	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):	-29.8	Total Delay for Signalled Lanes (pcuHr):	45.07	Cycle Time (s):	60
C1 Stream: 3 PRC for Signalled Lanes (%):	-6.9	Total Delay for Signalled Lanes (pcuHr):	21.66	Cycle Time (s):	60
PRC Over All Lanes (%):	-29.8	Total Delay Over All Lanes(pcuHr):	110.49		

Full Input Data And Results

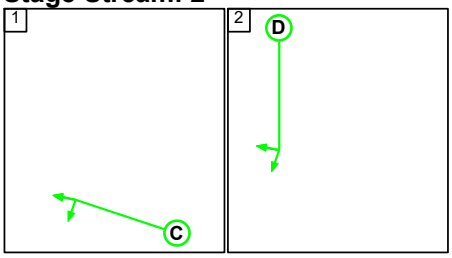
Scenario 25: '28PC 17:00-18:00' (FG25: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

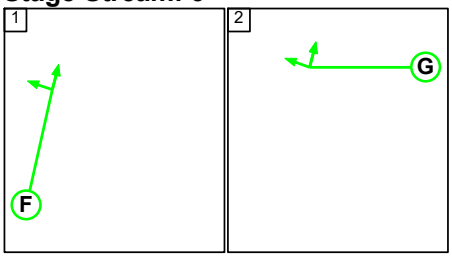
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	2	46

Stage Stream: 2

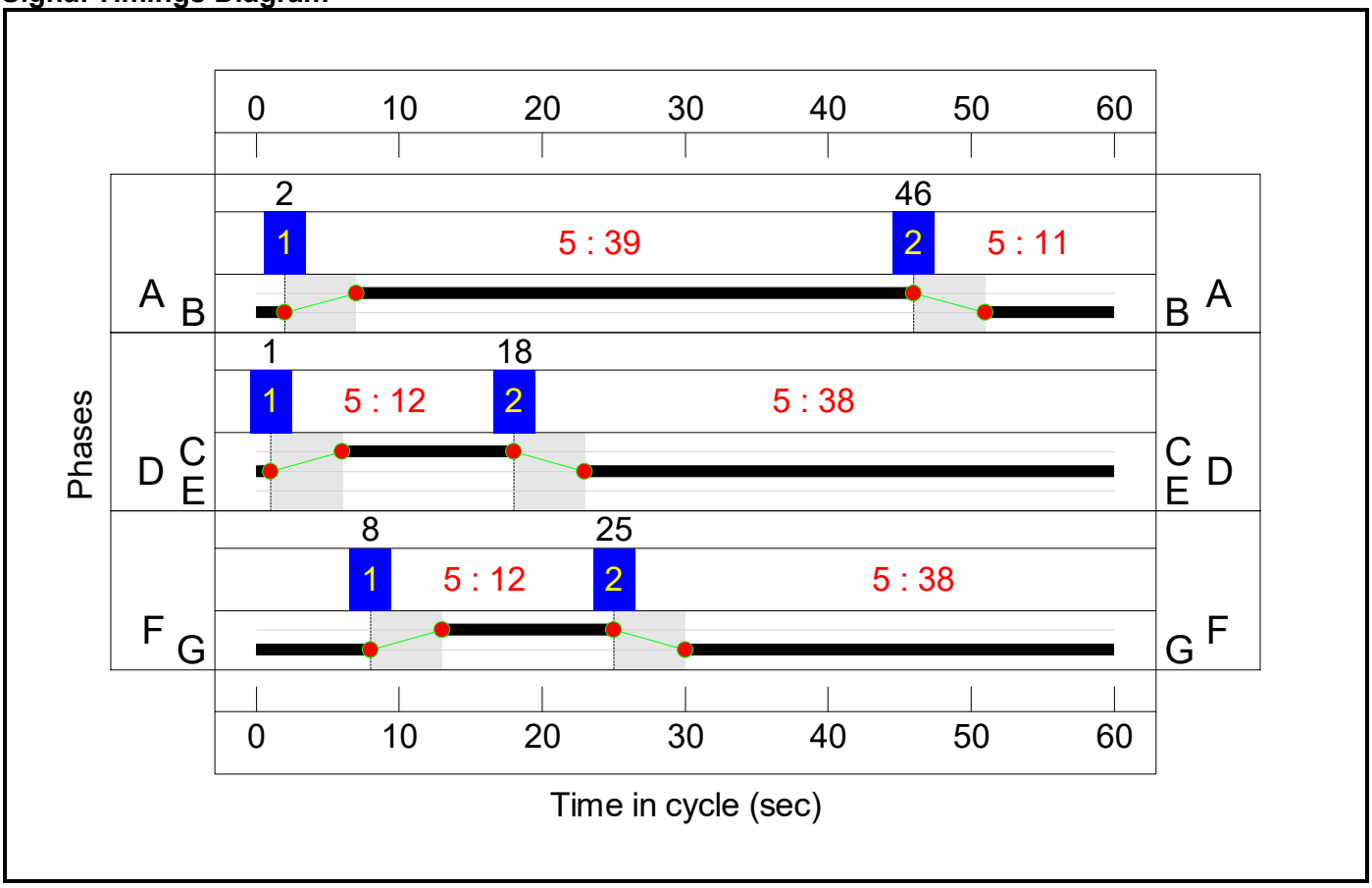
Stage	1	2
Duration	12	38
Change Point	1	18

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	8	25

Full Input Data And Results

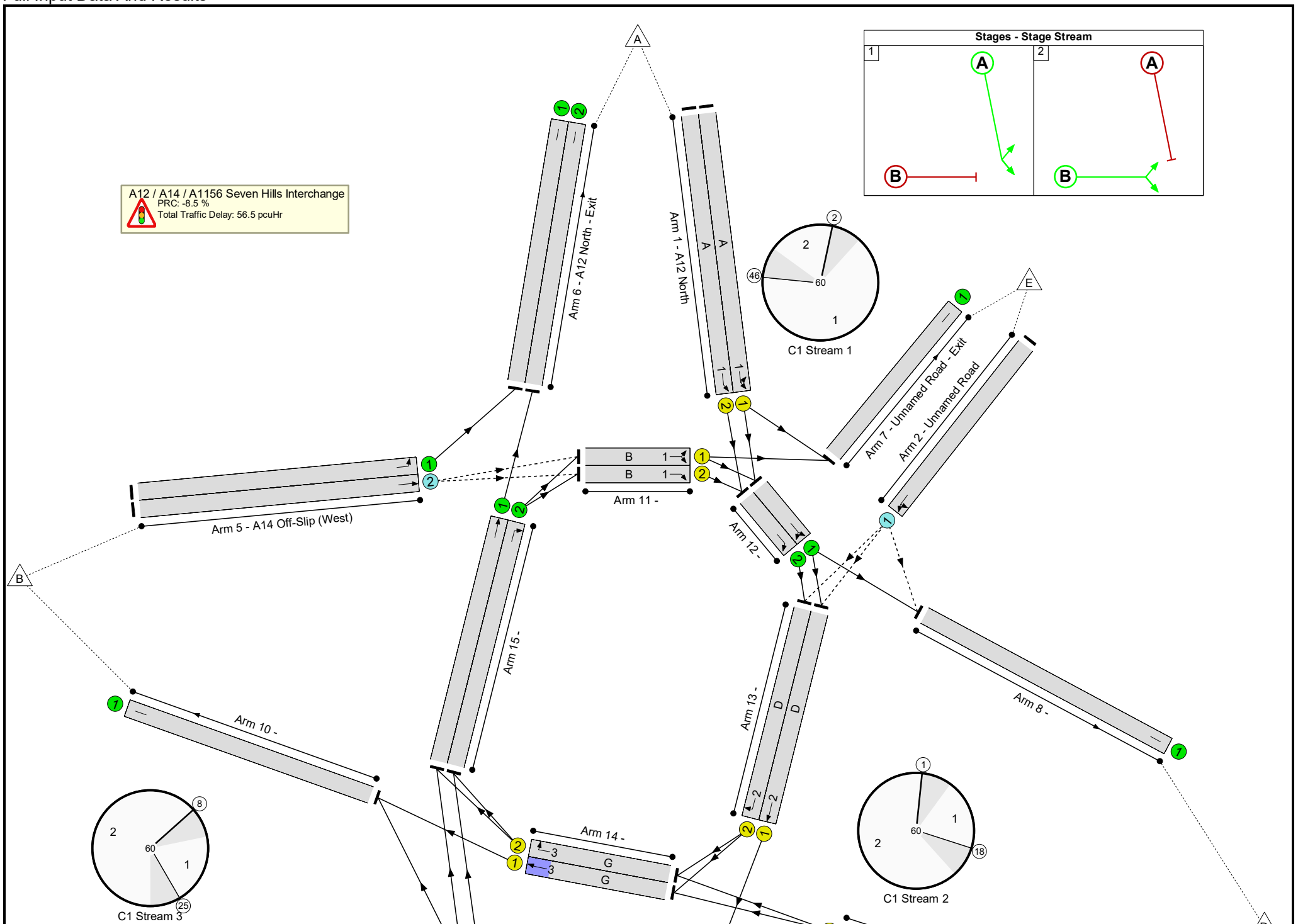
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.6%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.6%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	726	1866	1244	58.4%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	1164	1866	1244	93.6%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	311	9.3%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	12	-	331	1877	407	81.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	12	-	388	1877	407	95.4%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	340	1878	407	83.6%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	229	1878	407	56.3%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1504	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	124	1871	709	17.5%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1504	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	652	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	52	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	738	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1267	Inf	Inf	0.0%

	N/A	B		1	11	-	348	1886	377	92.3%
	N/A	B		1	11	-	5	1886	377	1.3%
A	N/A	-		-	-	-	1022	Inf	Inf	0.0%
A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
	N/A	D		1	38	-	407	1877	1220	33.4%
	N/A	D		1	38	-	1191	1877	1220	97.6%
	N/A	G		1	38	-	1190	2007	1305	91.2%
	N/A	G		1	38	-	389	1872	1217	32.0%
A	N/A	-		-	-	-	652	Inf	Inf	0.0%
A	N/A	-		-	-	-	229	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**153**	**0**	**0**	**16.8**	**39.7**	**0.0**	**56.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**153**	**0**	**0**	**16.8**	**39.7**	**0.0**	**56.5**	**-**	**-**	**-**	**-**
1/1	726	726	-	-	-	1.1	0.7	-	1.8	8.9	6.5	0.7	7.2
1/2	1164	1164	-	-	-	2.9	6.3	-	9.2	28.3	17.1	6.3	23.4
2/1	29	29	29	0	0	0.0	0.1	-	0.1	8.3	0.1	0.1	0.2
3/1	331	331	-	-	-	2.1	2.1	-	4.1	44.9	5.2	2.1	7.3
3/2	388	388	-	-	-	2.5	6.2	-	8.7	81.0	6.4	6.2	12.6
4/1	340	340	-	-	-	2.1	2.4	-	4.5	47.6	5.4	2.4	7.8
4/2	229	229	-	-	-	1.3	0.6	-	2.0	31.0	3.4	0.6	4.0
5/1	1504	1504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	124	124	124	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
6/1	1504	1504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	652	652	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	738	738	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1267	1267	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	348	348	-	-	-	1.6	4.5	-	6.1	63.2	5.7	4.5	10.2
11/2	5	5	-	-	-	0.0	0.0	-	0.0	24.4	0.1	0.0	0.1
12/1	1022	1022	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1169	1169	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	407	407	-	-	-	0.4	0.3	-	0.6	5.6	2.3	0.3	2.5
13/2	1191	1191	-	-	-	0.9	11.5	-	12.3	37.3	7.8	11.5	19.3
14/1	1190	1190	-	-	-	0.4	4.8	-	5.2	15.6	1.5	4.8	6.3

Full Input Data And Results

14/2	389	389	-	-	-	1.6	0.2	-	1.8	16.7	6.5	0.2	6.7
15/1	652	652	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	229	229	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

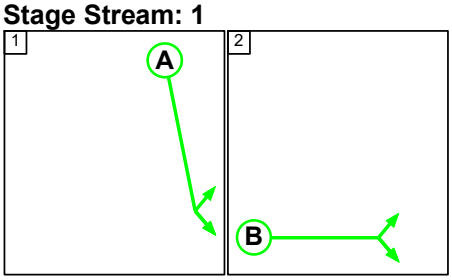
C1	Stream: 1 PRC for Signalled Lanes (%):	-4.0	Total Delay for Signalled Lanes (pcuHr):	17.10	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-8.5	Total Delay for Signalled Lanes (pcuHr):	25.83	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	-1.4	Total Delay for Signalled Lanes (pcuHr):	13.43	Cycle Time (s):	60
	PRC Over All Lanes (%):	-8.5	Total Delay Over All Lanes(pcuHr):	56.53		

Full Input Data And Results

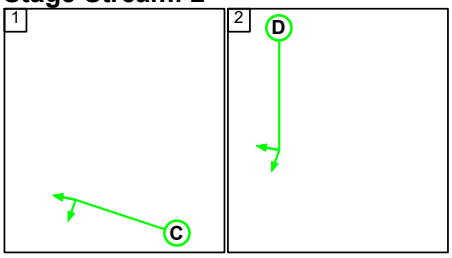
Scenario 26: '34RC 06:00-07:00' (FG26: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

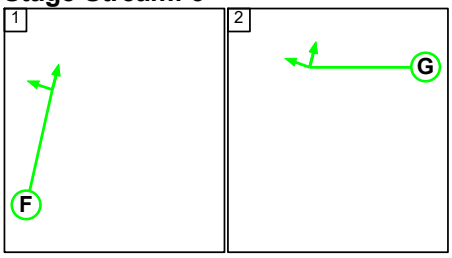
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

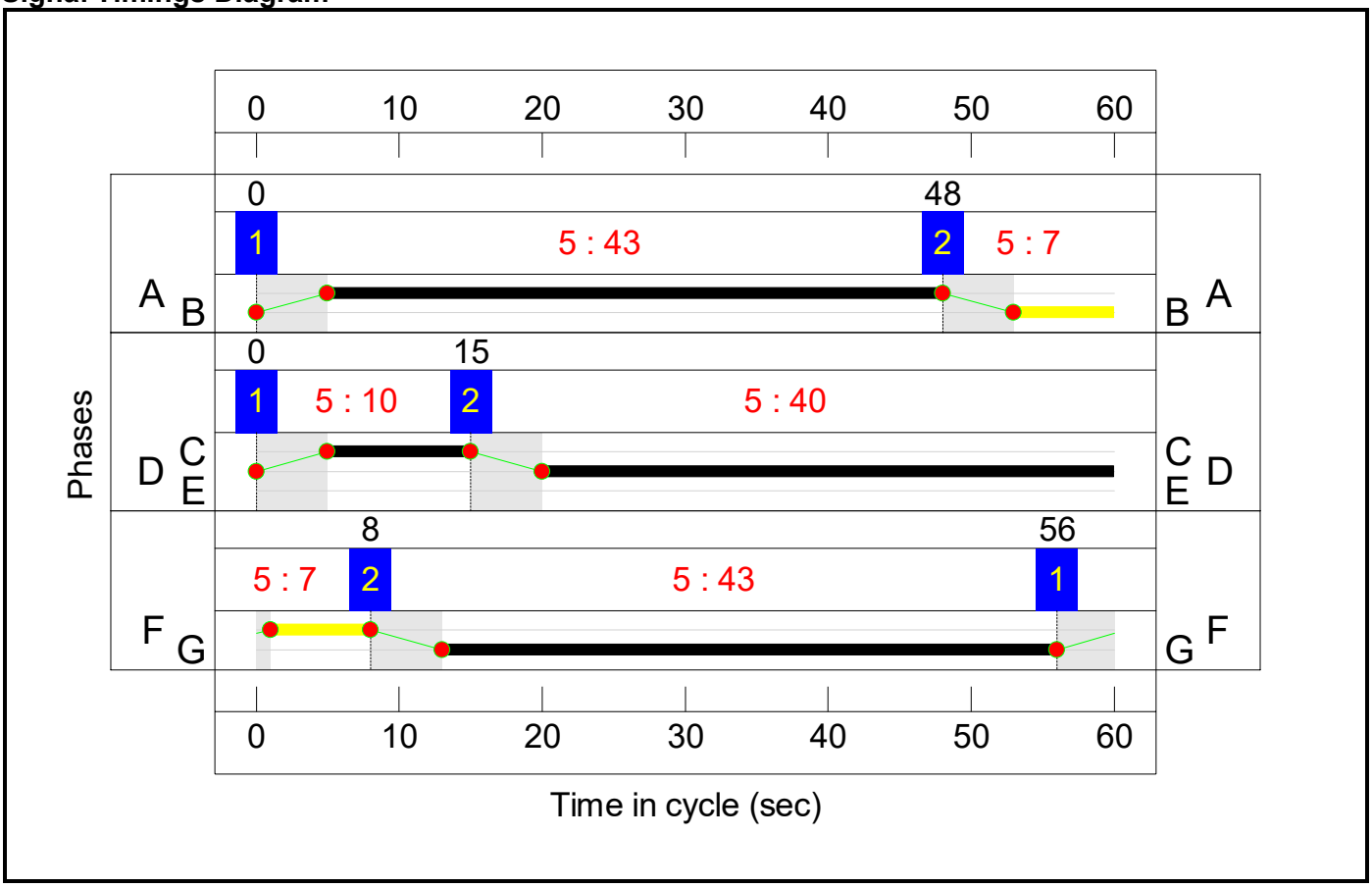
Stage	1	2
Duration	10	40
Change Point	0	15

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	56	8

Full Input Data And Results

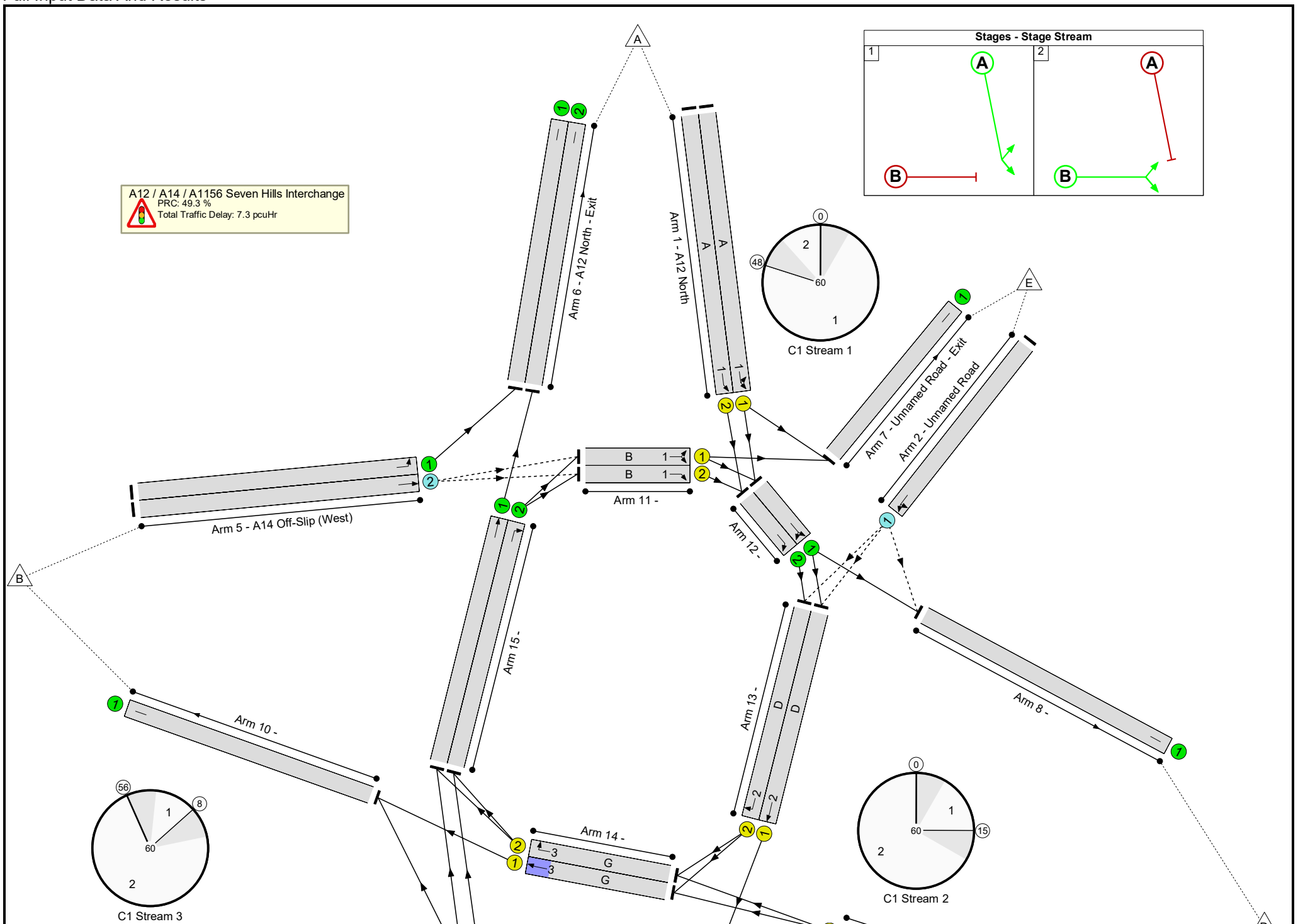
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.3%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.3%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	43	-	314	1866	1368	22.9%
1/2	A12 North Ahead	U	1	N/A	A		1	43	-	722	1866	1368	52.8%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	31	1871	650	4.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	76	1877	344	22.1%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	188	1877	344	54.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	36	1878	250	14.4%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	36	1871	924	3.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	231	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	162	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	770	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	7	-	29	1886	251	11.5%
11/2	Right	U	1	N/A	B		1	7	-	21	1886	251	8.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	86	1877	1283	6.7%
13/2	Right	U	2	N/A	D		1	40	-	773	1877	1283	60.3%
14/1	Ahead	U	3	N/A	G		1	43	-	763	2007	1472	51.8%
14/2	Right	U	3	N/A	G		1	43	-	198	1872	1373	14.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**67**	**0**	**0**	**4.2**	**3.1**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**67**	**0**	**0**	**4.2**	**3.1**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
1/1	314	314	-	-	-	0.2	0.1	-	0.4	4.3	1.7	0.1	1.8
1/2	722	722	-	-	-	0.7	0.6	-	1.3	6.3	5.2	0.6	5.8
2/1	31	31	31	0	0	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
3/1	76	76	-	-	-	0.4	0.1	-	0.6	27.6	1.1	0.1	1.2
3/2	188	188	-	-	-	1.2	0.6	-	1.8	33.7	2.8	0.6	3.4
4/1	36	36	-	-	-	0.2	0.1	-	0.3	31.4	0.5	0.1	0.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	36	36	36	0	0	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
6/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	215	215	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	162	162	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	770	770	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	29	29	-	-	-	0.1	0.1	-	0.2	25.7	0.4	0.1	0.5
11/2	21	21	-	-	-	0.1	0.0	-	0.2	30.8	0.3	0.0	0.3
12/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	743	743	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	86	86	-	-	-	0.1	0.0	-	0.1	3.7	0.3	0.0	0.3
13/2	773	773	-	-	-	0.6	0.8	-	1.3	6.2	3.2	0.8	4.0
14/1	763	763	-	-	-	0.5	0.5	-	1.1	5.1	2.8	0.5	3.4

Full Input Data And Results

14/2	198	198	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	215	215	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

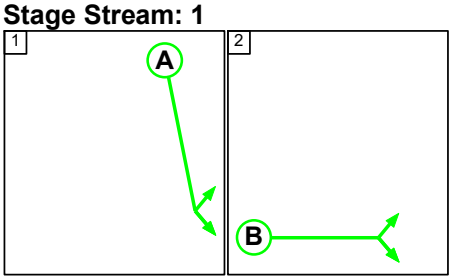
C1	Stream: 1 PRC for Signalled Lanes (%):	70.6	Total Delay for Signalled Lanes (pcuHr):	2.02	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	49.3	Total Delay for Signalled Lanes (pcuHr):	3.76	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	73.6	Total Delay for Signalled Lanes (pcuHr):	1.51	Cycle Time (s):	60
	PRC Over All Lanes (%):	49.3	Total Delay Over All Lanes(pcuHr):	7.33		

Full Input Data And Results

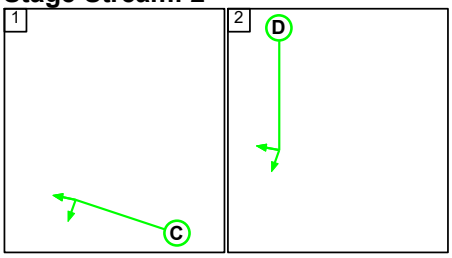
Scenario 27: '34RC 07:00-08:00' (FG27: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

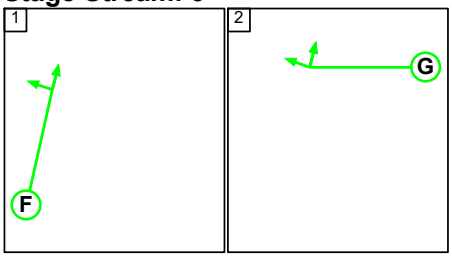
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	1	45

Stage Stream: 2

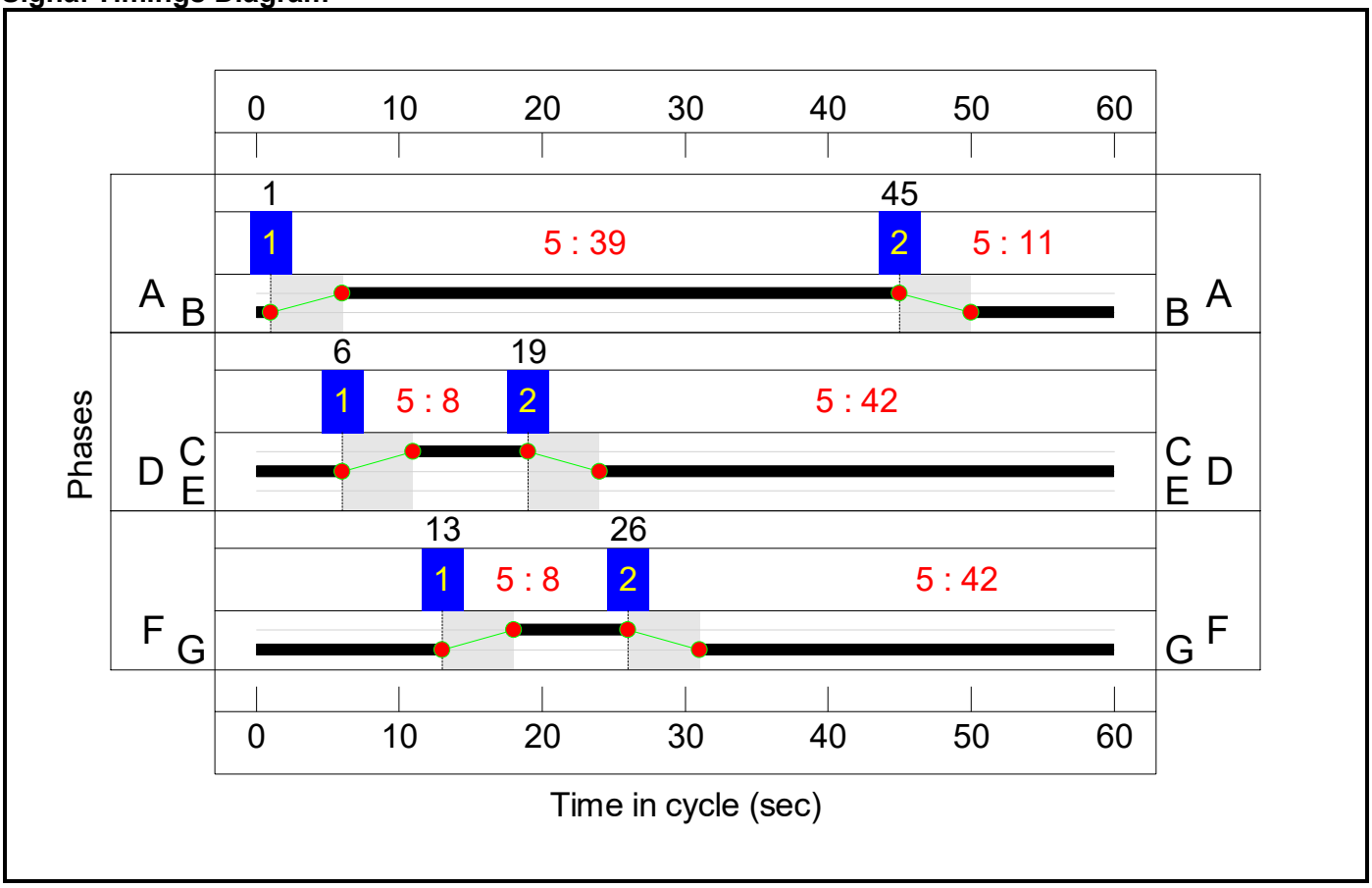
Stage	1	2
Duration	8	42
Change Point	6	19

Stage Stream: 3

Stage	1	2
Duration	8	42
Change Point	13	26

Full Input Data And Results

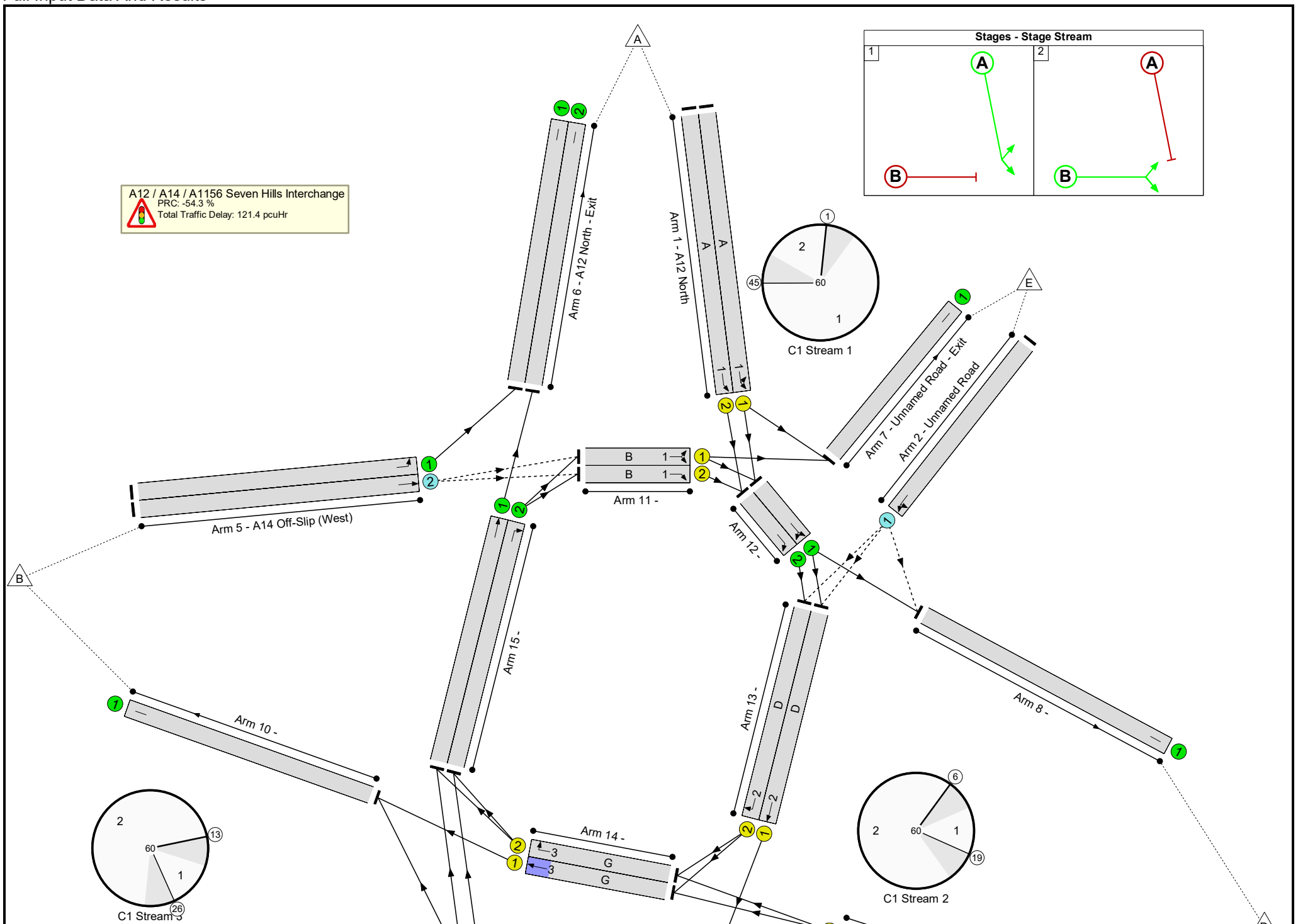
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**138.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**138.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	523	1866	1244	42.0%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	1273	1866	1244	102.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	60	1871	367	16.4%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	8	-	222	1877	282	78.8%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	8	-	391	1877	282	138.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	8	-	227	1878	282	80.6%
4/2	A1156 Ahead	U	3	N/A	F		1	8	-	136	1878	282	48.3%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1449	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	110	1871	807	13.6%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1449	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	71	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1393	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	256	1886	377	66.7%
11/2	Right	U	1	N/A	B		1	11	-	6	1886	377	1.6%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	708	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1279	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	42	-	274	1877	1345	20.4%
13/2	Right	U	2	N/A	D		1	42	-	1332	1877	1345	96.9%
14/1	Ahead	U	3	N/A	G		1	42	-	1334	2007	1438	90.7%
14/2	Right	U	3	N/A	G		1	42	-	389	1872	1342	20.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**170**	**0**	**0**	**17.6**	**103.8**	**0.0**	**121.4**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**170**	**0**	**0**	**17.6**	**103.8**	**0.0**	**121.4**	**-**	**-**	**-**	**-**
1/1	523	523	-	-	-	0.7	0.4	-	1.0	7.1	3.9	0.4	4.3
1/2	1273	1244	-	-	-	4.3	26.5	-	30.8	87.1	21.7	26.5	48.2
2/1	60	60	60	0	0	0.0	0.1	-	0.1	6.6	0.2	0.1	0.3
3/1	222	222	-	-	-	1.5	1.8	-	3.3	53.1	3.5	1.8	5.3
3/2	391	282	-	-	-	5.9	56.5	-	62.4	574.1	8.3	56.5	64.8
4/1	227	227	-	-	-	1.6	1.9	-	3.5	55.4	3.7	1.9	5.6
4/2	136	136	-	-	-	0.9	0.5	-	1.3	35.6	2.0	0.5	2.5
5/1	1449	1449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	110	110	110	0	0	0.0	0.1	-	0.1	2.6	0.0	0.1	0.1
6/1	1449	1449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1363	1363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	252	252	-	-	-	1.0	1.0	-	2.0	28.6	3.8	1.0	4.8
11/2	6	6	-	-	-	0.0	0.0	-	0.0	24.5	0.1	0.0	0.1
12/1	708	708	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1250	1250	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	274	274	-	-	-	0.2	0.1	-	0.3	4.4	1.4	0.1	1.5
13/2	1303	1303	-	-	-	0.4	10.4	-	10.8	29.7	13.1	10.4	23.5
14/1	1304	1304	-	-	-	0.3	4.5	-	4.8	13.3	1.4	4.5	6.0

Full Input Data And Results

14/2	281	281	-	-	-	0.8	0.1	-	0.9	12.2	4.6	0.1	4.8
15/1	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	148	148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

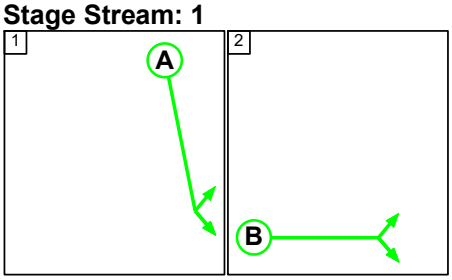
C1	Stream: 1 PRC for Signalled Lanes (%):	-13.7	Total Delay for Signalled Lanes (pcuHr):	33.86	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-54.3	Total Delay for Signalled Lanes (pcuHr):	76.73	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-0.7	Total Delay for Signalled Lanes (pcuHr):	10.59	Cycle Time (s): 60
	PRC Over All Lanes (%):	-54.3	Total Delay Over All Lanes(pcuHr):	121.37	

Full Input Data And Results

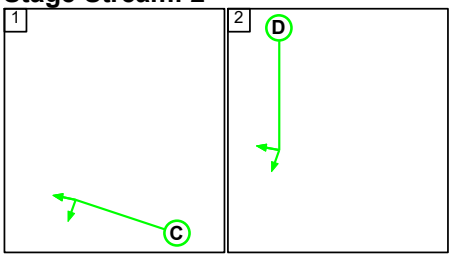
Scenario 28: '34RC 08:00-09:00' (FG28: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

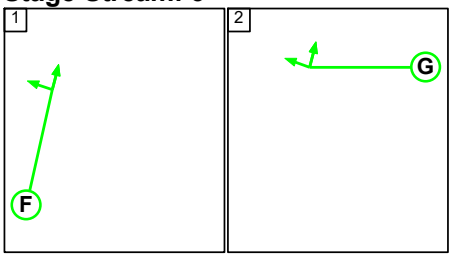
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	36	14
Change Point	0	41

Stage Stream: 2

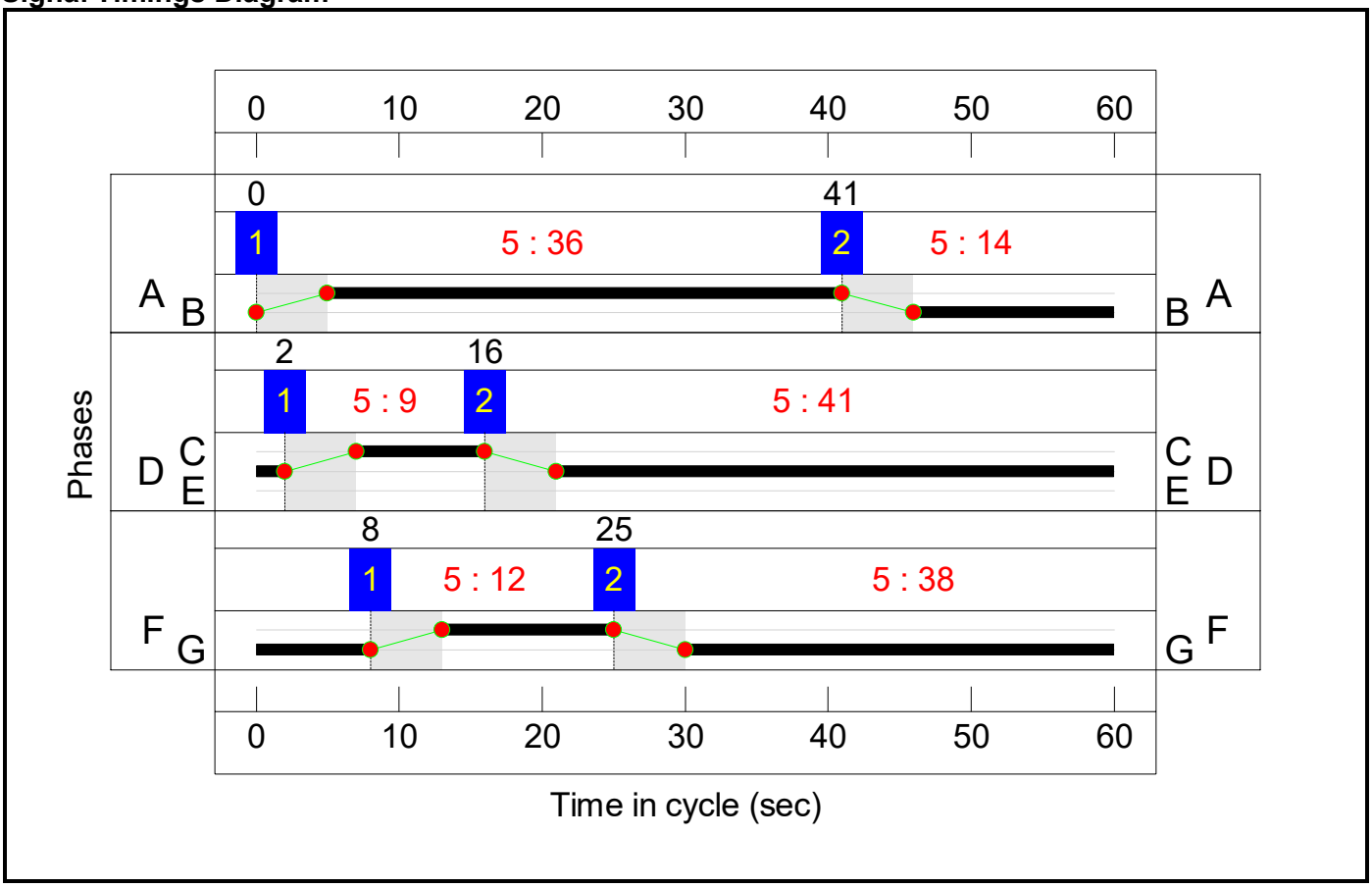
Stage	1	2
Duration	9	41
Change Point	2	16

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	8	25

Full Input Data And Results

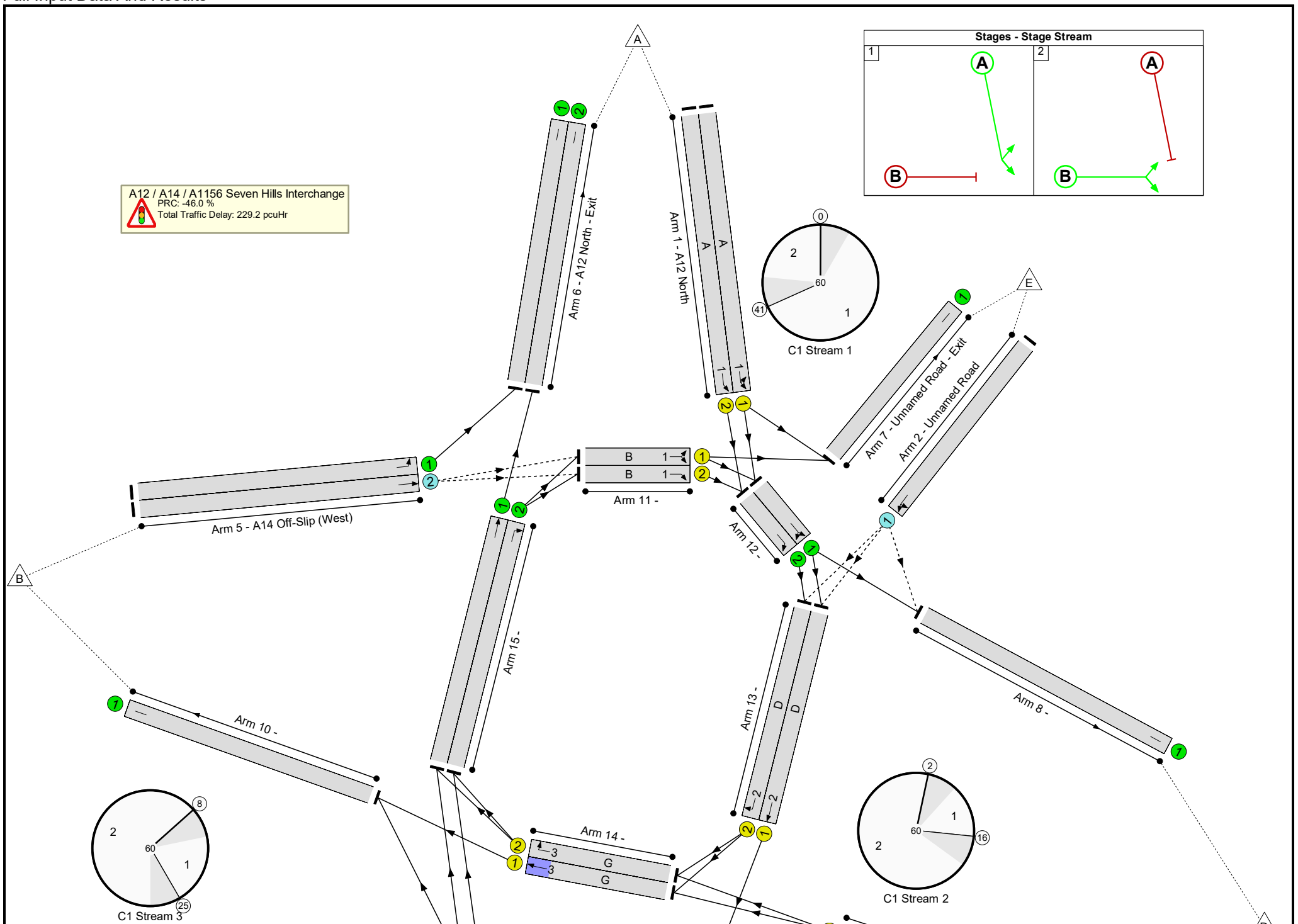
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**131.4%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**131.4%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	36	-	883	1866	1151	76.7%
1/2	A12 North Ahead	U	1	N/A	A		1	36	-	1387	1866	1151	120.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	110	1871	295	37.3%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	302	1877	313	96.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	411	1877	313	131.4%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	365	1878	407	89.7%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	177	1878	407	43.5%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1681	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	136	1871	741	18.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1681	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	34	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	886	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1552	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	14	-	318	1886	471	66.6%
11/2	Right	U	1	N/A	B		1	14	-	12	1886	471	2.5%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1167	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1399	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	584	1877	1314	44.4%
13/2	Right	U	2	N/A	D		1	41	-	1481	1877	1314	94.7%
14/1	Ahead	U	3	N/A	G		1	38	-	1471	2007	1305	94.6%
14/2	Right	U	3	N/A	G		1	38	-	421	1872	1217	26.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**246**	**0**	**0**	**28.2**	**200.9**	**0.0**	**229.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**246**	**0**	**0**	**28.2**	**200.9**	**0.0**	**229.2**	**-**	**-**	**-**	**-**
1/1	883	883	-	-	-	2.1	1.6	-	3.7	15.0	10.5	1.6	12.2
1/2	1387	1151	-	-	-	10.7	121.0	-	131.7	341.8	27.1	121.0	148.1
2/1	110	110	110	0	0	0.3	0.3	-	0.6	19.7	1.2	0.3	1.5
3/1	302	302	-	-	-	2.1	6.4	-	8.5	101.0	4.9	6.4	11.3
3/2	411	313	-	-	-	5.8	51.1	-	56.9	498.0	8.5	51.1	59.6
4/1	365	365	-	-	-	2.3	3.7	-	6.0	59.4	5.9	3.7	9.6
4/2	177	177	-	-	-	1.0	0.4	-	1.4	28.1	2.5	0.4	2.9
5/1	1681	1681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	136	136	136	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1681	1681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	30	30	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	886	886	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1316	1316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	314	314	-	-	-	1.2	1.0	-	2.2	24.8	4.8	1.0	5.8
11/2	12	12	-	-	-	0.1	0.0	-	0.1	21.2	0.2	0.0	0.2
12/1	1167	1167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	584	584	-	-	-	0.5	0.4	-	0.9	5.3	2.7	0.4	3.1
13/2	1245	1245	-	-	-	0.5	7.4	-	8.0	23.0	5.8	7.4	13.2
14/1	1235	1235	-	-	-	0.6	7.3	-	7.9	23.1	4.7	7.3	12.0

Full Input Data And Results

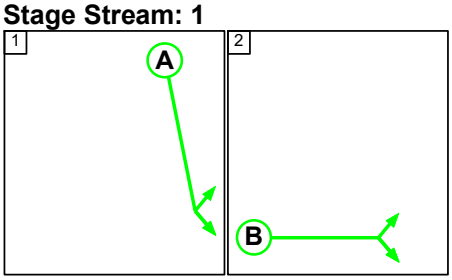
14/2	323	323	-	-	-	1.2	0.2	-	1.4	15.4	5.3	0.2	5.5
15/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-33.9	Total Delay for Signalled Lanes (pcuHr):	137.60	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-46.0	Total Delay for Signalled Lanes (pcuHr):	74.15	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-5.2	Total Delay for Signalled Lanes (pcuHr):	16.71	Cycle Time (s): 60
	PRC Over All Lanes (%):	-46.0	Total Delay Over All Lanes(pcuHr):	229.17	

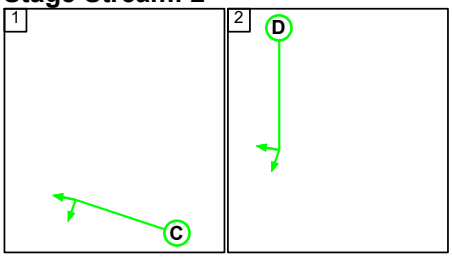
Full Input Data And Results
Scenario 29: '34RC 15:00-16:00' (FG29: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

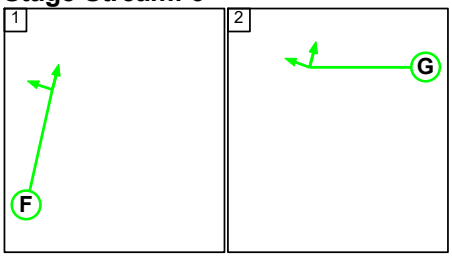
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	1	46

Stage Stream: 2

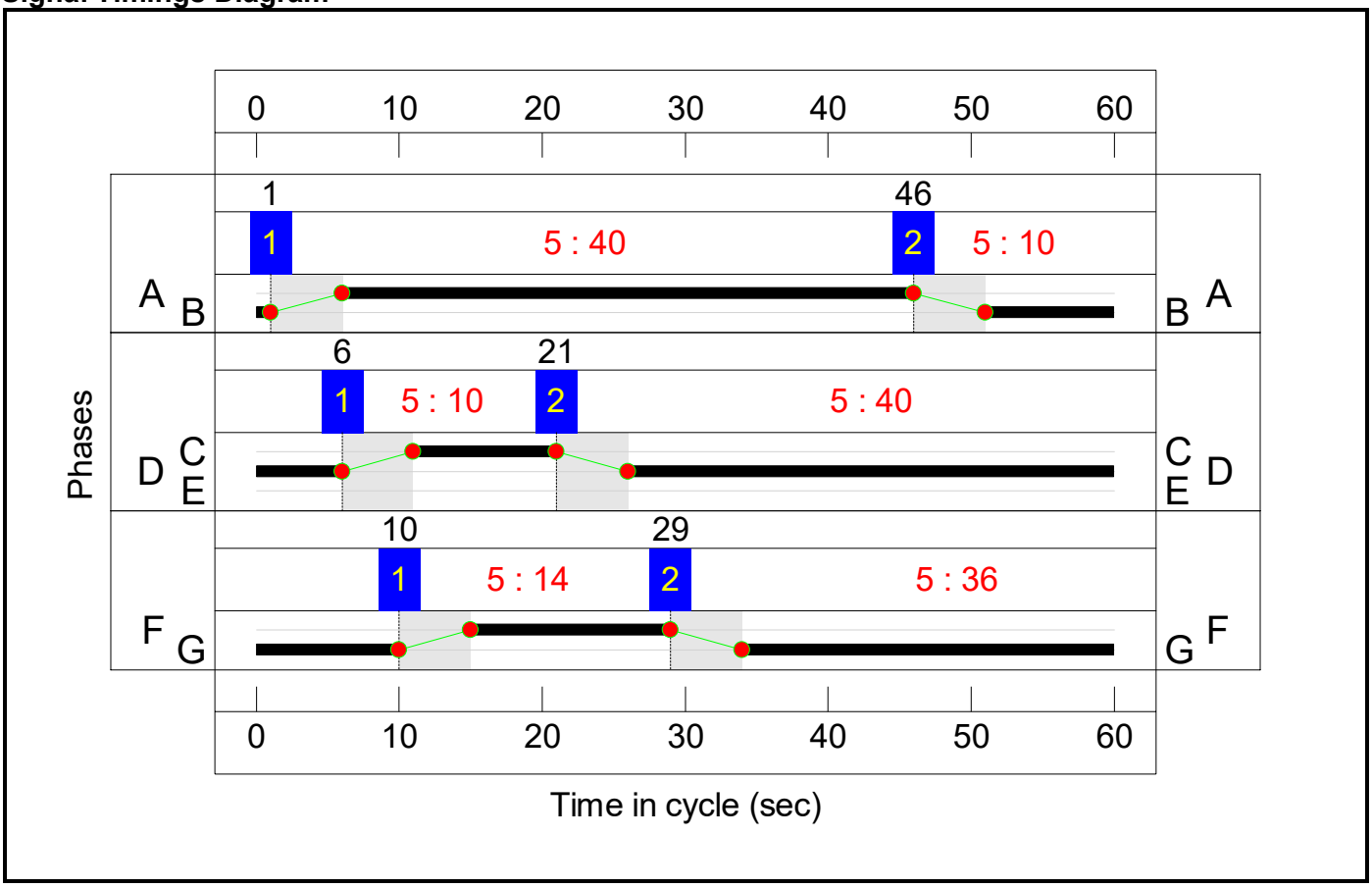
Stage	1	2
Duration	10	40
Change Point	6	21

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	10	29

Full Input Data And Results

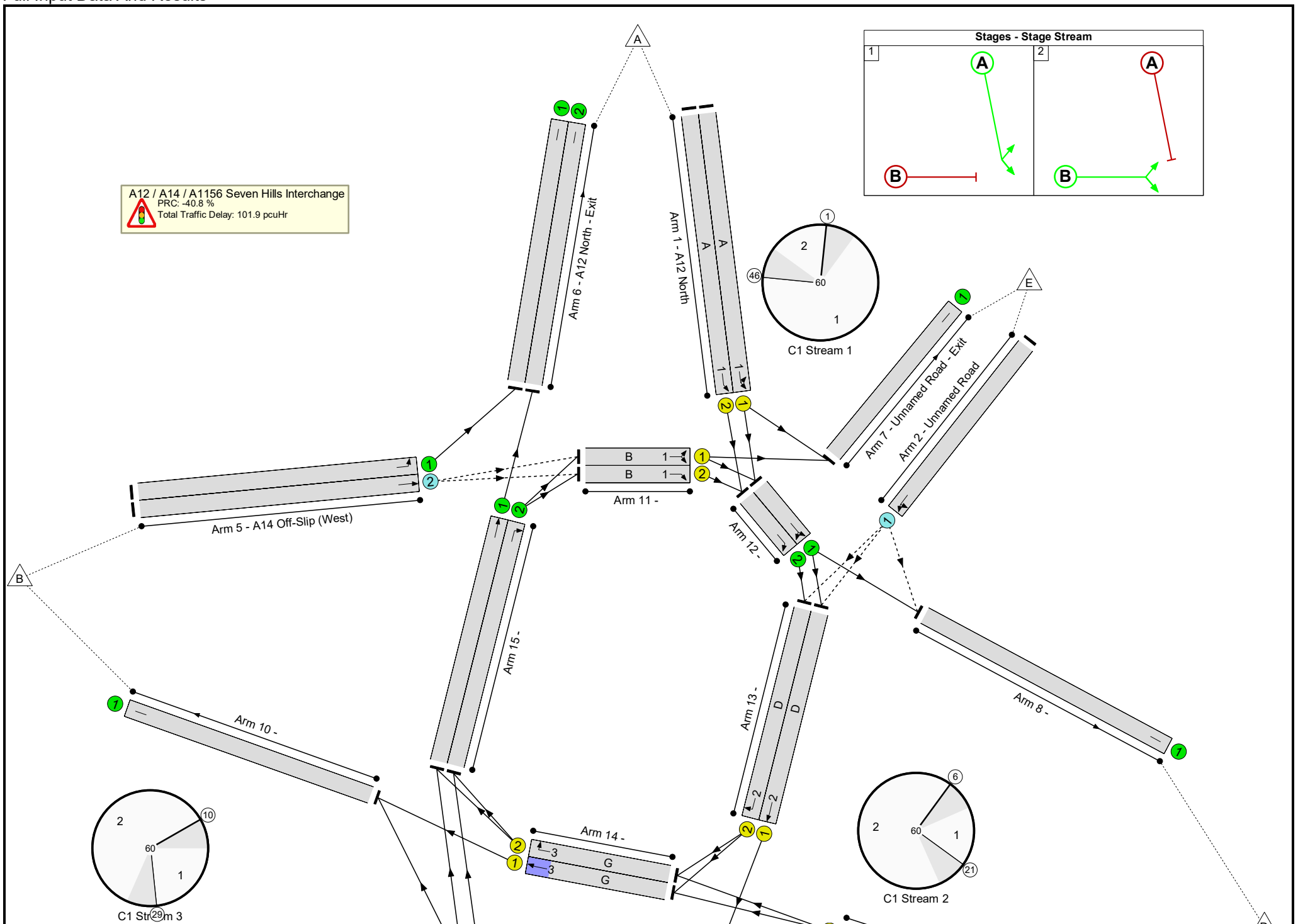
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**126.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**126.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	818	1866	1275	64.2%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1167	1866	1275	91.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	42	1871	322	13.0%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	323	1877	344	93.9%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	436	1877	344	126.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	430	1878	470	91.6%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	153	1878	470	32.6%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1442	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	97	1871	719	13.5%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1442	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	789	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	822	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1283	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	247	1886	346	71.4%
11/2	Right	U	1	N/A	B		1	10	-	4	1886	346	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1005	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1171	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	499	1877	1283	38.9%
13/2	Right	U	2	N/A	D		1	40	-	1207	1877	1283	94.1%
14/1	Ahead	U	3	N/A	G		1	36	-	1200	2007	1238	97.0%
14/2	Right	U	3	N/A	G		1	36	-	443	1872	1154	30.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	789	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	154	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**139**	**0**	**0**	**19.1**	**82.8**	**0.0**	**101.9**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**139**	**0**	**0**	**19.1**	**82.8**	**0.0**	**101.9**	**-**	**-**	**-**	**-**
1/1	818	818	-	-	-	1.2	0.9	-	2.1	9.3	7.5	0.9	8.4
1/2	1167	1167	-	-	-	2.6	4.9	-	7.5	23.3	16.2	4.9	21.2
2/1	42	42	42	0	0	0.0	0.1	-	0.1	9.7	0.3	0.1	0.4
3/1	323	323	-	-	-	2.2	5.1	-	7.3	81.5	5.3	5.1	10.4
3/2	436	344	-	-	-	5.6	48.2	-	53.8	444.0	8.8	48.2	57.0
4/1	430	430	-	-	-	2.6	4.4	-	7.1	59.1	6.9	4.4	11.4
4/2	153	153	-	-	-	0.8	0.2	-	1.0	24.1	2.0	0.2	2.3
5/1	1442	1442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	97	97	97	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1442	1442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1283	1283	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	247	247	-	-	-	1.0	1.2	-	2.3	33.0	3.9	1.2	5.1
11/2	4	4	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	1005	1005	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1171	1171	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	499	499	-	-	-	0.3	0.3	-	0.6	4.1	2.1	0.3	2.4
13/2	1207	1207	-	-	-	0.6	6.8	-	7.4	22.0	17.9	6.8	24.6
14/1	1200	1200	-	-	-	0.9	10.3	-	11.2	33.5	4.2	10.3	14.5

Full Input Data And Results

14/2	351	351	-	-	-	1.3	0.2	-	1.5	15.7	5.8	0.2	6.0
15/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	154	154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

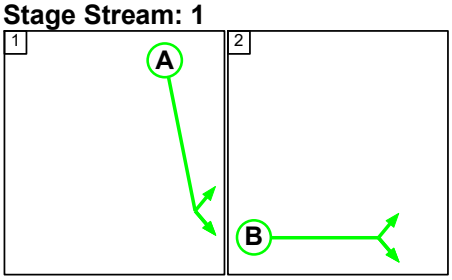
C1	Stream: 1 PRC for Signalled Lanes (%):	-1.7	Total Delay for Signalled Lanes (pcuHr):	11.95	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-40.8	Total Delay for Signalled Lanes (pcuHr):	69.02	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-7.7	Total Delay for Signalled Lanes (pcuHr):	20.76	Cycle Time (s): 60
	PRC Over All Lanes (%):	-40.8	Total Delay Over All Lanes(pcuHr):	101.92	

Full Input Data And Results

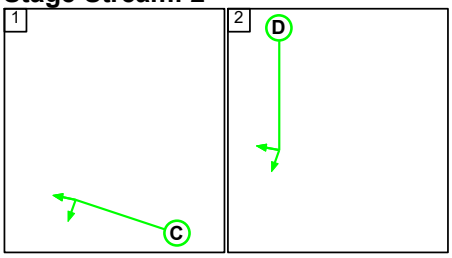
Scenario 30: '34RC 17:00-18:00' (FG30: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

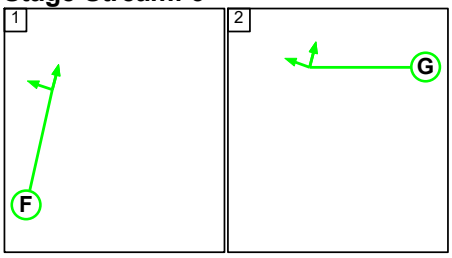
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	1	44

Stage Stream: 2

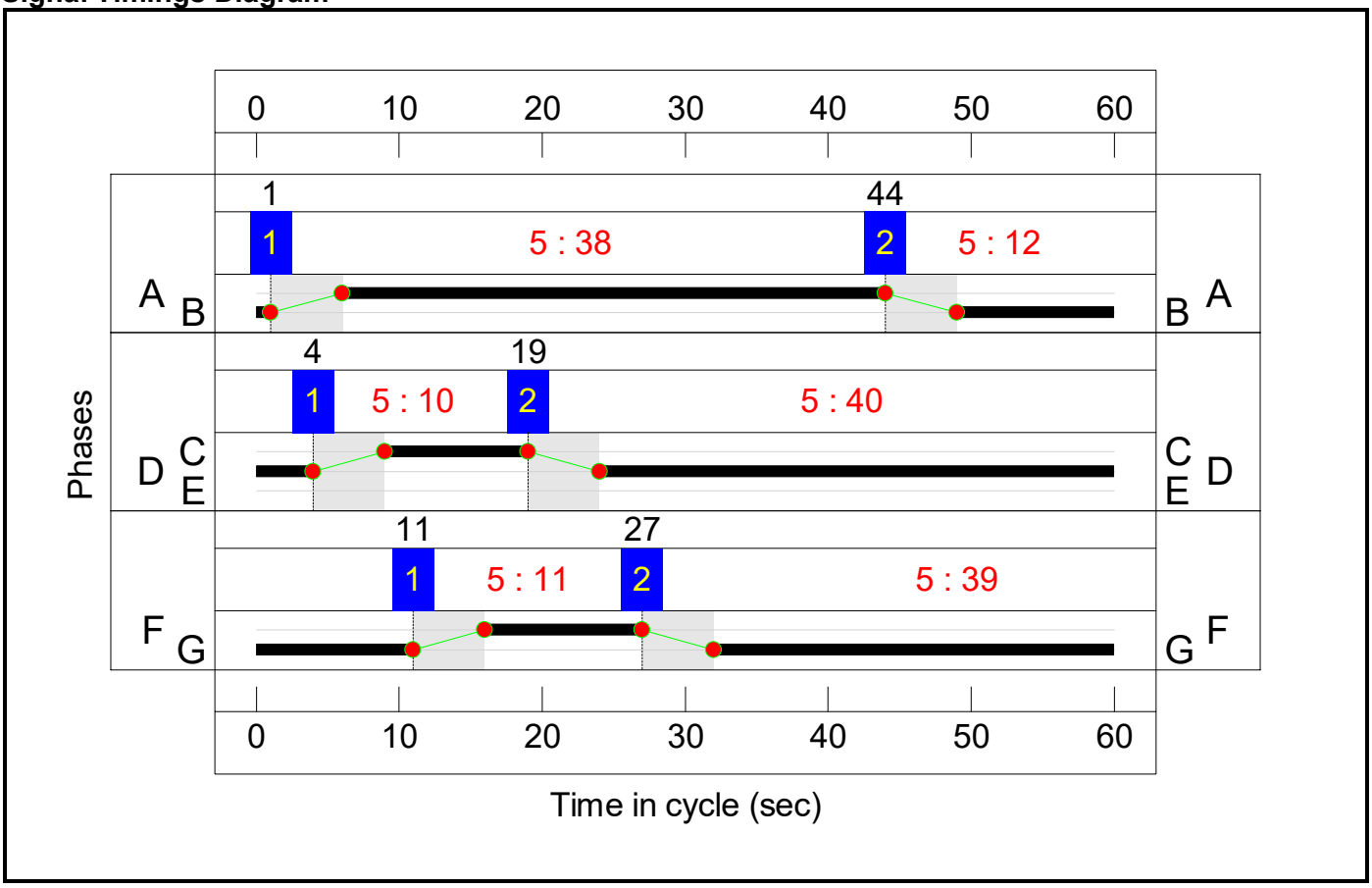
Stage	1	2
Duration	10	40
Change Point	4	19

Stage Stream: 3

Stage	1	2
Duration	11	39
Change Point	11	27

Full Input Data And Results

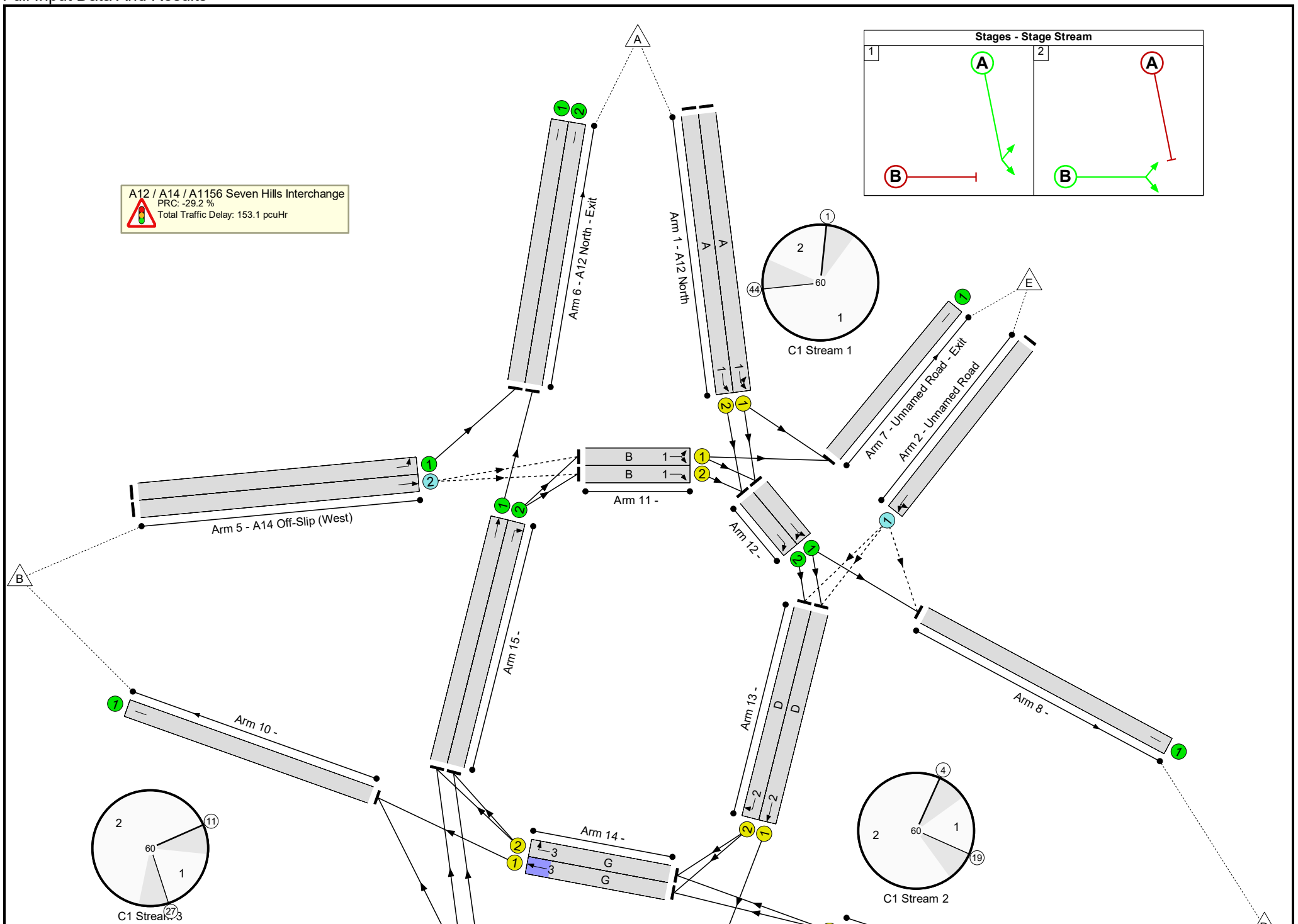
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.2%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.2%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	752	1866	1213	62.0%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1311	1866	1213	108.1%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	289	10.4%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	375	1877	344	109.0%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	400	1877	344	116.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	11	-	326	1878	376	86.8%
4/2	A1156 Ahead	U	3	N/A	F		1	11	-	243	1878	376	64.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1650	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	118	1871	723	16.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1650	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	617	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	819	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1415	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	356	1886	409	87.1%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1054	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1316	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	444	1877	1283	34.6%
13/2	Right	U	2	N/A	D		1	40	-	1339	1877	1283	96.7%
14/1	Ahead	U	3	N/A	G		1	39	-	1338	2007	1338	92.7%
14/2	Right	U	3	N/A	G		1	39	-	401	1872	1248	27.6%
15/1	Ahead	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**148**	**0**	**0**	**22.8**	**130.3**	**0.0**	**153.1**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**148**	**0**	**0**	**22.8**	**130.3**	**0.0**	**153.1**	**-**	**-**	**-**	**-**
1/1	752	752	-	-	-	1.3	0.8	-	2.1	10.0	7.3	0.8	8.1
1/2	1311	1213	-	-	-	6.4	55.0	-	61.4	168.5	23.5	55.0	78.5
2/1	30	30	30	0	0	0.0	0.1	-	0.1	9.4	0.2	0.1	0.2
3/1	375	344	-	-	-	3.4	20.1	-	23.5	226.1	6.8	20.1	26.9
3/2	400	344	-	-	-	4.3	31.2	-	35.5	319.4	7.6	31.2	38.7
4/1	326	326	-	-	-	2.1	2.9	-	5.0	55.7	5.3	2.9	8.2
4/2	243	243	-	-	-	1.5	0.9	-	2.4	35.5	3.7	0.9	4.6
5/1	1650	1650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	118	118	118	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1650	1650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	617	617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	788	788	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1317	1317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	356	356	-	-	-	1.3	3.0	-	4.3	43.8	5.8	3.0	8.8
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	1054	1054	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1218	1218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	444	444	-	-	-	0.3	0.3	-	0.6	4.9	2.2	0.3	2.5
13/2	1241	1241	-	-	-	0.5	10.0	-	10.5	30.5	10.0	10.0	20.0
14/1	1240	1240	-	-	-	0.4	5.7	-	6.0	17.5	1.8	5.7	7.4

Full Input Data And Results

14/2	345	345	-	-	-	1.3	0.2	-	1.5	15.5	5.7	0.2	5.9
15/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	243	243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

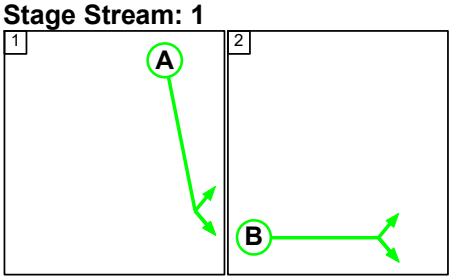
C1	Stream: 1 PRC for Signalled Lanes (%):	-20.1	Total Delay for Signalled Lanes (pcuHr):	67.83	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-29.2	Total Delay for Signalled Lanes (pcuHr):	70.15	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-3.0	Total Delay for Signalled Lanes (pcuHr):	14.95	Cycle Time (s): 60
	PRC Over All Lanes (%):	-29.2	Total Delay Over All Lanes(pcuHr):	153.10	

Full Input Data And Results

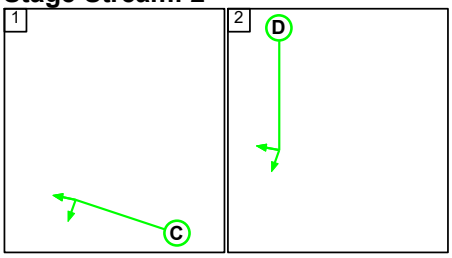
Scenario 31: '34OP 06:00-07:00' (FG31: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

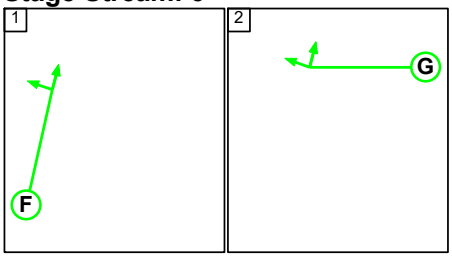
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

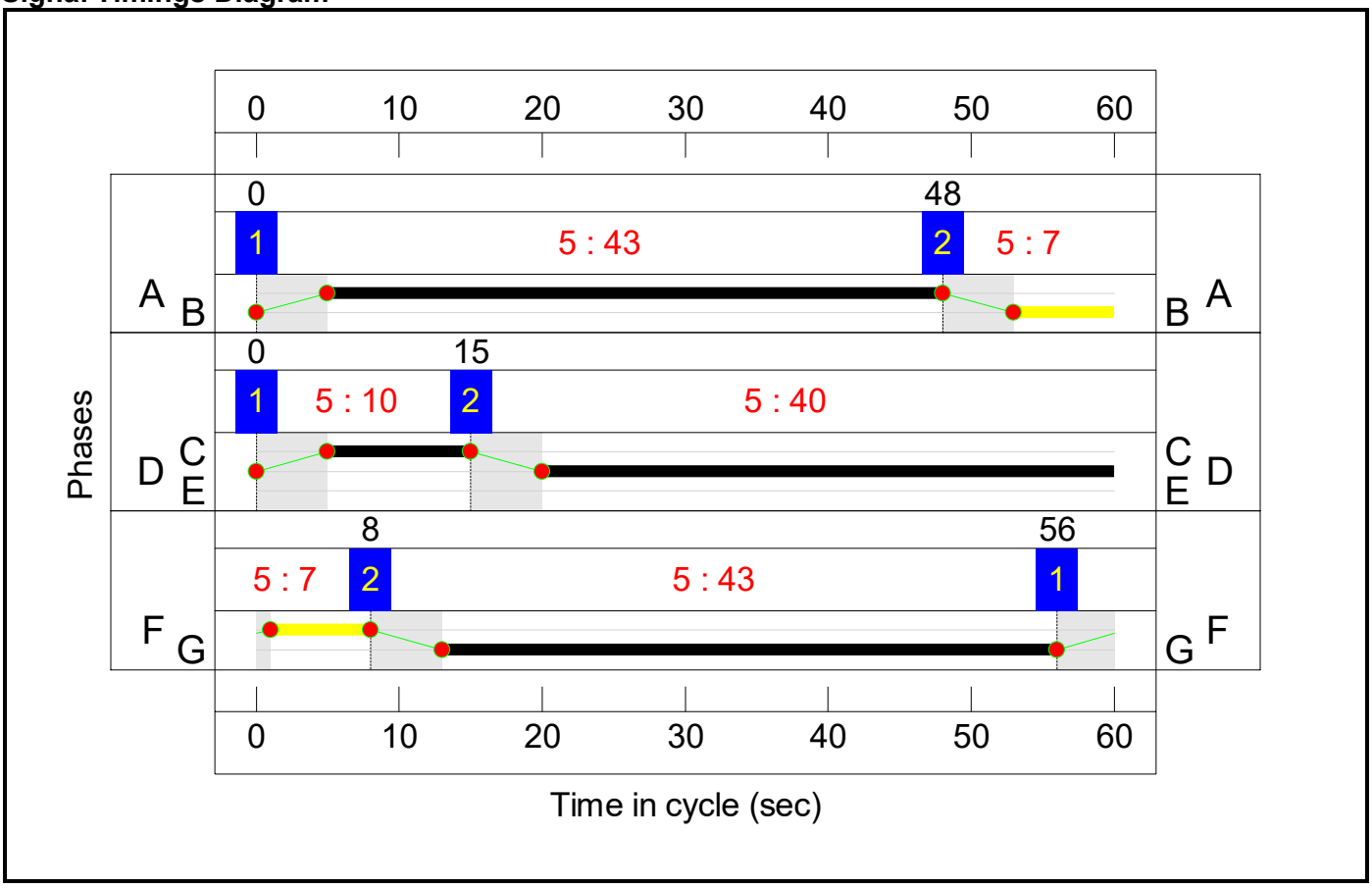
Stage	1	2
Duration	10	40
Change Point	0	15

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	56	8

Full Input Data And Results

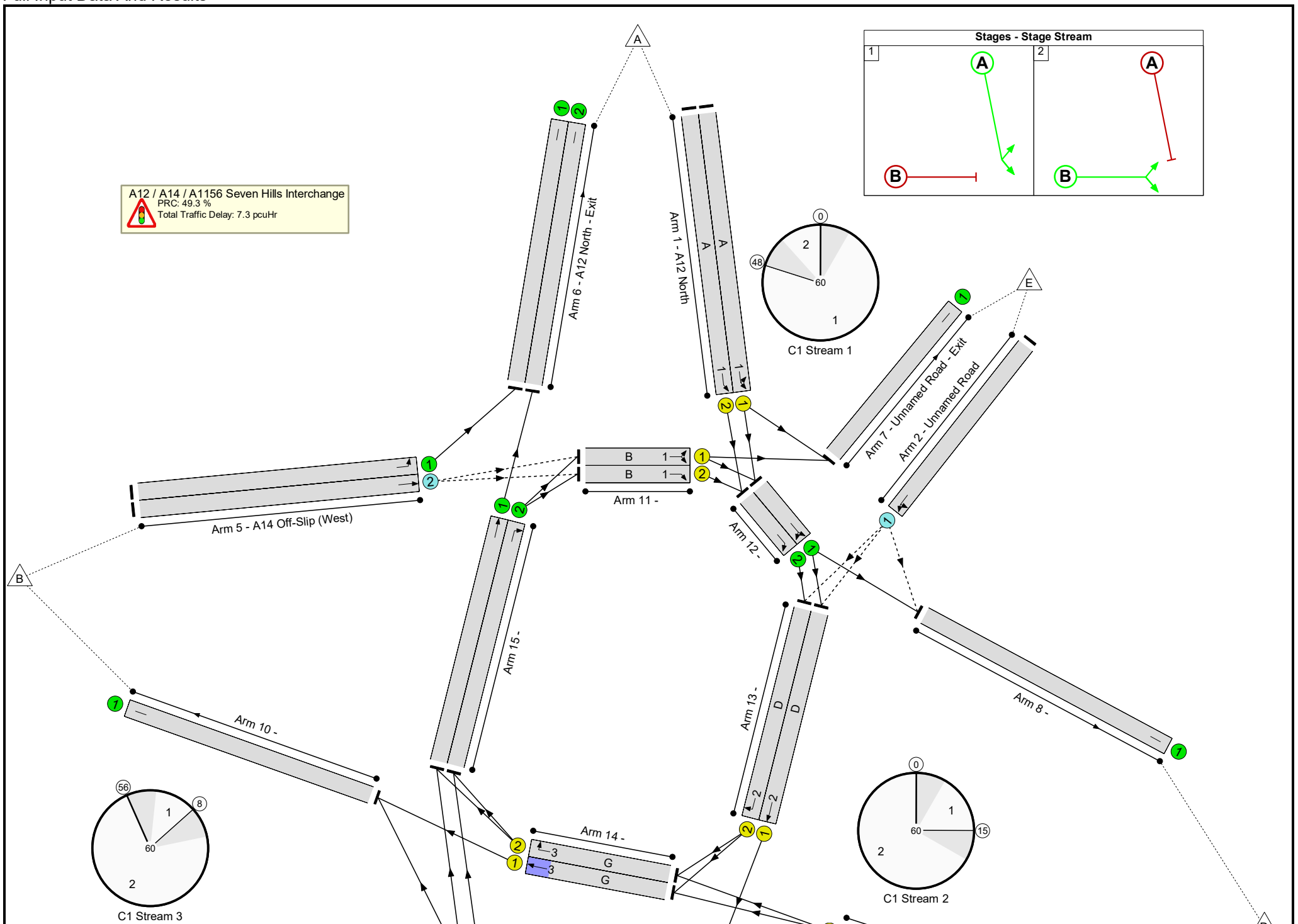
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.3%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.3%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	43	-	314	1866	1368	22.9%
1/2	A12 North Ahead	U	1	N/A	A		1	43	-	722	1866	1368	52.8%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	31	1871	650	4.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	76	1877	344	22.1%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	188	1877	344	54.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	36	1878	250	14.4%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	36	1871	924	3.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	231	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	162	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	770	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	7	-	29	1886	251	11.5%
11/2	Right	U	1	N/A	B		1	7	-	21	1886	251	8.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	86	1877	1283	6.7%
13/2	Right	U	2	N/A	D		1	40	-	773	1877	1283	60.3%
14/1	Ahead	U	3	N/A	G		1	43	-	763	2007	1472	51.8%
14/2	Right	U	3	N/A	G		1	43	-	198	1872	1373	14.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**67**	**0**	**0**	**4.2**	**3.1**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**67**	**0**	**0**	**4.2**	**3.1**	**0.0**	**7.3**	**-**	**-**	**-**	**-**
1/1	314	314	-	-	-	0.2	0.1	-	0.4	4.3	1.7	0.1	1.8
1/2	722	722	-	-	-	0.7	0.6	-	1.3	6.3	5.2	0.6	5.8
2/1	31	31	31	0	0	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
3/1	76	76	-	-	-	0.4	0.1	-	0.6	27.6	1.1	0.1	1.2
3/2	188	188	-	-	-	1.2	0.6	-	1.8	33.7	2.8	0.6	3.4
4/1	36	36	-	-	-	0.2	0.1	-	0.3	31.4	0.5	0.1	0.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	36	36	36	0	0	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
6/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	215	215	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	162	162	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	770	770	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	29	29	-	-	-	0.1	0.1	-	0.2	25.7	0.4	0.1	0.5
11/2	21	21	-	-	-	0.1	0.0	-	0.2	30.8	0.3	0.0	0.3
12/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	743	743	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	86	86	-	-	-	0.1	0.0	-	0.1	3.7	0.3	0.0	0.3
13/2	773	773	-	-	-	0.6	0.8	-	1.3	6.2	3.2	0.8	4.0
14/1	763	763	-	-	-	0.5	0.5	-	1.1	5.1	2.8	0.5	3.4

Full Input Data And Results

14/2	198	198	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	215	215	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

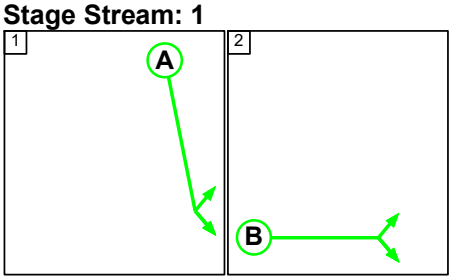
C1	Stream: 1 PRC for Signalled Lanes (%):	70.6	Total Delay for Signalled Lanes (pcuHr):	2.02	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	49.3	Total Delay for Signalled Lanes (pcuHr):	3.76	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	73.6	Total Delay for Signalled Lanes (pcuHr):	1.51	Cycle Time (s):	60
	PRC Over All Lanes (%):	49.3	Total Delay Over All Lanes(pcuHr):	7.33		

Full Input Data And Results

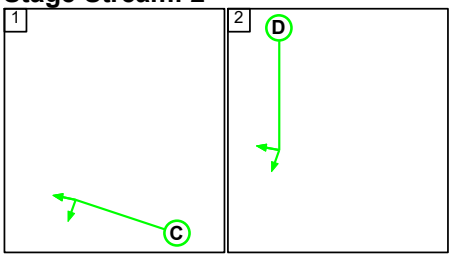
Scenario 32: '34OP 07:00-08:00' (FG32: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

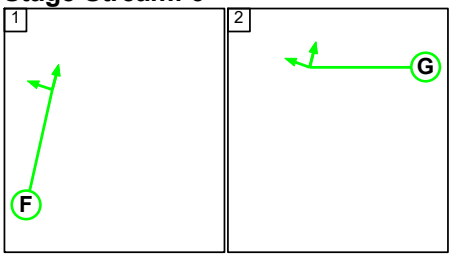
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	2	44

Stage Stream: 2

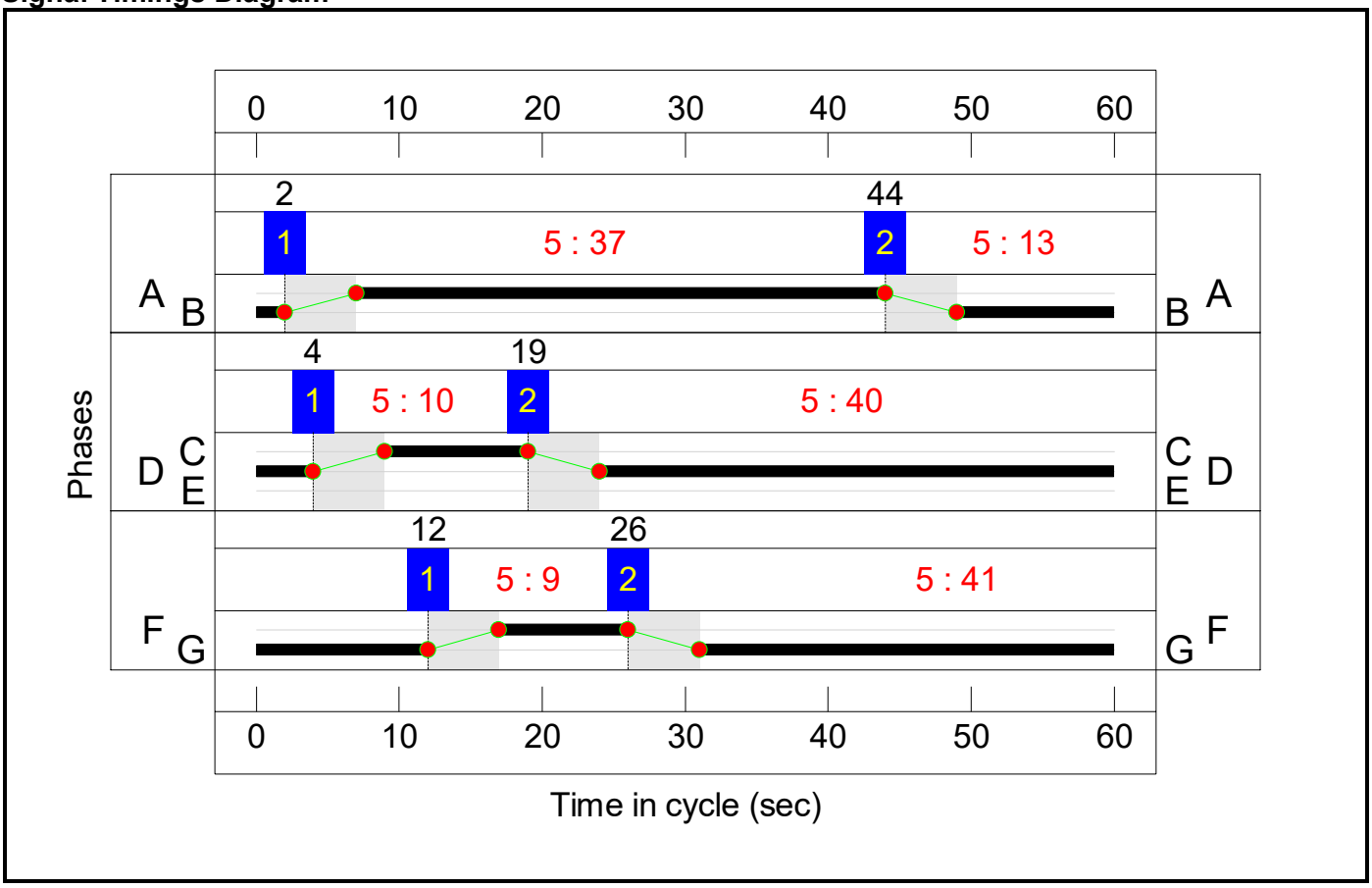
Stage	1	2
Duration	10	40
Change Point	4	19

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	12	26

Full Input Data And Results

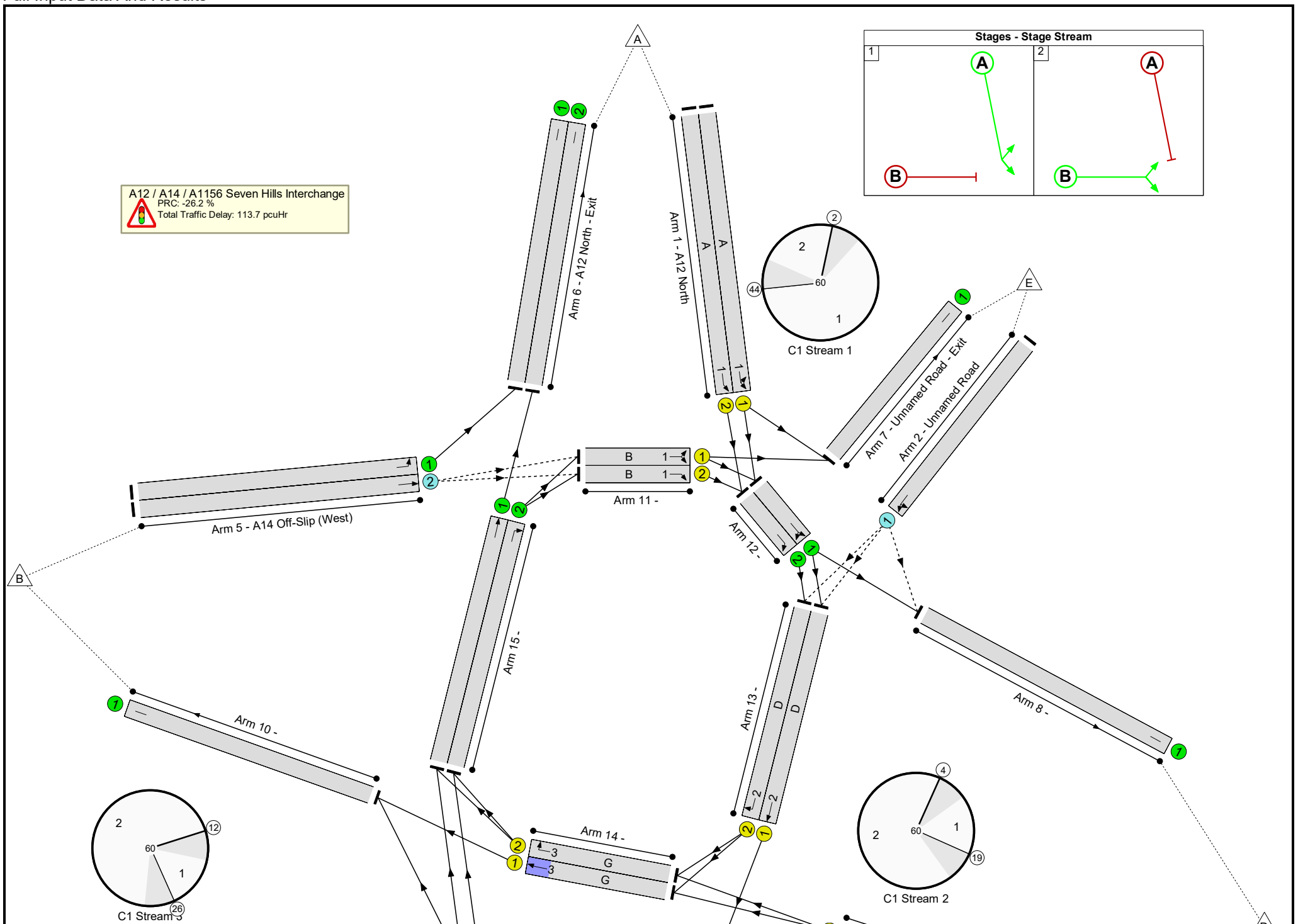
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**113.6%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**113.6%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	526	1866	1182	44.5%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1271	1866	1182	107.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	60	1871	388	15.5%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	222	1877	344	64.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	391	1877	344	113.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	227	1878	313	72.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	140	1878	313	44.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1454	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	110	1871	785	14.0%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1454	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	71	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	445	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1391	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	260	1886	440	58.6%
11/2	Right	U	1	N/A	B		1	13	-	6	1886	440	1.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1277	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	277	1877	1283	21.6%
13/2	Right	U	2	N/A	D		1	40	-	1330	1877	1283	96.7%
14/1	Ahead	U	3	N/A	G		1	41	-	1332	2007	1405	88.4%
14/2	Right	U	3	N/A	G		1	41	-	389	1872	1310	26.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	541	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**170**	**0**	**0**	**17.9**	**95.8**	**0.0**	**113.7**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**170**	**0**	**0**	**17.9**	**95.8**	**0.0**	**113.7**	**-**	**-**	**-**	**-**
1/1	526	526	-	-	-	0.8	0.4	-	1.2	8.4	4.4	0.4	4.8
1/2	1271	1182	-	-	-	6.2	50.8	-	57.0	161.5	22.7	50.8	73.5
2/1	60	60	60	0	0	0.0	0.1	-	0.1	6.4	0.2	0.1	0.3
3/1	222	222	-	-	-	1.4	0.9	-	2.3	37.2	3.4	0.9	4.3
3/2	391	344	-	-	-	4.0	27.1	-	31.1	286.1	7.3	27.1	34.4
4/1	227	227	-	-	-	1.5	1.3	-	2.8	44.0	3.5	1.3	4.8
4/2	140	140	-	-	-	0.9	0.4	-	1.3	32.9	2.1	0.4	2.5
5/1	1454	1454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	110	110	110	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
6/1	1454	1454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	497	497	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	445	445	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1301	1301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	258	258	-	-	-	1.0	0.7	-	1.7	23.2	3.8	0.7	4.5
11/2	6	6	-	-	-	0.0	0.0	-	0.0	22.2	0.1	0.0	0.1
12/1	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1188	1188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	277	277	-	-	-	0.2	0.1	-	0.4	4.8	1.3	0.1	1.5
13/2	1241	1241	-	-	-	0.5	10.0	-	10.5	30.6	12.6	10.0	22.6
14/1	1242	1242	-	-	-	0.2	3.7	-	3.9	11.2	0.8	3.7	4.5

Full Input Data And Results

14/2	343	343	-	-	-	1.2	0.2	-	1.4	14.3	5.7	0.2	5.9
15/1	497	497	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	154	154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

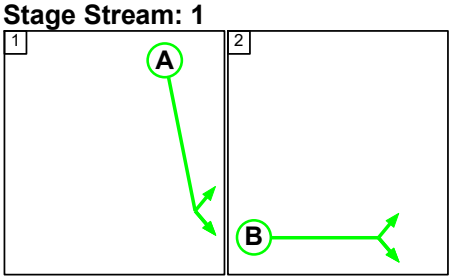
C1	Stream: 1 PRC for Signalled Lanes (%):	-19.5	Total Delay for Signalled Lanes (pcuHr):	59.95	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-26.2	Total Delay for Signalled Lanes (pcuHr):	44.27	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	9.29	Cycle Time (s): 60
	PRC Over All Lanes (%):	-26.2	Total Delay Over All Lanes(pcuHr):	113.70	

Full Input Data And Results

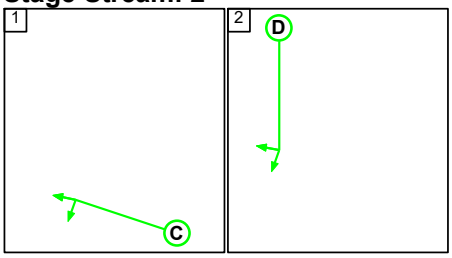
Scenario 33: '34OP 08:00-09:00' (FG33: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

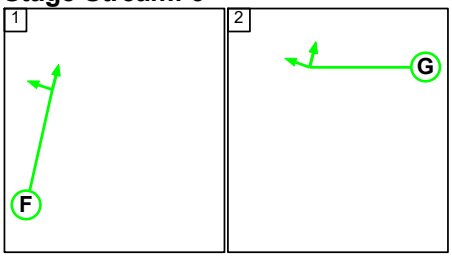
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	35	15
Change Point	0	40

Stage Stream: 2

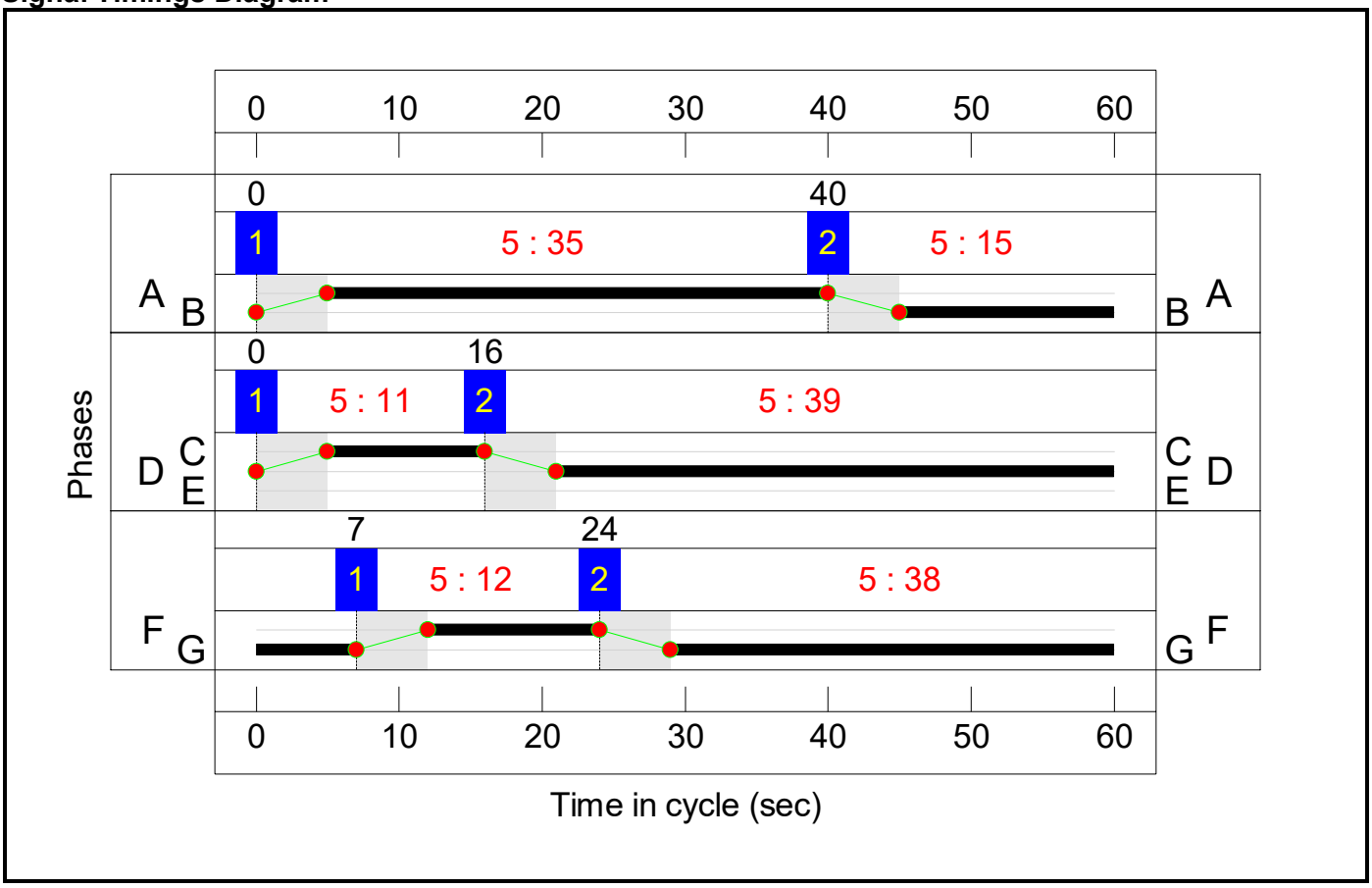
Stage	1	2
Duration	11	39
Change Point	0	16

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	7	24

Full Input Data And Results

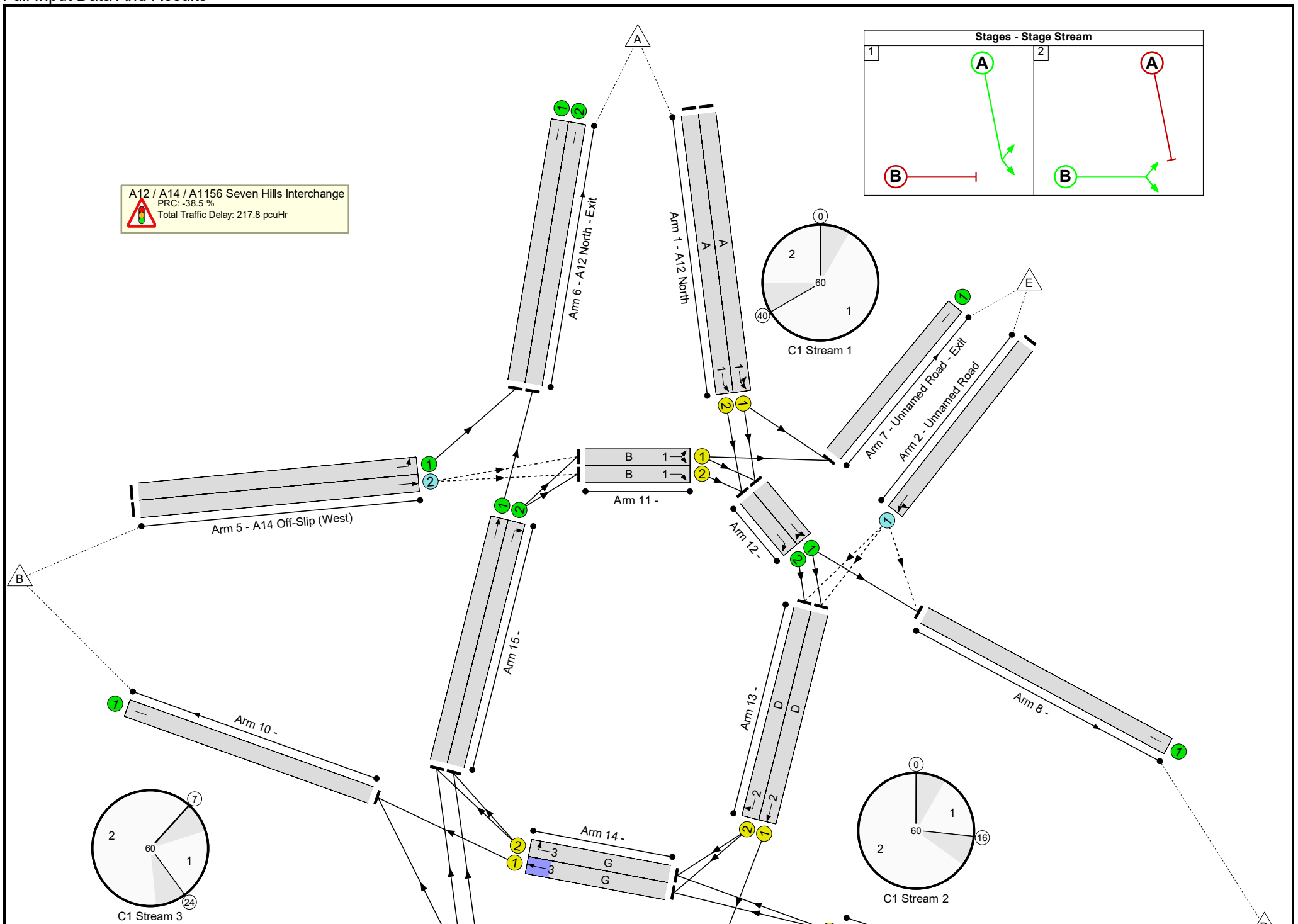
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**124.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**124.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	35	-	899	1866	1120	80.3%
1/2	A12 North Ahead	U	1	N/A	A		1	35	-	1396	1866	1120	124.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	110	1871	306	36.0%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	302	1877	375	80.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	413	1877	375	110.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	365	1878	407	89.7%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	178	1878	407	43.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1683	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	136	1871	720	18.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1683	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	690	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	34	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	612	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	902	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1561	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	15	-	319	1886	503	63.1%
11/2	Right	U	1	N/A	B		1	15	-	12	1886	503	2.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1184	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1408	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	600	1877	1251	47.9%
13/2	Right	U	2	N/A	D		1	39	-	1490	1877	1251	97.0%
14/1	Ahead	U	3	N/A	G		1	38	-	1480	2007	1305	92.3%
14/2	Right	U	3	N/A	G		1	38	-	423	1872	1217	31.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	690	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	195	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**246**	**0**	**0**	**28.1**	**189.7**	**0.0**	**217.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**246**	**0**	**0**	**28.1**	**189.7**	**0.0**	**217.8**	**-**	**-**	**-**	**-**
1/1	899	899	-	-	-	2.3	2.0	-	4.3	17.3	11.5	2.0	13.5
1/2	1396	1120	-	-	-	12.0	140.7	-	152.7	393.7	27.9	140.7	168.6
2/1	110	110	110	0	0	0.3	0.3	-	0.6	19.2	1.2	0.3	1.4
3/1	302	302	-	-	-	1.9	2.0	-	3.9	46.2	4.8	2.0	6.7
3/2	413	375	-	-	-	3.9	23.2	-	27.1	236.4	7.5	23.2	30.8
4/1	365	365	-	-	-	2.3	3.7	-	6.0	59.4	5.9	3.7	9.6
4/2	178	178	-	-	-	1.0	0.4	-	1.4	28.2	2.5	0.4	2.9
5/1	1683	1683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	136	136	136	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
6/1	1683	1683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	32	32	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1285	1285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	317	317	-	-	-	1.2	0.8	-	2.0	22.7	4.8	0.8	5.6
11/2	12	12	-	-	-	0.1	0.0	-	0.1	20.2	0.1	0.0	0.2
12/1	1184	1184	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1132	1132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	600	600	-	-	-	0.5	0.5	-	1.0	6.0	2.9	0.5	3.3
13/2	1214	1214	-	-	-	0.8	10.4	-	11.1	33.0	6.3	10.4	16.6
14/1	1204	1204	-	-	-	0.4	5.4	-	5.8	17.2	1.8	5.4	7.2

Full Input Data And Results

14/2	385	385	-	-	-	1.5	0.2	-	1.8	16.6	6.4	0.2	6.6
15/1	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

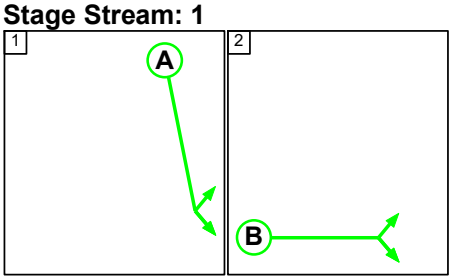
C1	Stream: 1 PRC for Signalled Lanes (%):	-38.5	Total Delay for Signalled Lanes (pcuHr):	159.05	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-22.2	Total Delay for Signalled Lanes (pcuHr):	43.12	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-2.5	Total Delay for Signalled Lanes (pcuHr):	14.95	Cycle Time (s): 60
	PRC Over All Lanes (%):	-38.5	Total Delay Over All Lanes(pcuHr):	217.82	

Full Input Data And Results

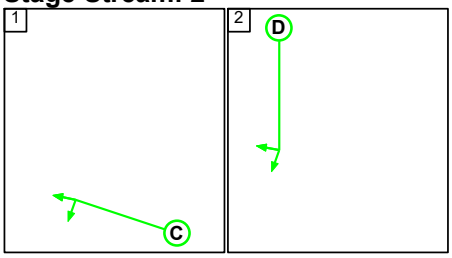
Scenario 34: '34OP 15:00-16:00' (FG34: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

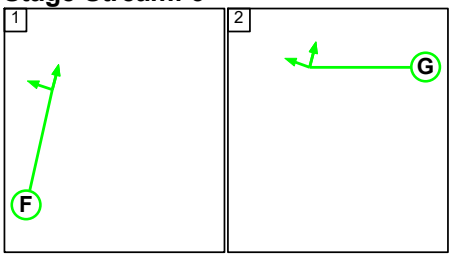
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

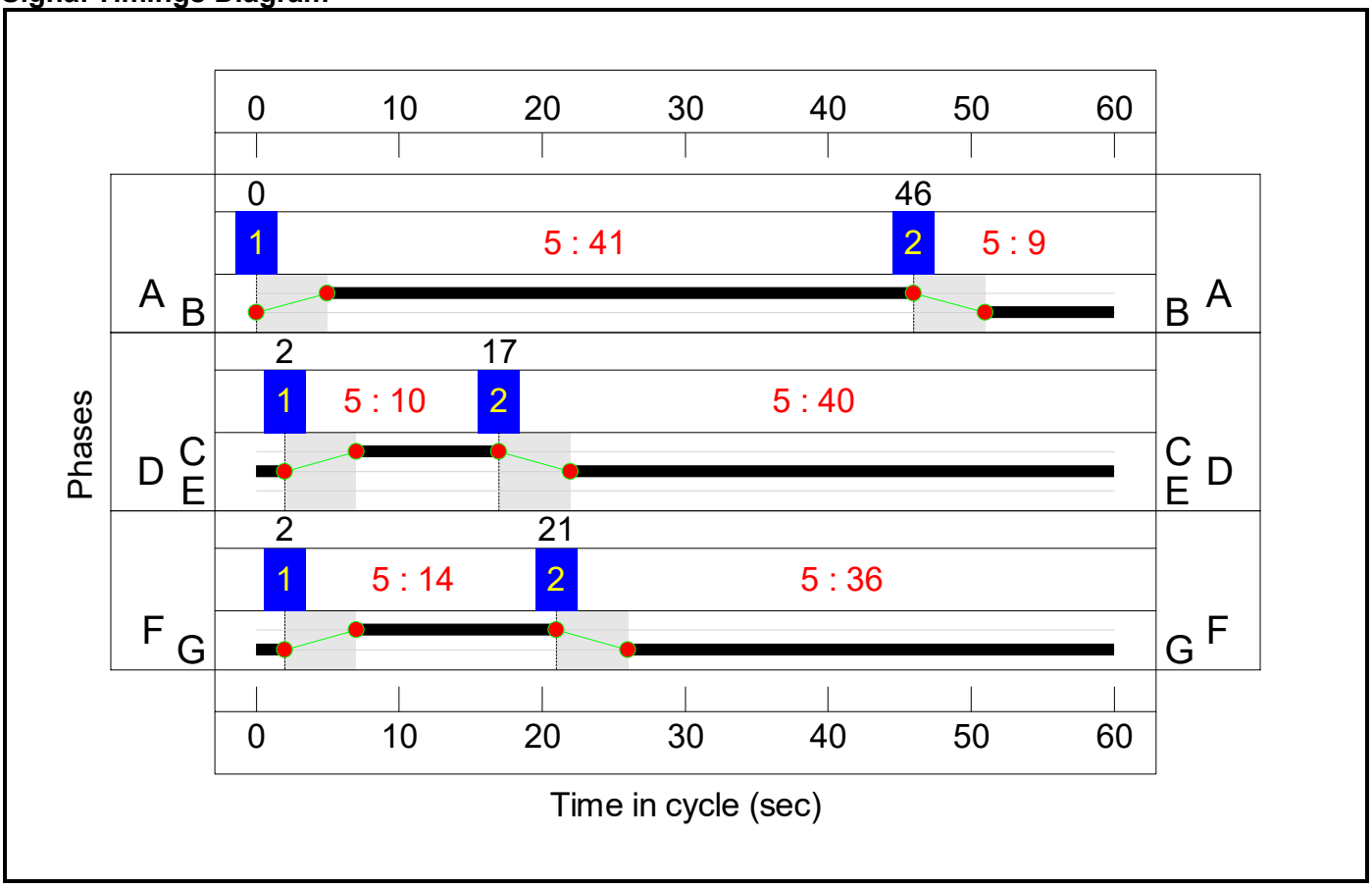
Stage	1	2
Duration	10	40
Change Point	2	17

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	2	21

Full Input Data And Results

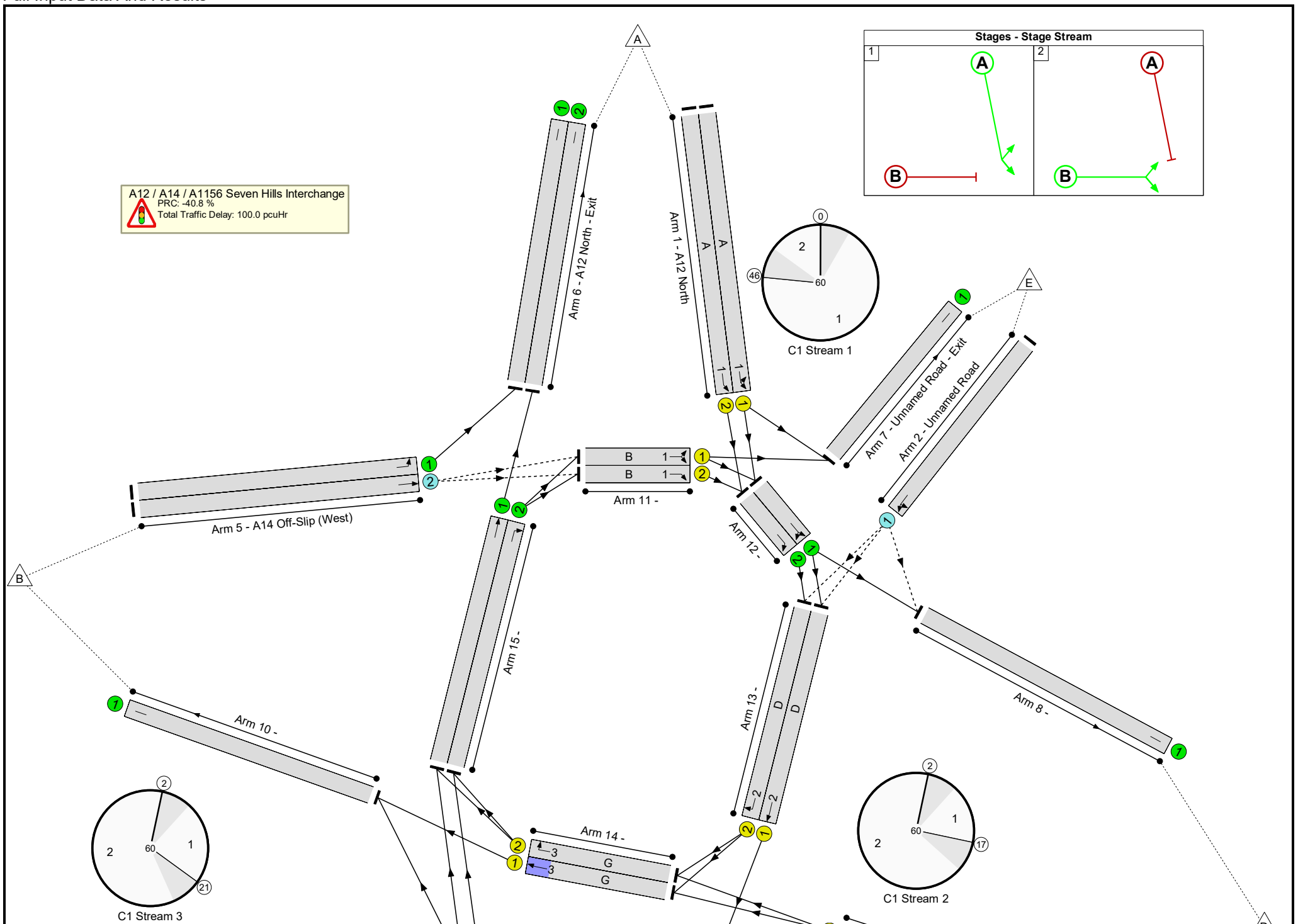
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**126.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**126.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	820	1866	1306	62.8%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	1159	1866	1306	88.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	42	1871	321	13.1%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	323	1877	344	93.9%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	436	1877	344	126.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	430	1878	470	91.6%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	155	1878	470	33.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1444	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	97	1871	718	13.5%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1444	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	789	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	824	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1275	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	249	1886	314	79.1%
11/2	Right	U	1	N/A	B		1	9	-	4	1886	314	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1009	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1163	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	501	1877	1283	39.1%
13/2	Right	U	2	N/A	D		1	40	-	1199	1877	1283	93.5%
14/1	Ahead	U	3	N/A	G		1	36	-	1192	2007	1238	96.3%
14/2	Right	U	3	N/A	G		1	36	-	443	1872	1154	30.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	789	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**139**	**0**	**0**	**19.4**	**80.6**	**0.0**	**100.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**139**	**0**	**0**	**19.4**	**80.6**	**0.0**	**100.0**	**-**	**-**	**-**	**-**
1/1	820	820	-	-	-	1.1	0.8	-	1.9	8.5	7.3	0.8	8.1
1/2	1159	1159	-	-	-	2.3	3.7	-	6.0	18.8	15.1	3.7	18.9
2/1	42	42	42	0	0	0.0	0.1	-	0.1	9.5	0.3	0.1	0.4
3/1	323	323	-	-	-	2.2	5.1	-	7.3	81.5	5.3	5.1	10.4
3/2	436	344	-	-	-	5.7	48.2	-	53.9	444.8	8.8	48.2	57.0
4/1	430	430	-	-	-	2.6	4.4	-	7.1	59.1	6.9	4.4	11.4
4/2	155	155	-	-	-	0.8	0.2	-	1.0	24.1	2.1	0.2	2.4
5/1	1444	1444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	97	97	97	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1444	1444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1275	1275	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	249	249	-	-	-	1.3	1.8	-	3.1	45.5	4.0	1.8	5.8
11/2	4	4	-	-	-	0.0	0.0	-	0.0	27.0	0.1	0.0	0.1
12/1	1009	1009	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	501	501	-	-	-	0.3	0.3	-	0.6	4.3	1.7	0.3	2.0
13/2	1199	1199	-	-	-	0.6	6.2	-	6.9	20.6	5.8	6.2	12.0
14/1	1192	1192	-	-	-	1.5	9.3	-	10.8	32.5	5.3	9.3	14.6

Full Input Data And Results

14/2	351	351	-	-	-	0.9	0.2	-	1.1	11.8	5.8	0.2	6.0
15/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

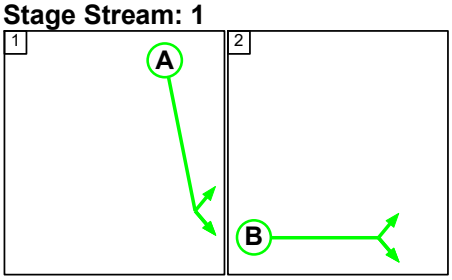
C1 Stream: 1 PRC for Signalled Lanes (%):	1.4	Total Delay for Signalled Lanes (pcuHr):	11.16	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):	-40.8	Total Delay for Signalled Lanes (pcuHr):	68.65	Cycle Time (s):	60
C1 Stream: 3 PRC for Signalled Lanes (%):	-7.0	Total Delay for Signalled Lanes (pcuHr):	20.00	Cycle Time (s):	60
PRC Over All Lanes (%):	-40.8	Total Delay Over All Lanes(pcuHr):	99.99		

Full Input Data And Results

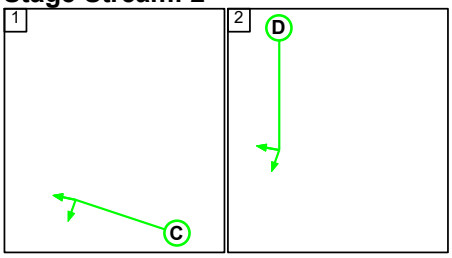
Scenario 35: '34OP 17:00-18:00' (FG35: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

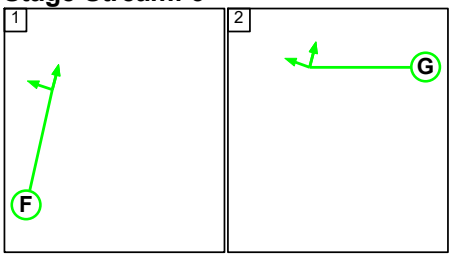
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	59	43

Stage Stream: 2

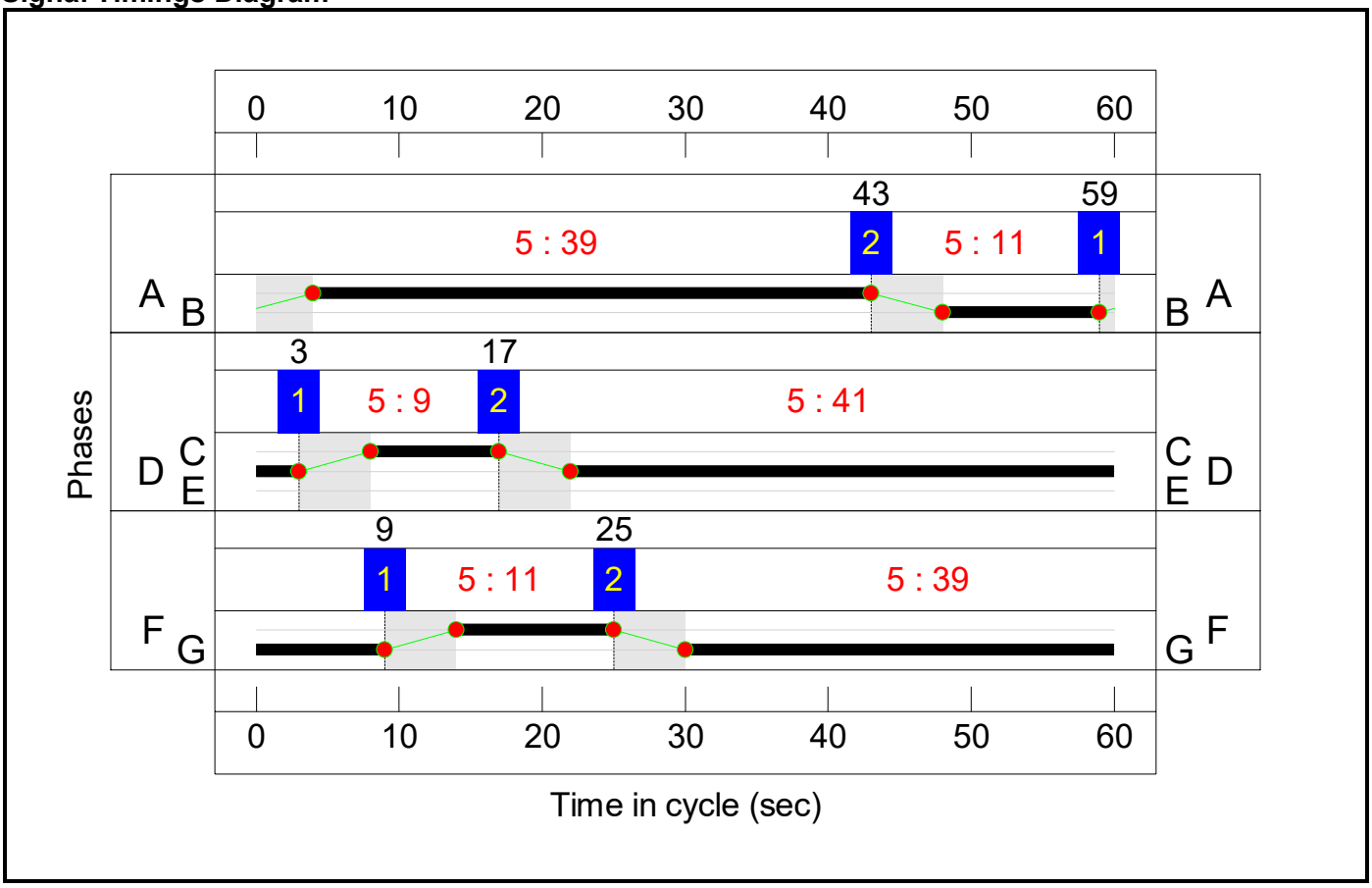
Stage	1	2
Duration	9	41
Change Point	3	17

Stage Stream: 3

Stage	1	2
Duration	11	39
Change Point	9	25

Full Input Data And Results

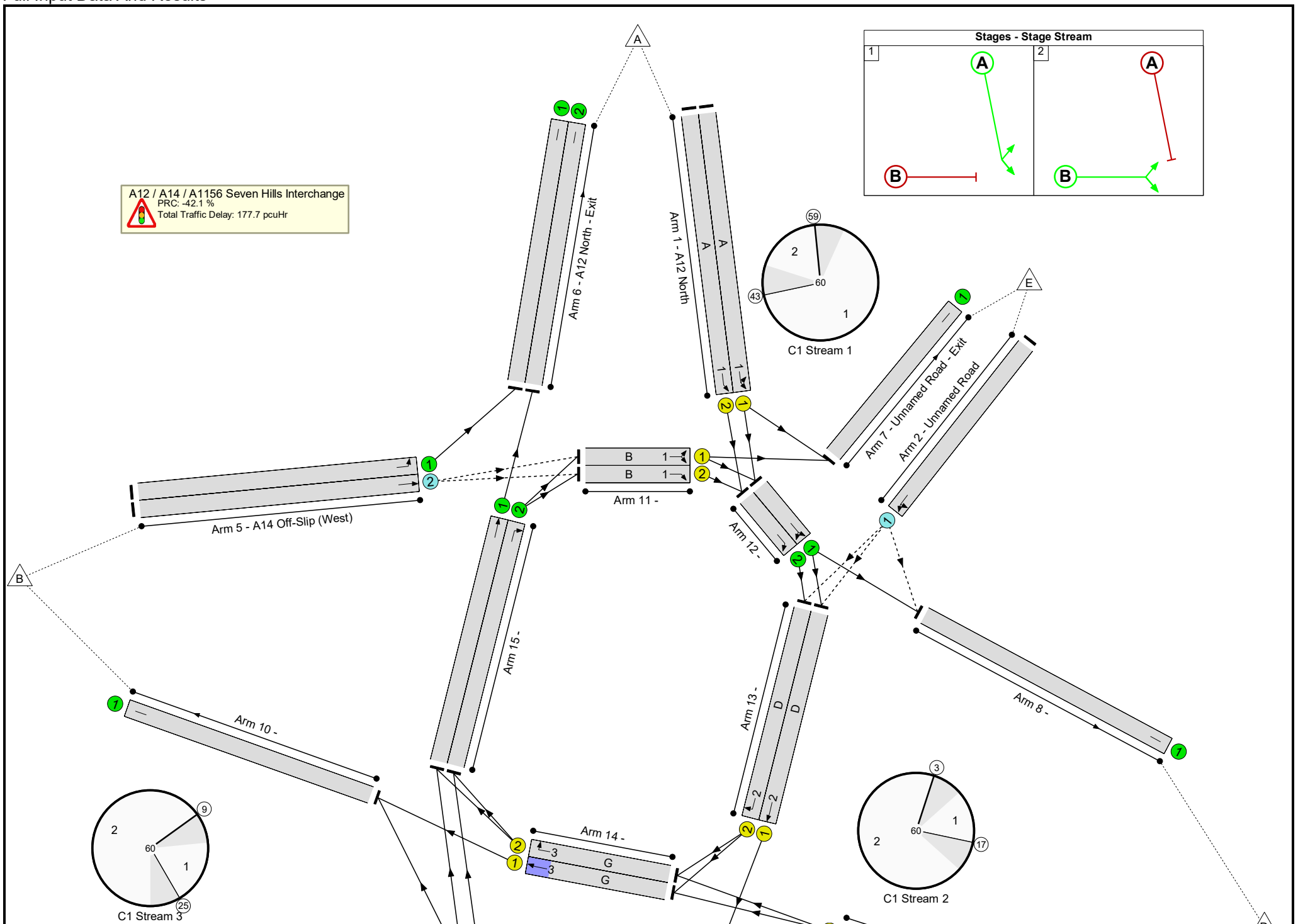
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	748	1866	1244	60.1%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	1320	1866	1244	106.1%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	276	10.9%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	375	1877	313	119.9%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	400	1877	313	127.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	11	-	314	1878	376	83.6%
4/2	A1156 Ahead	U	3	N/A	F		1	11	-	248	1878	376	66.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1654	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	118	1871	736	16.0%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1654	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	638	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1424	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	361	1886	377	95.7%
11/2	Right	U	1	N/A	B		1	11	-	5	1886	377	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1055	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1325	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	440	1877	1314	33.5%
13/2	Right	U	2	N/A	D		1	41	-	1348	1877	1314	96.8%
14/1	Ahead	U	3	N/A	G		1	39	-	1347	2007	1338	95.0%
14/2	Right	U	3	N/A	G		1	39	-	401	1872	1248	25.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	638	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	248	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**148**	**0**	**0**	**24.0**	**153.8**	**0.0**	**177.7**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**148**	**0**	**0**	**24.0**	**153.8**	**0.0**	**177.7**	**-**	**-**	**-**	**-**
1/1	748	748	-	-	-	1.2	0.8	-	1.9	9.2	6.9	0.8	7.6
1/2	1320	1244	-	-	-	5.7	45.3	-	50.9	139.0	23.3	45.3	68.6
2/1	30	30	30	0	0	0.0	0.1	-	0.1	9.5	0.2	0.1	0.2
3/1	375	313	-	-	-	4.4	33.9	-	38.3	367.5	7.3	33.9	41.1
3/2	400	313	-	-	-	5.3	45.8	-	51.1	459.9	8.1	45.8	53.9
4/1	314	314	-	-	-	2.0	2.4	-	4.4	50.2	5.0	2.4	7.3
4/2	248	248	-	-	-	1.5	1.0	-	2.5	36.0	3.8	1.0	4.7
5/1	1654	1654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	118	118	118	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1654	1654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	551	551	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1348	1348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	361	361	-	-	-	1.4	6.3	-	7.7	76.8	6.0	6.3	12.2
11/2	5	5	-	-	-	0.0	0.0	-	0.0	24.4	0.1	0.0	0.1
12/1	1055	1055	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1249	1249	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	440	440	-	-	-	0.3	0.3	-	0.6	4.6	2.2	0.3	2.4
13/2	1272	1272	-	-	-	0.4	10.2	-	10.6	30.1	11.0	10.2	21.2
14/1	1271	1271	-	-	-	0.5	7.7	-	8.3	23.4	3.0	7.7	10.7

Full Input Data And Results

14/2	314	314	-	-	-	1.1	0.2	-	1.3	14.5	5.2	0.2	5.4
15/1	551	551	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	248	248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-17.9	Total Delay for Signalled Lanes (pcuHr):	60.59	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-42.1	Total Delay for Signalled Lanes (pcuHr):	100.58	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-5.6	Total Delay for Signalled Lanes (pcuHr):	16.39	Cycle Time (s): 60
	PRC Over All Lanes (%):	-42.1	Total Delay Over All Lanes(pcuHr):	177.73	

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 2020.07.23_J22_Model_CV_v16 fixed drawing geometry + cap adj.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J22\Model
Report generation date: 18/12/2020 10:26:07

»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM
»2023 Reference Case [Adjusted flows], 6-7 AM
»2023 Reference Case [Adjusted flows], 7-8 AM
»2023 Reference Case [Adjusted flows], 8-9 AM
»2023 Reference Case [Adjusted flows], 3-4 PM
»2023 Reference Case [Adjusted flows], 5-6 PM
»2023 Early Years [Adjusted flows], 6-7 AM
»2023 Early Years [Adjusted flows], 7-8 AM
»2023 Early Years [Adjusted flows], 8-9 AM
»2023 Early Years [Adjusted flows], 3-4 PM
»2023 Early Years [Adjusted flows], 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base Year																								
A - A12 North	0.5	2.4	2.11	0.34	A	1.8	3.6	4.06	0.65	A	3.3	7.5	6.25	0.77	A	3.0	6.7	5.68	0.75	A	3.2	7.4	5.83	0.77	A
B - Foxhall Rd West	0.2	0.5	3.65	0.17	A	2.2	8.8	16.80	0.69	C	84.0	121.6	512.73	1.43	F	2.2	8.7	16.64	0.69	C	1.3	4.7	11.52	0.57	B
C - A12 South	0.4	1.2	1.93	0.29	A	1.9	3.8	4.16	0.66	A	10.2	52.9	17.22	0.92	C	3.0	6.4	5.85	0.75	A	4.2	14.2	7.59	0.81	A
D - Newbourne Rd East	0.1	0.5	4.17	0.08	A	0.7	3.1	10.57	0.40	B	2.6	13.1	26.50	0.73	D	1.5	6.5	16.79	0.60	C	1.2	5.3	14.64	0.54	B
	2023 Reference Case																								
A - A12 North	0.6	2.7	2.16	0.36	A	2.2	4.6	4.61	0.69	A	3.4	8.0	6.46	0.78	A	3.4	7.6	6.36	0.78	A	3.6	8.0	6.35	0.78	A
B - Foxhall Rd West	0.2	0.5	3.80	0.19	A	4.3	22.9	30.52	0.82	D	140.0	182.7	932.57	1.84	F	3.1	15.5	24.56	0.77	C	2.0	7.4	15.62	0.67	C
C - A12 South	0.4	1.5	1.94	0.30	A	2.2	4.8	4.68	0.69	A	19.9	100.1	31.77	0.97	D	4.1	13.0	7.48	0.81	A	4.9	19.9	8.58	0.83	A
D - Newbourne Rd East	0.1	0.5	4.31	0.09	A	0.8	3.9	12.38	0.45	B	3.0	15.1	29.05	0.76	D	2.0	9.3	21.38	0.67	C	1.4	6.6	17.27	0.60	C
	2023 Early Years																								
A - A12 North	0.6	2.7	2.18	0.37	A	2.4	5.4	5.03	0.71	A	3.7	9.9	6.85	0.79	A	3.7	9.4	6.81	0.79	A	3.7	9.6	6.70	0.79	A
B - Foxhall Rd West	0.3	1.0	4.03	0.20	A	19.8	59.5	121.25	1.02	F	179.9	179.9	1537.20	2.09	F	3.5	18.3	28.27	0.79	D	2.1	8.4	16.96	0.68	C
C - A12 South	0.5	2.2	2.08	0.34	A	3.1	6.8	6.15	0.76	A	41.4	133.1	59.16	1.01	F	4.5	17.0	8.27	0.82	A	5.1	21.8	8.86	0.84	A
D - Newbourne Rd East	0.1	0.5	4.34	0.09	A	0.9	4.3	13.68	0.47	B	3.3	17.3	32.41	0.78	D	2.2	10.6	23.52	0.70	C	1.5	7.0	18.07	0.61	C
	2028 Reference Case																								
A - A12 North	0.6	2.8	2.20	0.37	A	2.5	5.4	5.03	0.71	A	4.6	18.2	8.19	0.83	A	4.2	14.1	7.56	0.81	A	5.2	21.6	8.64	0.84	A
B - Foxhall Rd West	0.3	0.9	3.89	0.20	A	13.7	53.2	85.85	0.98	F	208.1	208.1	1709.95	2.19	F	18.0	58.3	108.54	1.01	F	4.6	24.8	34.82	0.84	D
C - A12 South	0.4	1.7	1.96	0.31	A	2.8	6.0	5.50	0.74	A	25.5	113.7	38.96	0.98	E	5.2	22.8	9.31	0.84	A	9.9	50.6	16.52	0.92	C
D - Newbourne Rd East	0.1	0.5	4.36	0.09	A	0.9	4.4	13.89	0.48	B	5.7	29.8	55.94	0.88	F	3.1	16.4	32.07	0.77	D	2.6	13.7	30.04	0.74	D
	2028 Peak Construction																								
A - A12 North	0.6	2.8	2.20	0.37	A	2.5	5.5	4.97	0.71	A	5.1	22.0	8.91	0.84	A	5.3	23.1	9.24	0.85	A	5.9	27.4	9.85	0.86	A
B - Foxhall Rd West	0.3	1.2	4.33	0.22	A	45.7	85.0	248.69	1.16	F	199.3	199.3	1671.33	2.17	F	21.8	60.6	133.97	1.04	F	4.5	24.5	34.76	0.84	D
C - A12 South	0.6	2.7	2.18	0.37	A	3.9	11.7	7.33	0.80	A	45.9	137.8	63.84	1.02	F	7.0	35.4	12.30	0.88	B	10.7	56.7	17.80	0.92	C
D - Newbourne Rd East	0.1	0.5	4.36	0.09	A	0.9	4.4	13.66	0.48	B	7.2	34.9	70.56	0.91	F	4.5	24.3	47.86	0.84	E	3.1	16.9	36.60	0.78	E
	2034 Reference Case																								
A - A12 North	0.6	2.7	2.26	0.39	A	3.1	7.0	5.82	0.76	A	8.0	42.3	13.28	0.90	B	7.5	39.0	12.22	0.89	B	16.7	90.5	25.60	0.96	D

B - Foxhall Rd West	0.3	1.4	4.24	0.25	A	50.8	92.1	252.02	1.16	F	244.3	244.3	1818.66	2.23	F	104.7	146.8	531.99	1.42	F	36.2	75.5	199.03	1.12	F
C - A12 South	0.5	2.0	2.02	0.33	A	3.3	7.3	6.37	0.77	A	29.8	120.8	44.42	0.99	E	11.7	64.4	19.67	0.93	C	30.8	122.6	45.15	0.99	E
D - Newbourne Rd East	0.1	0.5	4.45	0.10	A	1.2	5.7	17.40	0.55	C	31.0	63.9	239.33	1.14	F	14.7	46.9	129.49	1.01	F	22.9	52.9	207.88	1.12	F
	2034 Operational Led																								
A - A12 North	0.6	2.7	2.26	0.39	A	3.0	6.9	5.79	0.76	A	8.8	45.9	14.48	0.91	B	7.3	37.8	11.93	0.89	B	17.1	92.2	26.25	0.96	D
B - Foxhall Rd West	0.3	1.4	4.24	0.25	A	46.7	87.5	235.93	1.15	F	240.9	241.0	1785.04	2.21	F	102.1	144.1	521.17	1.41	F	37.0	76.4	201.76	1.12	F
C - A12 South	0.5	2.0	2.02	0.33	A	3.4	7.3	6.40	0.77	A	29.1	119.6	43.54	0.99	E	11.8	64.9	19.79	0.93	C	28.3	119.1	42.07	0.99	E
D - Newbourne Rd East	0.1	0.5	4.45	0.10	A	1.2	5.6	17.27	0.55	C	36.1	68.8	276.60	1.17	F	13.7	45.8	122.48	1.00	F	23.5	53.5	212.91	1.12	F
	2023 Reference Case [Adjusted flows]																								
A - A12 North	0.6	2.7	2.16	0.36	A	2.2	4.6	4.61	0.69	A	3.4	8.0	6.46	0.78	A	3.4	7.6	6.36	0.78	A	3.6	8.0	6.35	0.78	A
B - Foxhall Rd West	0.2	0.5	3.80	0.19	A	4.3	22.9	30.52	0.82	D	140.0	182.7	932.57	1.84	F	3.1	15.5	24.56	0.77	C	2.0	7.4	15.62	0.67	C
C - A12 South	0.4	1.5	1.94	0.30	A	2.2	4.8	4.68	0.69	A	19.9	100.1	31.77	0.97	D	4.1	13.0	7.48	0.81	A	4.9	19.9	8.58	0.83	A
D - Newbourne Rd East	0.1	0.5	4.31	0.09	A	0.8	3.9	12.38	0.45	B	3.0	15.1	29.05	0.76	D	2.0	9.3	21.38	0.67	C	1.4	6.6	17.27	0.60	C
	2023 Early Years [Adjusted flows]																								
A - A12 North	0.6	2.7	2.18	0.37	A	2.4	5.4	5.03	0.71	A	3.7	9.9	6.85	0.79	A	3.7	9.4	6.81	0.79	A	3.7	9.6	6.70	0.79	A
B - Foxhall Rd West	0.3	1.0	4.03	0.20	A	19.8	59.5	121.25	1.02	F	179.9	179.9	1537.20	2.09	F	3.5	18.3	28.27	0.79	D	2.1	8.4	16.96	0.68	C
C - A12 South	0.5	2.2	2.08	0.34	A	3.1	6.8	6.15	0.76	A	41.4	133.1	59.16	1.01	F	4.5	17.0	8.27	0.82	A	5.1	21.8	8.86	0.84	A
D - Newbourne Rd East	0.1	0.5	4.34	0.09	A	0.9	4.3	13.68	0.47	B	3.3	17.3	32.41	0.78	D	2.2	10.6	23.52	0.70	C	1.5	7.0	18.07	0.61	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

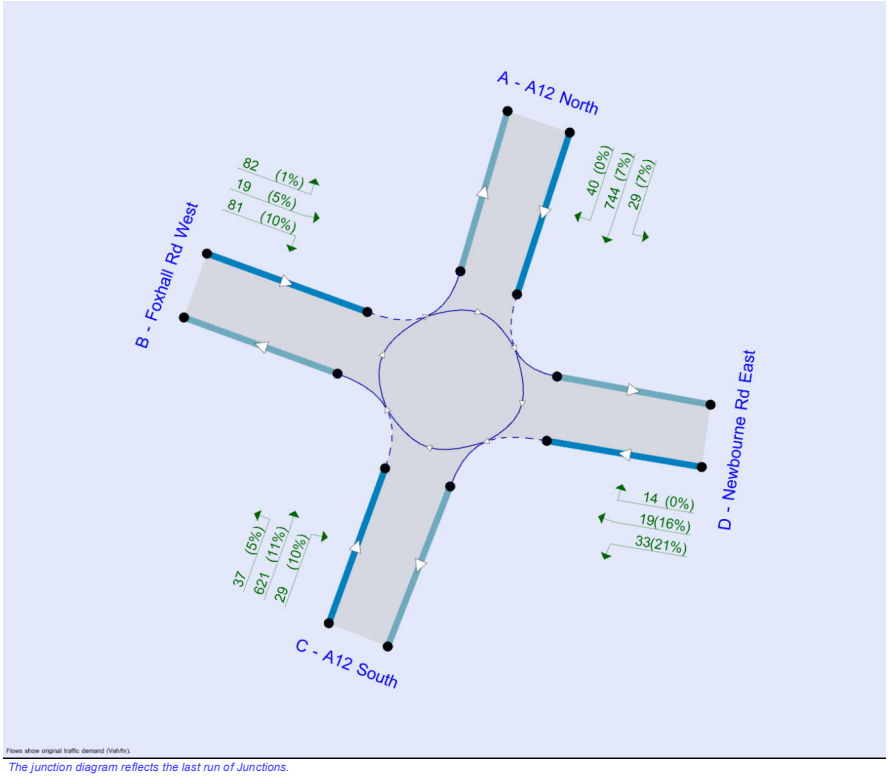
File summary

File Description

Title	A12 / Foxhall Road / Newbourne Road
Location	52° 2'52.64"N, 1°16'28.90"E
Site number	22
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Foxhall Rd West	
C	A12 South	
D	Newbourne Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	6.10	7.80	17.1	28.8	73.5	8.0	
B - Foxhall Rd West	3.40	8.20	15.8	26.5	73.5	25.0	
C - A12 South	7.60	7.60	0.0	23.9	73.5	14.0	
D - Newbourne Rd East	3.30	7.70	13.8	27.0	73.5	25.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Queue calibration	425
B - Foxhall Rd West	Direct	Queue calibration	-150
C - A12 South	Direct	Queue calibration	500
D - Newbourne Rd East	Direct	Queue calibration	-125

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.626	2868
B - Foxhall Rd West	0.517	1670
C - A12 South	0.621	2949
D - Newbourne Rd East	0.500	1585

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	813	100.000
B - Foxhall Rd West		ONE HOUR	✓	182	100.000
C - A12 South		ONE HOUR	✓	687	100.000
D - Newbourne Rd East		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	744	29
	B - Foxhall Rd West	82	0	81	19
	C - A12 South	621	37	0	29
	D - Newbourne Rd East	14	19	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	7	7
	B - Foxhall Rd West	1	0	10	5
	C - A12 South	11	5	0	10
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	2.11	0.5	2.4	A	746	1119
B - Foxhall Rd West	0.17	3.65	0.2	0.5	A	167	251
C - A12 South	0.29	1.93	0.4	1.2	A	630	946
D - Newbourne Rd East	0.08	4.17	0.1	0.5	A	61	91

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	612	153	97	2634	0.232	611	539	0.0	0.3	1.780	A
B - Foxhall Rd West	137	34	499	1313	0.104	137	72	0.0	0.1	3.058	A
C - A12 South	517	129	55	2641	0.196	516	645	0.0	0.2	1.694	A
D - Newbourne Rd East	50	12	650	1075	0.046	49	58	0.0	0.0	3.509	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	731	183	116	2621	0.279	731	644	0.3	0.4	1.903	A
B - Foxhall Rd West	164	41	597	1260	0.130	163	86	0.1	0.1	3.282	A
C - A12 South	618	154	66	2634	0.234	617	771	0.2	0.3	1.784	A
D - Newbourne Rd East	59	15	777	1016	0.058	59	69	0.0	0.1	3.761	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	895	224	142	2605	0.344	895	789	0.4	0.5	2.105	A
B - Foxhall Rd West	200	50	731	1188	0.169	200	106	0.1	0.2	3.645	A
C - A12 South	756	189	80	2626	0.288	756	944	0.3	0.4	1.925	A
D - Newbourne Rd East	73	18	952	935	0.078	73	85	0.1	0.1	4.173	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	895	224	142	2604	0.344	895	789	0.5	0.5	2.105	A
B - Foxhall Rd West	200	50	731	1187	0.169	200	106	0.2	0.2	3.646	A
C - A12 South	756	189	80	2626	0.288	756	945	0.4	0.4	1.925	A
D - Newbourne Rd East	73	18	952	935	0.078	73	85	0.1	0.1	4.174	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	731	183	116	2621	0.279	731	645	0.5	0.4	1.904	A
B - Foxhall Rd West	164	41	597	1260	0.130	164	86	0.2	0.1	3.287	A
C - A12 South	618	154	66	2634	0.234	618	772	0.4	0.3	1.787	A
D - Newbourne Rd East	59	15	778	1016	0.058	59	69	0.1	0.1	3.767	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	612	153	97	2633	0.232	612	540	0.4	0.3	1.780	A
B - Foxhall Rd West	137	34	500	1312	0.104	137	72	0.1	0.1	3.063	A
C - A12 South	517	129	55	2641	0.196	517	646	0.3	0.2	1.694	A
D - Newbourne Rd East	50	12	652	1074	0.046	50	58	0.1	0.0	3.513	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Foxhall Rd West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.31	0.00	0.00	0.31	0.31			N/A	N/A
D - Newbourne Rd East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.25	0.52	0.52			N/A	N/A
B - Foxhall Rd West	0.20	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.40	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.31	1.44	2.39			N/A	N/A
B - Foxhall Rd West	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.40	0.03	0.33	1.23	1.23			N/A	N/A
D - Newbourne Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.31	0.00	0.00	0.31	0.31			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Foxhall Rd West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	5.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1487	100.000
B - Foxhall Rd West		ONE HOUR	✓	430	100.000
C - A12 South		ONE HOUR	✓	1509	100.000
D - Newbourne Rd East		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	144	1285	58
	B - Foxhall Rd West	219	0	163	48
	C - A12 South	1375	92	0	42
	D - Newbourne Rd East	117	28	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	12
	B - Foxhall Rd West	2	0	8	8
	C - A12 South	8	5	0	19
	D - Newbourne Rd East	12	21	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	4.06	1.8	3.6	A	1365	2047
B - Foxhall Rd West	0.69	16.80	2.2	8.8	C	395	592
C - A12 South	0.66	4.16	1.9	3.8	A	1385	2077
D - Newbourne Rd East	0.40	10.57	0.7	3.1	B	189	284

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1119	280	189	2582	0.434	1116	1284	0.0	0.8	2.452	A
B - Foxhall Rd West	324	81	1151	975	0.332	322	198	0.0	0.5	5.496	A
C - A12 South	1136	284	217	2589	0.439	1133	1132	0.0	0.8	2.468	A
D - Newbourne Rd East	155	39	1195	823	0.188	154	111	0.0	0.2	5.373	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1337	334	227	2557	0.523	1335	1536	0.8	1.1	2.944	A
B - Foxhall Rd West	387	97	1378	854	0.453	385	237	0.5	0.8	7.665	A
C - A12 South	1357	339	259	2562	0.529	1355	1355	0.8	1.1	2.980	A
D - Newbourne Rd East	185	46	1429	716	0.259	185	133	0.2	0.3	6.774	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1637	409	276	2525	0.648	1634	1878	1.1	1.8	4.027	A
B - Foxhall Rd West	473	118	1685	689	0.687	468	290	0.8	2.1	15.988	C
C - A12 South	1661	415	317	2527	0.657	1658	1657	1.1	1.9	4.129	A
D - Newbourne Rd East	227	57	1748	570	0.398	226	162	0.3	0.6	10.429	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1637	409	278	2524	0.649	1637	1884	1.8	1.8	4.059	A
B - Foxhall Rd West	473	118	1689	687	0.689	473	291	2.1	2.2	16.800	C
C - A12 South	1661	415	318	2526	0.658	1661	1661	1.9	1.9	4.162	A
D - Newbourne Rd East	227	57	1753	567	0.400	227	163	0.6	0.7	10.566	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1337	334	230	2555	0.523	1340	1544	1.8	1.1	2.968	A
B - Foxhall Rd West	387	97	1383	851	0.454	392	238	2.2	0.8	7.929	A
C - A12 South	1357	339	261	2561	0.530	1360	1361	1.9	1.1	3.002	A
D - Newbourne Rd East	185	46	1436	713	0.260	186	134	0.7	0.4	6.857	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1119	280	191	2580	0.434	1121	1290	1.1	0.8	2.470	A
B - Foxhall Rd West	324	81	1156	972	0.333	325	199	0.8	0.5	5.575	A
C - A12 South	1136	284	218	2588	0.439	1137	1138	1.1	0.8	2.486	A
D - Newbourne Rd East	155	39	1200	821	0.189	156	112	0.4	0.2	5.414	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C - A12 South	0.78	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.05	0.57	2.44	3.57			N/A	N/A
B - Foxhall Rd West	0.82	0.07	0.74	1.30	1.76			N/A	N/A
C - A12 South	1.12	0.05	0.53	2.57	3.78			N/A	N/A
D - Newbourne Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.03	0.26	1.82	1.82			N/A	N/A
B - Foxhall Rd West	2.08	0.03	0.29	2.08	8.78			N/A	N/A
C - A12 South	1.89	0.03	0.26	1.89	1.89			N/A	N/A
D - Newbourne Rd East	0.65	0.03	0.26	0.65	0.65			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.03	0.26	1.83	1.83			N/A	N/A
B - Foxhall Rd West	2.15	0.03	0.29	2.15	8.27			N/A	N/A
C - A12 South	1.91	0.03	0.26	1.91	1.91			N/A	N/A
D - Newbourne Rd East	0.66	0.03	0.31	1.15	3.13			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.36	1.08	1.49	1.77			N/A	N/A
B - Foxhall Rd West	0.85	0.05	0.60	1.63	2.19			N/A	N/A
C - A12 South	1.13	0.30	1.10	1.59	1.84			N/A	N/A
D - Newbourne Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.08	0.81	1.27	1.27			N/A	N/A
B - Foxhall Rd West	0.50	0.04	0.35	1.46	1.70			N/A	N/A
C - A12 South	0.79	0.08	0.80	1.46	1.46			N/A	N/A
D - Newbourne Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	66.10	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1742	100.000
B - Foxhall Rd West		ONE HOUR	✓	507	100.000
C - A12 South		ONE HOUR	✓	2041	100.000
D - Newbourne Rd East		ONE HOUR	✓	335	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	174	1446	122
	B - Foxhall Rd West	262	0	193	52
	C - A12 South	1778	166	1	96
	D - Newbourne Rd East	187	72	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	3	0	5	2
	C - A12 South	8	8	0	10
	D - Newbourne Rd East	9	3	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.25	3.3	7.5	A	1598	2398
B - Foxhall Rd West	1.43	512.73	84.0	121.6	F	465	698
C - A12 South	0.92	17.22	10.2	52.9	C	1873	2809
D - Newbourne Rd East	0.73	26.50	2.6	13.1	D	307	461

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1311	328	255	2520	0.521	1307	1668	0.0	1.1	2.958	A
B - Foxhall Rd West	382	95	1546	781	0.489	378	309	0.0	0.9	8.854	A
C - A12 South	1537	384	324	2536	0.606	1530	1286	0.0	1.5	3.557	A
D - Newbourne Rd East	252	63	1360	781	0.323	250	202	0.0	0.5	6.765	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	392	304	2489	0.629	1564	1994	1.1	1.7	3.878	A
B - Foxhall Rd West	456	114	1849	617	0.738	449	369	0.9	2.6	20.628	C
C - A12 South	1835	459	388	2498	0.734	1830	1538	1.5	2.7	5.349	A
D - Newbourne Rd East	301	75	1626	652	0.462	300	242	0.5	0.8	10.170	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1918	479	299	2492	0.770	1912	2343	1.7	3.2	6.137	A
B - Foxhall Rd West	558	140	2242	405	1.379	400	449	2.6	42.3	222.566	F
C - A12 South	2247	562	471	2448	0.918	2221	1822	2.7	9.3	14.406	B
D - Newbourne Rd East	369	92	1931	504	0.732	362	279	0.8	2.5	24.345	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1918	479	296	2494	0.769	1918	2362	3.2	3.3	6.246	A
B - Foxhall Rd West	558	140	2267	392	1.425	391	453	42.3	84.0	512.730	F
C - A12 South	2247	562	476	2445	0.919	2244	1826	9.3	10.2	17.221	C
D - Newbourne Rd East	369	92	1934	503	0.733	368	280	2.5	2.6	26.500	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	392	374	2447	0.640	1572	2101	3.3	1.8	4.144	A
B - Foxhall Rd West	456	114	1884	598	0.762	591	375	84.0	50.1	395.436	F
C - A12 South	1835	459	395	2494	0.736	1864	1601	10.2	2.8	5.974	A
D - Newbourne Rd East	301	75	1688	623	0.484	308	258	2.6	1.0	11.654	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1311	328	353	2460	0.533	1314	1784	1.8	1.1	3.149	A
B - Foxhall Rd West	382	95	1558	774	0.493	578	311	50.1	1.0	50.800	F
C - A12 South	1537	384	328	2534	0.606	1542	1369	2.8	1.6	3.647	A
D - Newbourne Rd East	252	63	1443	741	0.340	254	224	1.0	0.5	7.413	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.94	0.04	0.38	2.30	3.90			N/A	N/A
C - A12 South	1.52	0.54	1.40	1.98	2.55			N/A	N/A
D - Newbourne Rd East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.04	0.43	4.48	7.54			N/A	N/A
B - Foxhall Rd West	2.59	0.04	0.41	7.03	13.04			N/A	N/A
C - A12 South	2.71	0.04	0.40	7.34	13.69			N/A	N/A
D - Newbourne Rd East	0.84	0.06	0.74	1.43	1.85			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.25	0.03	0.28	3.25	6.44			N/A	N/A
B - Foxhall Rd West	42.26	20.92	40.10	61.27	68.37			N/A	N/A
C - A12 South	9.31	0.04	0.43	25.12	50.68			N/A	N/A
D - Newbourne Rd East	2.48	0.03	0.33	4.80	13.11			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.29	0.03	0.26	3.29	3.29			N/A	N/A
B - Foxhall Rd West	83.98	51.60	81.67	111.88	121.62			N/A	N/A
C - A12 South	10.17	0.03	0.34	16.77	52.89			N/A	N/A
D - Newbourne Rd East	2.61	0.03	0.31	3.55	12.77			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.09	1.24	3.84	5.22			N/A	N/A
B - Foxhall Rd West	50.14	28.25	48.23	69.05	75.88			N/A	N/A
C - A12 South	2.85	0.05	0.46	7.92	13.61			N/A	N/A
D - Newbourne Rd East	0.96	0.05	0.49	2.04	3.03			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.05	0.48	2.73	4.09			N/A	N/A
B - Foxhall Rd West	1.01	0.03	0.26	1.01	1.01			N/A	N/A
C - A12 South	1.56	0.03	0.32	3.02	8.09			N/A	N/A
D - Newbourne Rd East	0.52	0.03	0.33	1.04	2.07			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1748	100.000
B - Foxhall Rd West		ONE HOUR	✓	437	100.000
C - A12 South		ONE HOUR	✓	1676	100.000
D - Newbourne Rd East		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	294	1317	135
	B - Foxhall Rd West	246	0	146	45
	C - A12 South	1407	216	1	52
	D - Newbourne Rd East	109	104	77	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	5
	B - Foxhall Rd West	4	0	6	2
	C - A12 South	5	5	0	8
	D - Newbourne Rd East	4	6	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.68	3.0	6.7	A	1604	2406
B - Foxhall Rd West	0.69	16.64	2.2	8.7	C	401	601
C - A12 South	0.75	5.85	3.0	6.4	A	1538	2307
D - Newbourne Rd East	0.60	16.79	1.5	6.5	C	267	401

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1316	329	183	2612	0.504	1312	1323	0.0	1.0	2.761	A
B - Foxhall Rd West	329	82	1180	983	0.335	327	461	0.0	0.5	5.471	A
C - A12 South	1262	315	382	2568	0.491	1258	1156	0.0	1.0	2.740	A
D - Newbourne Rd East	219	55	1321	841	0.261	218	175	0.0	0.3	5.765	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1571	393	220	2589	0.607	1569	1583	1.0	1.5	3.521	A
B - Foxhall Rd West	393	98	1411	863	0.455	392	551	0.5	0.8	7.620	A
C - A12 South	1507	377	457	2522	0.597	1505	1383	1.0	1.5	3.529	A
D - Newbourne Rd East	262	65	1580	712	0.367	261	209	0.3	0.6	7.962	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1925	481	267	2559	0.752	1919	1933	1.5	3.0	5.570	A
B - Foxhall Rd West	481	120	1724	700	0.688	476	673	0.8	2.1	15.762	C
C - A12 South	1845	461	558	2462	0.750	1840	1690	1.5	2.9	5.733	A
D - Newbourne Rd East	320	80	1931	537	0.596	317	255	0.6	1.4	16.092	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1925	481	270	2558	0.752	1924	1942	3.0	3.0	5.678	A
B - Foxhall Rd West	481	120	1731	696	0.691	481	676	2.1	2.2	16.637	C
C - A12 South	1845	461	561	2460	0.750	1845	1696	2.9	3.0	5.855	A
D - Newbourne Rd East	320	80	1938	534	0.600	320	256	1.4	1.5	16.795	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1571	393	223	2588	0.607	1577	1595	3.0	1.6	3.584	A
B - Foxhall Rd West	393	98	1420	858	0.458	398	555	2.2	0.9	7.909	A
C - A12 South	1507	377	462	2520	0.598	1513	1392	3.0	1.5	3.594	A
D - Newbourne Rd East	262	65	1589	707	0.370	265	211	1.5	0.6	8.203	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1316	329	185	2611	0.504	1318	1331	1.6	1.0	2.788	A
B - Foxhall Rd West	329	82	1186	980	0.336	330	463	0.9	0.5	5.556	A
C - A12 South	1262	315	385	2566	0.492	1264	1162	1.5	1.0	2.768	A
D - Newbourne Rd East	219	55	1327	837	0.262	220	176	0.6	0.4	5.839	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C - A12 South	0.96	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.43	3.99	6.72			N/A	N/A
B - Foxhall Rd West	0.82	0.07	0.75	1.34	1.79			N/A	N/A
C - A12 South	1.47	0.04	0.43	3.84	6.38			N/A	N/A
D - Newbourne Rd East	0.57	0.06	0.66	1.33	1.42			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.96	0.03	0.27	2.96	3.93			N/A	N/A
B - Foxhall Rd West	2.09	0.03	0.29	2.09	8.73			N/A	N/A
C - A12 South	2.92	0.03	0.27	2.92	4.10			N/A	N/A
D - Newbourne Rd East	1.41	0.03	0.28	1.41	3.66			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	2.16	0.03	0.29	2.16	8.23			N/A	N/A
C - A12 South	2.96	0.03	0.26	2.96	2.96			N/A	N/A
D - Newbourne Rd East	1.46	0.03	0.29	1.46	6.47			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.10	1.18	3.05	4.10			N/A	N/A
B - Foxhall Rd West	0.86	0.05	0.62	1.65	2.23			N/A	N/A
C - A12 South	1.50	0.10	1.16	2.91	3.89			N/A	N/A
D - Newbourne Rd East	0.60	0.05	0.53	1.36	1.46			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.05	0.51	2.25	3.32			N/A	N/A
B - Foxhall Rd West	0.51	0.04	0.36	1.46	1.72			N/A	N/A
C - A12 South	0.97	0.05	0.49	2.09	3.11			N/A	N/A
D - Newbourne Rd East	0.36	0.03	0.33	1.13	1.35			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1844	100.000
B - Foxhall Rd West		ONE HOUR	✓	380	100.000
C - A12 South		ONE HOUR	✓	1850	100.000
D - Newbourne Rd East		ONE HOUR	✓	263	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	336	1379	128
	B - Foxhall Rd West	188	0	137	55
	C - A12 South	1488	331	1	30
	D - Newbourne Rd East	70	121	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	1	0	0	4
	C - A12 South	3	2	0	7
	D - Newbourne Rd East	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	5.83	3.2	7.4	A	1692	2538
B - Foxhall Rd West	0.57	11.52	1.3	4.7	B	349	523
C - A12 South	0.81	7.59	4.2	14.2	A	1698	2546
D - Newbourne Rd East	0.54	14.64	1.2	5.3	B	241	362

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1388	347	167	2696	0.515	1384	1311	0.0	1.1	2.735	A
B - Foxhall Rd West	286	72	1193	1025	0.279	285	591	0.0	0.4	4.850	A
C - A12 South	1393	348	396	2623	0.531	1388	1192	0.0	1.1	2.905	A
D - Newbourne Rd East	198	49	1391	863	0.229	197	160	0.0	0.3	5.392	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1658	414	200	2675	0.620	1655	1568	1.1	1.6	3.522	A
B - Foxhall Rd West	342	85	1427	902	0.379	341	707	0.4	0.6	6.407	A
C - A12 South	1663	416	474	2575	0.646	1660	1426	1.1	1.8	3.922	A
D - Newbourne Rd East	236	59	1664	725	0.326	236	191	0.3	0.5	7.340	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2030	508	244	2648	0.767	2024	1914	1.6	3.2	5.710	A
B - Foxhall Rd West	418	105	1742	735	0.569	416	864	0.6	1.3	11.185	B
C - A12 South	2037	509	578	2511	0.811	2028	1743	1.8	4.1	7.305	A
D - Newbourne Rd East	290	72	2034	538	0.538	287	234	0.5	1.1	14.177	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2030	508	245	2647	0.767	2030	1923	3.2	3.2	5.830	A
B - Foxhall Rd West	418	105	1750	731	0.573	418	867	1.3	1.3	11.516	B
C - A12 South	2037	509	581	2510	0.812	2037	1749	4.1	4.2	7.595	A
D - Newbourne Rd East	290	72	2041	535	0.541	289	234	1.1	1.2	14.644	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1658	414	202	2674	0.620	1664	1580	3.2	1.6	3.585	A
B - Foxhall Rd West	342	85	1438	896	0.381	344	712	1.3	0.6	6.561	A
C - A12 South	1663	416	478	2573	0.646	1673	1435	4.2	1.9	4.039	A
D - Newbourne Rd East	236	59	1674	721	0.328	239	192	1.2	0.5	7.513	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1388	347	168	2695	0.515	1391	1318	1.6	1.1	2.766	A
B - Foxhall Rd West	286	72	1200	1022	0.280	287	595	0.6	0.4	4.904	A
C - A12 South	1393	348	398	2621	0.531	1396	1199	1.9	1.1	2.945	A
D - Newbourne Rd East	198	49	1398	860	0.230	199	161	0.5	0.3	5.452	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.12	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.04	0.42	4.29	7.37			N/A	N/A
B - Foxhall Rd West	0.60	0.07	0.72	1.35	1.42			N/A	N/A
C - A12 South	1.80	0.04	0.40	4.82	8.63			N/A	N/A
D - Newbourne Rd East	0.48	0.04	0.41	1.24	1.37			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.20	0.03	0.27	3.20	5.28			N/A	N/A
B - Foxhall Rd West	1.29	0.03	0.27	1.29	1.50			N/A	N/A
C - A12 South	4.12	0.03	0.29	4.12	14.17			N/A	N/A
D - Newbourne Rd East	1.13	0.03	0.27	1.13	1.43			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.25	0.03	0.26	3.25	3.25			N/A	N/A
B - Foxhall Rd West	1.32	0.03	0.28	1.32	4.72			N/A	N/A
C - A12 South	4.21	0.03	0.27	4.21	4.21			N/A	N/A
D - Newbourne Rd East	1.16	0.03	0.30	1.27	5.33			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.65	0.09	1.18	3.45	4.66			N/A	N/A
B - Foxhall Rd West	0.62	0.07	0.69	1.35	1.43			N/A	N/A
C - A12 South	1.85	0.07	0.98	4.48	6.47			N/A	N/A
D - Newbourne Rd East	0.49	0.04	0.44	1.27	1.39			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.05	0.48	2.49	3.73			N/A	N/A
B - Foxhall Rd West	0.39	0.03	0.35	1.15	1.33			N/A	N/A
C - A12 South	1.14	0.04	0.40	2.88	4.89			N/A	N/A
D - Newbourne Rd East	0.30	0.03	0.29	0.80	1.15			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	866	100.000
B - Foxhall Rd West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	722	100.000
D - Newbourne Rd East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	795	30
	B - Foxhall Rd West	100	0	81	22
	C - A12 South	656	37	0	30
	D - Newbourne Rd East	15	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	10
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.16	0.6	2.7	A	794	1192
B - Foxhall Rd West	0.19	3.80	0.2	0.5	A	187	280
C - A12 South	0.30	1.94	0.4	1.5	A	663	994
D - Newbourne Rd East	0.09	4.31	0.1	0.5	A	65	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	100	2649	0.246	650	579	0.0	0.3	1.801	A
B - Foxhall Rd West	153	38	526	1301	0.118	153	73	0.0	0.1	3.133	A
C - A12 South	544	136	57	2666	0.204	543	685	0.0	0.3	1.695	A
D - Newbourne Rd East	53	13	689	1060	0.050	53	62	0.0	0.1	3.574	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	778	195	120	2637	0.295	778	692	0.3	0.4	1.936	A
B - Foxhall Rd West	183	46	629	1246	0.147	183	88	0.1	0.2	3.386	A
C - A12 South	650	162	68	2660	0.244	649	819	0.3	0.3	1.789	A
D - Newbourne Rd East	63	16	824	998	0.063	63	74	0.1	0.1	3.852	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	953	238	147	2619	0.364	952	848	0.4	0.6	2.160	A
B - Foxhall Rd West	224	56	771	1170	0.191	224	108	0.2	0.2	3.803	A
C - A12 South	795	199	83	2651	0.300	795	1003	0.3	0.4	1.940	A
D - Newbourne Rd East	78	19	1009	913	0.085	77	91	0.1	0.1	4.311	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	953	238	147	2619	0.364	953	848	0.6	0.6	2.160	A
B - Foxhall Rd West	224	56	771	1170	0.191	224	108	0.2	0.2	3.804	A
C - A12 South	795	199	83	2651	0.300	795	1003	0.4	0.4	1.940	A
D - Newbourne Rd East	78	19	1009	912	0.085	78	91	0.1	0.1	4.312	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	778	195	120	2637	0.295	779	693	0.6	0.4	1.938	A
B - Foxhall Rd West	183	46	630	1245	0.147	183	88	0.2	0.2	3.388	A
C - A12 South	650	162	68	2660	0.244	650	820	0.4	0.3	1.790	A
D - Newbourne Rd East	63	16	825	997	0.064	63	74	0.1	0.1	3.857	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	100	2649	0.246	652	580	0.4	0.3	1.802	A
B - Foxhall Rd West	153	38	528	1300	0.118	153	74	0.2	0.1	3.140	A
C - A12 South	544	136	57	2666	0.204	544	687	0.3	0.3	1.695	A
D - Newbourne Rd East	53	13	691	1059	0.050	53	62	0.1	0.1	3.581	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.25	0.57	0.57			N/A	N/A
B - Foxhall Rd West	0.24	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.43	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.36	2.68			N/A	N/A
B - Foxhall Rd West	0.24	0.03	0.26	0.47	0.52			N/A	N/A
C - A12 South	0.43	0.03	0.33	1.35	1.52			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	8.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1567	100.000
B - Foxhall Rd West		ONE HOUR	✓	485	100.000
C - A12 South		ONE HOUR	✓	1576	100.000
D - Newbourne Rd East		ONE HOUR	✓	214	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	168	1340	59
	B - Foxhall Rd West	270	0	164	52
	C - A12 South	1434	93	0	49
	D - Newbourne Rd East	118	31	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	1	0	8	10
	C - A12 South	9	5	0	12
	D - Newbourne Rd East	12	20	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	4.61	2.2	4.6	A	1438	2157
B - Foxhall Rd West	0.82	30.52	4.3	22.9	D	445	668
C - A12 South	0.69	4.68	2.2	4.8	A	1446	2169
D - Newbourne Rd East	0.45	12.38	0.8	3.9	B	196	294

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1180	295	198	2566	0.460	1177	1366	0.0	0.8	2.585	A
B - Foxhall Rd West	365	91	1201	950	0.384	363	219	0.0	0.6	6.106	A
C - A12 South	1186	297	238	2572	0.461	1183	1177	0.0	0.9	2.585	A
D - Newbourne Rd East	161	40	1255	797	0.202	160	120	0.0	0.3	5.652	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1409	352	237	2541	0.555	1408	1635	0.8	1.2	3.173	A
B - Foxhall Rd West	436	109	1437	823	0.530	434	262	0.6	1.1	9.216	A
C - A12 South	1417	354	284	2543	0.557	1415	1408	0.9	1.2	3.187	A
D - Newbourne Rd East	192	48	1501	683	0.281	192	143	0.3	0.4	7.319	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1726	431	286	2509	0.688	1722	1995	1.2	2.2	4.551	A
B - Foxhall Rd West	534	134	1758	650	0.822	523	320	1.1	3.9	26.264	D
C - A12 South	1735	434	347	2505	0.693	1731	1720	1.2	2.2	4.630	A
D - Newbourne Rd East	235	59	1834	529	0.445	234	174	0.4	0.8	12.126	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1726	431	290	2506	0.689	1726	2005	2.2	2.2	4.610	A
B - Foxhall Rd West	534	134	1762	648	0.825	533	321	3.9	4.3	30.525	D
C - A12 South	1735	434	349	2504	0.693	1735	1727	2.2	2.2	4.680	A
D - Newbourne Rd East	235	59	1840	526	0.447	235	175	0.8	0.8	12.383	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1409	352	243	2537	0.556	1413	1649	2.2	1.3	3.216	A
B - Foxhall Rd West	436	109	1444	819	0.532	449	263	4.3	1.2	10.020	B
C - A12 South	1417	354	286	2542	0.557	1420	1418	2.2	1.3	3.222	A
D - Newbourne Rd East	192	48	1511	678	0.283	194	145	0.8	0.4	7.455	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1180	295	200	2564	0.460	1182	1374	1.3	0.9	2.608	A
B - Foxhall Rd West	365	91	1207	947	0.386	367	220	1.2	0.6	6.234	A
C - A12 South	1186	297	239	2571	0.461	1188	1183	1.3	0.9	2.607	A
D - Newbourne Rd East	161	40	1261	794	0.203	161	120	0.4	0.3	5.698	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.62	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	0.85	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.05	0.48	2.97	4.64			N/A	N/A
B - Foxhall Rd West	1.10	0.05	0.57	2.49	3.64			N/A	N/A
C - A12 South	1.25	0.05	0.47	3.03	4.75			N/A	N/A
D - Newbourne Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.17	0.03	0.26	2.17	2.17			N/A	N/A
B - Foxhall Rd West	3.95	0.04	0.39	10.36	21.08			N/A	N/A
C - A12 South	2.22	0.03	0.26	2.22	2.22			N/A	N/A
D - Newbourne Rd East	0.78	0.03	0.26	0.78	0.78			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.19	0.03	0.26	2.19	2.19			N/A	N/A
B - Foxhall Rd West	4.28	0.03	0.33	8.20	22.89			N/A	N/A
C - A12 South	2.24	0.03	0.26	2.24	2.24			N/A	N/A
D - Newbourne Rd East	0.80	0.03	0.30	1.22	3.87			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.19	1.16	1.88	2.37			N/A	N/A
B - Foxhall Rd West	1.16	0.04	0.41	2.93	4.92			N/A	N/A
C - A12 South	1.27	0.17	1.16	1.91	2.46			N/A	N/A
D - Newbourne Rd East	0.40	0.03	0.28	0.64	1.07			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.07	0.77	1.45	1.86			N/A	N/A
B - Foxhall Rd West	0.63	0.03	0.31	1.09	2.98			N/A	N/A
C - A12 South	0.86	0.06	0.75	1.50	1.90			N/A	N/A
D - Newbourne Rd East	0.26	0.03	0.25	0.45	0.48			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	121.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1759	100.000
B - Foxhall Rd West		ONE HOUR	✓	553	100.000
C - A12 South		ONE HOUR	✓	2158	100.000
D - Newbourne Rd East		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	165	1471	124
	B - Foxhall Rd West	300	0	194	59
	C - A12 South	1884	166	1	107
	D - Newbourne Rd East	188	75	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	9	2	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.46	3.4	8.0	A	1614	2422
B - Foxhall Rd West	1.84	932.57	140.0	182.7	F	507	761
C - A12 South	0.97	31.77	19.9	100.1	D	1981	2971
D - Newbourne Rd East	0.76	29.05	3.0	15.1	D	320	480

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1325	331	269	2494	0.531	1320	1776	0.0	1.1	3.055	A
B - Foxhall Rd West	416	104	1634	736	0.565	411	304	0.0	1.3	10.917	B
C - A12 South	1625	406	320	2544	0.639	1618	1313	0.0	1.7	3.860	A
D - Newbourne Rd East	263	66	1372	774	0.339	261	217	0.0	0.5	6.985	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	395	317	2465	0.642	1579	2117	1.1	1.8	4.052	A
B - Foxhall Rd West	497	124	1953	564	0.881	480	364	1.3	5.4	37.578	E
C - A12 South	1940	485	383	2506	0.774	1934	1566	1.7	3.3	6.223	A
D - Newbourne Rd East	314	78	1637	644	0.487	312	258	0.5	0.9	10.780	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1937	484	276	2489	0.778	1931	2422	1.8	3.4	6.367	A
B - Foxhall Rd West	608	152	2349	350	1.738	349	441	5.4	70.4	419.796	F
C - A12 South	2376	594	464	2457	0.967	2325	1830	3.3	16.1	21.806	C
D - Newbourne Rd East	384	96	1918	506	0.760	376	288	0.9	2.8	26.484	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1937	484	269	2493	0.777	1937	2447	3.4	3.4	6.465	A
B - Foxhall Rd West	608	152	2386	330	1.843	330	446	70.4	140.0	895.860	F
C - A12 South	2376	594	470	2454	0.969	2361	1831	16.1	19.9	31.772	D
D - Newbourne Rd East	384	96	1918	506	0.759	383	289	2.8	3.0	29.054	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	395	339	2451	0.645	1588	2207	3.4	1.8	4.199	A
B - Foxhall Rd West	497	124	2024	525	0.946	521	372	140.0	133.8	932.569	F
C - A12 South	1940	485	391	2501	0.776	2006	1591	19.9	3.6	8.198	A
D - Newbourne Rd East	314	78	1660	633	0.495	321	267	3.0	1.0	11.822	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1325	331	412	2407	0.550	1327	1959	1.8	1.2	3.341	A
B - Foxhall Rd West	416	104	1649	728	0.572	722	307	133.8	57.2	478.609	F
C - A12 South	1625	406	323	2542	0.639	1632	1429	3.6	1.8	3.987	A
D - Newbourne Rd East	263	66	1488	719	0.365	264	252	1.0	0.6	7.949	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.26	0.03	0.28	1.26	4.59			N/A	N/A
C - A12 South	1.75	0.29	1.01	2.84	3.55			N/A	N/A
D - Newbourne Rd East	0.51	0.51	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.04	0.43	4.75	8.00			N/A	N/A
B - Foxhall Rd West	5.41	0.05	0.49	15.51	27.02			N/A	N/A
C - A12 South	3.33	0.04	0.42	9.17	16.93			N/A	N/A
D - Newbourne Rd East	0.93	0.06	0.76	1.71	2.26			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.40	0.03	0.28	3.40	7.73			N/A	N/A
B - Foxhall Rd West	70.36	41.68	68.15	95.17	103.93			N/A	N/A
C - A12 South	16.13	0.10	3.87	46.42	71.14			N/A	N/A
D - Newbourne Rd East	2.81	0.03	0.35	6.39	15.08			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.03	0.27	3.43	3.43			N/A	N/A
B - Foxhall Rd West	139.96	101.29	138.00	172.08	182.68			N/A	N/A
C - A12 South	19.90	0.07	1.50	58.67	100.06			N/A	N/A
D - Newbourne Rd East	2.96	0.03	0.32	4.56	15.00			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.08	1.16	4.13	5.78			N/A	N/A
B - Foxhall Rd West	133.78	91.49	131.42	169.56	181.57			N/A	N/A
C - A12 South	3.58	0.04	0.43	9.91	18.20			N/A	N/A
D - Newbourne Rd East	1.01	0.04	0.44	2.40	3.73			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.05	0.48	2.96	4.59			N/A	N/A
B - Foxhall Rd West	57.20	25.34	53.78	86.79	98.09			N/A	N/A
C - A12 South	1.79	0.03	0.30	2.39	8.71			N/A	N/A
D - Newbourne Rd East	0.58	0.03	0.32	1.24	2.57			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	9.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1791	100.000
B - Foxhall Rd West		ONE HOUR	✓	433	100.000
C - A12 South		ONE HOUR	✓	1808	100.000
D - Newbourne Rd East		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	283	1366	140
	B - Foxhall Rd West	235	0	147	51
	C - A12 South	1528	218	1	62
	D - Newbourne Rd East	112	106	95	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	5
	B - Foxhall Rd West	4	0	6	6
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	4	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.36	3.4	7.6	A	1643	2465
B - Foxhall Rd West	0.77	24.56	3.1	15.5	C	397	596
C - A12 South	0.81	7.48	4.1	13.0	A	1659	2489
D - Newbourne Rd East	0.67	21.38	2.0	9.3	C	288	433

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	195	2594	0.520	1344	1408	0.0	1.1	2.870	A
B - Foxhall Rd West	326	81	1279	929	0.351	324	456	0.0	0.5	5.925	A
C - A12 South	1361	340	378	2578	0.528	1357	1206	0.0	1.1	2.937	A
D - Newbourne Rd East	237	59	1349	830	0.285	235	190	0.0	0.4	6.032	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	403	234	2571	0.626	1608	1684	1.1	1.7	3.729	A
B - Foxhall Rd West	389	97	1530	800	0.487	388	545	0.5	0.9	8.700	A
C - A12 South	1626	406	452	2533	0.642	1623	1443	1.1	1.8	3.945	A
D - Newbourne Rd East	282	71	1614	697	0.405	281	228	0.4	0.7	8.638	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1972	493	284	2540	0.776	1965	2053	1.7	3.4	6.190	A
B - Foxhall Rd West	477	119	1868	625	0.762	469	665	0.9	2.9	21.984	C
C - A12 South	1991	498	551	2473	0.805	1982	1761	1.8	4.0	7.205	A
D - Newbourne Rd East	346	86	1971	517	0.669	341	278	0.7	1.9	19.900	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1972	493	287	2538	0.777	1972	2066	3.4	3.4	6.356	A
B - Foxhall Rd West	477	119	1877	621	0.768	476	669	2.9	3.1	24.557	C
C - A12 South	1991	498	555	2471	0.806	1991	1770	4.0	4.1	7.484	A
D - Newbourne Rd East	346	86	1980	513	0.674	346	279	1.9	2.0	21.384	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	403	239	2567	0.627	1617	1701	3.4	1.7	3.813	A
B - Foxhall Rd West	389	97	1543	793	0.491	398	550	3.1	1.0	9.288	A
C - A12 South	1626	406	458	2529	0.643	1635	1456	4.1	1.8	4.064	A
D - Newbourne Rd East	282	71	1626	691	0.409	288	230	2.0	0.7	9.033	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	197	2593	0.520	1351	1417	1.7	1.1	2.904	A
B - Foxhall Rd West	326	81	1287	926	0.352	328	458	1.0	0.5	6.036	A
C - A12 South	1361	340	381	2576	0.528	1364	1214	1.8	1.1	2.978	A
D - Newbourne Rd East	237	59	1357	826	0.286	238	192	0.7	0.4	6.128	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.11	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.04	0.42	4.43	7.60			N/A	N/A
B - Foxhall Rd West	0.93	0.06	0.67	1.81	2.54			N/A	N/A
C - A12 South	1.77	0.04	0.41	4.73	8.37			N/A	N/A
D - Newbourne Rd East	0.67	0.06	0.68	1.40	1.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.37	0.03	0.28	3.37	7.21			N/A	N/A
B - Foxhall Rd West	2.91	0.03	0.33	5.87	15.55			N/A	N/A
C - A12 South	3.97	0.03	0.29	3.97	13.00			N/A	N/A
D - Newbourne Rd East	1.89	0.03	0.30	1.89	8.46			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.03	0.27	3.43	3.43			N/A	N/A
B - Foxhall Rd West	3.11	0.03	0.31	4.07	15.10			N/A	N/A
C - A12 South	4.06	0.03	0.27	4.06	4.06			N/A	N/A
D - Newbourne Rd East	1.99	0.03	0.30	2.23	9.28			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.70	0.08	1.14	3.71	5.08			N/A	N/A
B - Foxhall Rd West	0.98	0.05	0.45	2.28	3.52			N/A	N/A
C - A12 South	1.82	0.07	1.01	4.34	6.22			N/A	N/A
D - Newbourne Rd East	0.70	0.05	0.49	1.22	1.77			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.05	0.46	2.63	4.00			N/A	N/A
B - Foxhall Rd West	0.55	0.03	0.32	1.11	2.40			N/A	N/A
C - A12 South	1.13	0.04	0.41	2.84	4.77			N/A	N/A
D - Newbourne Rd East	0.40	0.03	0.33	1.26	1.26			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	8.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1869	100.000
B - Foxhall Rd West		ONE HOUR	✓	422	100.000
C - A12 South		ONE HOUR	✓	1903	100.000
D - Newbourne Rd East		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	302	1436	130
	B - Foxhall Rd West	226	0	137	58
	C - A12 South	1532	334	1	36
	D - Newbourne Rd East	71	128	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	3
	B - Foxhall Rd West	0	0	0	5
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.35	3.6	8.0	A	1715	2572
B - Foxhall Rd West	0.67	15.62	2.0	7.4	C	387	581
C - A12 South	0.83	8.58	4.9	19.9	A	1746	2619
D - Newbourne Rd East	0.60	17.27	1.4	6.6	C	258	386

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1407	352	174	2674	0.526	1402	1373	0.0	1.1	2.823	A
B - Foxhall Rd West	318	79	1231	1000	0.318	316	572	0.0	0.5	5.247	A
C - A12 South	1432	358	376	2620	0.547	1428	1243	0.0	1.2	3.008	A
D - Newbourne Rd East	211	53	1408	852	0.248	210	168	0.0	0.3	5.594	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1680	420	209	2653	0.633	1677	1642	1.1	1.7	3.683	A
B - Foxhall Rd West	379	95	1472	872	0.435	378	685	0.5	0.8	7.276	A
C - A12 South	1711	428	450	2575	0.664	1708	1486	1.2	2.0	4.138	A
D - Newbourne Rd East	252	63	1685	711	0.355	251	201	0.3	0.5	7.814	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2057	514	254	2624	0.784	2050	2003	1.7	3.5	6.191	A
B - Foxhall Rd West	465	116	1796	699	0.665	460	836	0.8	1.9	14.785	B
C - A12 South	2095	524	548	2515	0.833	2084	1815	2.0	4.7	8.153	A
D - Newbourne Rd East	309	77	2058	521	0.593	306	246	0.5	1.4	16.475	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2057	514	256	2623	0.784	2057	2014	3.5	3.6	6.353	A
B - Foxhall Rd West	465	116	1806	694	0.669	464	840	1.9	2.0	15.620	C
C - A12 South	2095	524	552	2513	0.834	2094	1823	4.7	4.9	8.581	A
D - Newbourne Rd East	309	77	2066	517	0.598	309	247	1.4	1.4	17.272	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1680	420	212	2651	0.634	1687	1658	3.6	1.7	3.763	A
B - Foxhall Rd West	379	95	1485	865	0.439	384	691	2.0	0.8	7.561	A
C - A12 South	1711	428	454	2572	0.665	1722	1497	4.9	2.0	4.291	A
D - Newbourne Rd East	252	63	1696	706	0.357	256	203	1.4	0.6	8.064	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1407	352	176	2673	0.526	1409	1381	1.7	1.1	2.856	A
B - Foxhall Rd West	318	79	1238	996	0.319	319	576	0.8	0.5	5.323	A
C - A12 South	1432	358	378	2618	0.547	1436	1250	2.0	1.2	3.052	A
D - Newbourne Rd East	211	53	1416	848	0.249	212	169	0.6	0.3	5.668	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C - A12 South	1.20	0.56	1.07	1.22	1.61			N/A	N/A
D - Newbourne Rd East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.04	0.41	4.57	7.94			N/A	N/A
B - Foxhall Rd West	0.76	0.07	0.73	1.49	1.53			N/A	N/A
C - A12 South	1.95	0.04	0.40	5.24	9.56			N/A	N/A
D - Newbourne Rd East	0.54	0.05	0.58	1.32	1.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.52	0.03	0.28	3.52	7.97			N/A	N/A
B - Foxhall Rd West	1.89	0.03	0.29	1.89	6.87			N/A	N/A
C - A12 South	4.74	0.03	0.30	4.74	19.86			N/A	N/A
D - Newbourne Rd East	1.40	0.03	0.28	1.40	3.57			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.58	0.03	0.27	3.58	3.58			N/A	N/A
B - Foxhall Rd West	1.97	0.03	0.29	1.97	7.40			N/A	N/A
C - A12 South	4.88	0.03	0.27	4.88	6.63			N/A	N/A
D - Newbourne Rd East	1.45	0.03	0.30	1.54	6.63			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.08	1.13	3.87	5.41			N/A	N/A
B - Foxhall Rd West	0.79	0.06	0.65	1.38	1.84			N/A	N/A
C - A12 South	2.01	0.06	0.86	5.12	7.68			N/A	N/A
D - Newbourne Rd East	0.56	0.05	0.49	1.33	1.44			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.04	0.45	2.73	4.26			N/A	N/A
B - Foxhall Rd West	0.47	0.04	0.36	1.38	1.41			N/A	N/A
C - A12 South	1.22	0.04	0.38	3.08	5.65			N/A	N/A
D - Newbourne Rd East	0.33	0.03	0.32	1.08	1.32			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	879	100.000
B - Foxhall Rd West		ONE HOUR	✓	205	100.000
C - A12 South		ONE HOUR	✓	794	100.000
D - Newbourne Rd East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	808	30
	B - Foxhall Rd West	102	0	81	22
	C - A12 South	728	37	0	30
	D - Newbourne Rd East	15	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	10
	C - A12 South	12	5	0	5
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.18	0.6	2.7	A	806	1209
B - Foxhall Rd West	0.20	4.03	0.3	1.0	A	188	283
C - A12 South	0.34	2.08	0.5	2.2	A	729	1094
D - Newbourne Rd East	0.09	4.34	0.1	0.5	A	65	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	662	165	100	2652	0.249	660	634	0.0	0.3	1.808	A
B - Foxhall Rd West	155	39	580	1267	0.122	154	73	0.0	0.1	3.234	A
C - A12 South	598	150	57	2617	0.229	597	694	0.0	0.3	1.782	A
D - Newbourne Rd East	53	13	698	1056	0.050	53	62	0.0	0.1	3.590	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	790	197	120	2639	0.299	790	759	0.3	0.4	1.946	A
B - Foxhall Rd West	185	46	694	1205	0.153	184	88	0.1	0.2	3.528	A
C - A12 South	714	179	68	2611	0.274	714	831	0.3	0.4	1.897	A
D - Newbourne Rd East	63	16	835	993	0.064	63	74	0.1	0.1	3.873	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	967	242	147	2621	0.369	967	929	0.4	0.6	2.176	A
B - Foxhall Rd West	226	57	850	1120	0.202	226	108	0.2	0.3	4.027	A
C - A12 South	875	219	83	2602	0.336	874	1017	0.4	0.5	2.084	A
D - Newbourne Rd East	78	19	1023	906	0.086	77	91	0.1	0.1	4.343	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	967	242	147	2621	0.369	967	930	0.6	0.6	2.176	A
B - Foxhall Rd West	226	57	850	1119	0.202	226	108	0.3	0.3	4.030	A
C - A12 South	875	219	83	2602	0.336	875	1018	0.5	0.5	2.084	A
D - Newbourne Rd East	78	19	1024	906	0.086	78	91	0.1	0.1	4.345	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	790	197	120	2639	0.299	791	760	0.6	0.4	1.948	A
B - Foxhall Rd West	185	46	695	1204	0.153	185	88	0.3	0.2	3.532	A
C - A12 South	714	179	68	2611	0.274	715	832	0.5	0.4	1.901	A
D - Newbourne Rd East	63	16	836	992	0.064	63	74	0.1	0.1	3.878	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	662	165	100	2651	0.250	662	636	0.4	0.3	1.811	A
B - Foxhall Rd West	155	39	582	1266	0.122	155	74	0.2	0.1	3.240	A
C - A12 South	598	150	57	2617	0.229	598	696	0.4	0.3	1.782	A
D - Newbourne Rd East	53	13	700	1055	0.050	53	62	0.1	0.1	3.596	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.50	0.03	0.25	0.50	0.50			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.29	1.32	2.73			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.28	0.50	0.97			N/A	N/A
C - A12 South	0.51	0.03	0.31	1.44	2.25			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	20.33	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1610	100.000
B - Foxhall Rd West		ONE HOUR	✓	520	100.000
C - A12 South		ONE HOUR	✓	1679	100.000
D - Newbourne Rd East		ONE HOUR	✓	214	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	166	1385	59
	B - Foxhall Rd West	294	0	170	57
	C - A12 South	1542	93	0	44
	D - Newbourne Rd East	118	31	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	12	5	0	14
	D - Newbourne Rd East	12	20	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	5.03	2.4	5.4	A	1478	2217
B - Foxhall Rd West	1.02	121.25	19.8	59.5	F	477	716
C - A12 South	0.76	6.15	3.1	6.8	A	1540	2311
D - Newbourne Rd East	0.47	13.68	0.9	4.3	B	196	294

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1212	303	202	2542	0.477	1209	1465	0.0	0.9	2.694	A
B - Foxhall Rd West	392	98	1278	891	0.439	388	217	0.0	0.8	7.121	A
C - A12 South	1264	316	236	2498	0.506	1260	1215	0.0	1.0	2.897	A
D - Newbourne Rd East	161	40	1291	775	0.207	160	120	0.0	0.3	5.838	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	241	2517	0.575	1446	1752	0.9	1.3	3.355	A
B - Foxhall Rd West	468	117	1529	752	0.622	464	260	0.8	1.6	12.391	B
C - A12 South	1509	377	283	2471	0.611	1507	1453	1.0	1.6	3.728	A
D - Newbourne Rd East	192	48	1544	657	0.292	191	143	0.3	0.4	7.717	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1773	443	278	2494	0.711	1769	2119	1.3	2.4	4.934	A
B - Foxhall Rd West	573	143	1869	563	1.018	527	318	1.6	12.9	67.327	F
C - A12 South	1848	462	345	2434	0.759	1842	1764	1.6	3.1	6.024	A
D - Newbourne Rd East	235	59	1876	503	0.468	233	170	0.4	0.9	13.279	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1773	443	285	2489	0.712	1773	2135	2.4	2.4	5.026	A
B - Foxhall Rd West	573	143	1876	559	1.024	545	319	12.9	19.8	121.253	F
C - A12 South	1848	462	347	2433	0.760	1848	1774	3.1	3.1	6.155	A
D - Newbourne Rd East	235	59	1886	498	0.472	235	173	0.9	0.9	13.675	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	274	2496	0.580	1452	1804	2.4	1.4	3.463	A
B - Foxhall Rd West	468	117	1538	746	0.626	540	262	19.8	1.8	23.734	C
C - A12 South	1509	377	285	2469	0.611	1515	1484	3.1	1.6	3.799	A
D - Newbourne Rd East	192	48	1575	643	0.299	194	152	0.9	0.4	8.045	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1212	303	205	2540	0.477	1214	1475	1.4	0.9	2.720	A
B - Foxhall Rd West	392	98	1285	887	0.441	395	219	1.8	0.8	7.376	A
C - A12 South	1264	316	238	2497	0.506	1266	1223	1.6	1.0	2.930	A
D - Newbourne Rd East	161	40	1299	772	0.208	162	121	0.4	0.3	5.905	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.77	0.13	0.89	1.40	1.47			N/A	N/A
C - A12 South	1.02	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.05	0.46	3.40	5.37			N/A	N/A
B - Foxhall Rd West	1.59	0.04	0.44	4.19	6.94			N/A	N/A
C - A12 South	1.55	0.04	0.43	4.07	6.81			N/A	N/A
D - Newbourne Rd East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.41	0.03	0.27	2.41	2.41			N/A	N/A
B - Foxhall Rd West	12.93	0.75	8.65	28.92	37.58			N/A	N/A
C - A12 South	3.07	0.03	0.28	3.07	5.38			N/A	N/A
D - Newbourne Rd East	0.86	0.03	0.26	0.86	0.86			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.45	0.03	0.26	2.45	2.45			N/A	N/A
B - Foxhall Rd West	19.83	0.97	13.12	45.48	59.51			N/A	N/A
C - A12 South	3.12	0.03	0.26	3.12	3.12			N/A	N/A
D - Newbourne Rd East	0.88	0.03	0.30	1.29	4.27			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.15	1.21	2.34	2.91			N/A	N/A
B - Foxhall Rd West	1.76	0.03	0.33	3.78	9.22			N/A	N/A
C - A12 South	1.59	0.09	1.15	3.28	4.47			N/A	N/A
D - Newbourne Rd East	0.43	0.03	0.33	1.10	1.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.06	0.71	1.74	2.36			N/A	N/A
B - Foxhall Rd West	0.80	0.03	0.27	0.80	1.71			N/A	N/A
C - A12 South	1.03	0.05	0.48	2.37	3.58			N/A	N/A
D - Newbourne Rd East	0.27	0.03	0.26	0.46	0.49			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	197.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1784	100.000
B - Foxhall Rd West		ONE HOUR	✓	556	100.000
C - A12 South		ONE HOUR	✓	2202	100.000
D - Newbourne Rd East		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	161	1500	124
	B - Foxhall Rd West	300	0	196	60
	C - A12 South	1928	166	1	107
	D - Newbourne Rd East	188	71	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	11	8	0	7
	D - Newbourne Rd East	9	2	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.85	3.7	9.9	A	1637	2456
B - Foxhall Rd West	2.09	1537.20	179.9	179.9	F	510	765
C - A12 South	1.01	59.16	41.4	133.1	F	2021	3031
D - Newbourne Rd East	0.78	32.41	3.3	17.3	D	320	480

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1343	336	271	2477	0.542	1339	1807	0.0	1.2	3.148	A
B - Foxhall Rd West	418	105	1666	696	0.601	412	298	0.0	1.5	12.445	B
C - A12 South	1658	415	314	2485	0.667	1650	1339	0.0	2.0	4.273	A
D - Newbourne Rd East	263	66	1392	760	0.345	260	218	0.0	0.5	7.174	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1604	401	313	2452	0.654	1601	2147	1.2	1.9	4.219	A
B - Foxhall Rd West	499	125	1991	517	0.967	470	356	1.5	8.9	57.040	F
C - A12 South	1980	495	376	2449	0.809	1972	1593	2.0	4.1	7.415	A
D - Newbourne Rd East	314	78	1657	630	0.498	312	258	0.5	1.0	11.260	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1965	491	259	2484	0.791	1957	2412	1.9	3.7	6.741	A
B - Foxhall Rd West	612	153	2357	314	1.947	313	429	8.9	83.5	567.762	F
C - A12 South	2425	606	455	2402	1.009	2331	1854	4.1	27.6	32.533	D
D - Newbourne Rd East	384	96	1933	492	0.781	375	283	1.0	3.1	29.039	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1965	491	251	2489	0.789	1964	2438	3.7	3.7	6.854	A
B - Foxhall Rd West	612	153	2397	292	2.094	292	434	83.5	163.4	1537.198	F
C - A12 South	2425	606	461	2399	1.011	2369	1854	27.6	41.4	59.164	F
D - Newbourne Rd East	384	96	1932	492	0.780	383	283	3.1	3.3	32.414	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1604	401	304	2457	0.653	1611	2270	3.7	1.9	4.292	A
B - Foxhall Rd West	499	125	2141	434	1.152	434	371	163.4	179.9	1238.831	F
C - A12 South	1980	495	385	2443	0.810	2128	1591	41.4	4.5	16.742	C
D - Newbourne Rd East	314	78	1653	631	0.497	323	262	3.3	1.0	11.998	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1343	336	396	2402	0.559	1346	1971	1.9	1.3	3.415	A
B - Foxhall Rd West	418	105	1684	686	0.610	682	301	179.9	113.9	776.589	F
C - A12 South	1658	415	317	2483	0.668	1668	1441	4.5	2.0	4.469	A
D - Newbourne Rd East	263	66	1494	712	0.369	264	248	1.0	0.6	8.078	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.45	0.03	0.27	1.45	1.45			N/A	N/A
C - A12 South	1.98	0.18	1.09	3.67	4.68			N/A	N/A
D - Newbourne Rd East	0.52	0.52	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.87	0.04	0.43	5.02	8.60			N/A	N/A
B - Foxhall Rd West	8.94	0.07	1.20	25.95	41.60			N/A	N/A
C - A12 South	4.05	0.05	0.46	11.44	20.34			N/A	N/A
D - Newbourne Rd East	0.97	0.06	0.75	1.83	2.55			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.65	0.03	0.28	3.65	9.95			N/A	N/A
B - Foxhall Rd West	83.51	49.26	80.94	113.40	123.95			N/A	N/A
C - A12 South	27.55	1.01	17.55	65.11	86.17			N/A	N/A
D - Newbourne Rd East	3.10	0.04	0.37	7.74	16.54			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.69	0.03	0.27	3.69	3.69			N/A	N/A
B - Foxhall Rd West	163.42	162.05	162.50	163.42	163.42			N/A	N/A
C - A12 South	41.43	1.23	25.73	99.85	133.14			N/A	N/A
D - Newbourne Rd East	3.29	0.03	0.33	5.92	17.31			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.07	1.07	4.53	6.46			N/A	N/A
B - Foxhall Rd West	179.88	179.05	179.50	179.90	179.95			N/A	N/A
C - A12 South	4.53	0.04	0.43	12.50	23.51			N/A	N/A
D - Newbourne Rd East	1.01	0.04	0.41	2.49	4.01			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.05	0.45	3.20	5.04			N/A	N/A
B - Foxhall Rd West	113.89	66.96	110.51	155.25	169.82			N/A	N/A
C - A12 South	2.04	0.03	0.29	2.04	8.91			N/A	N/A
D - Newbourne Rd East	0.59	0.03	0.32	1.19	2.73			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	10.69	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1786	100.000
B - Foxhall Rd West		ONE HOUR	✓	429	100.000
C - A12 South		ONE HOUR	✓	1817	100.000
D - Newbourne Rd East		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	270	1374	140
	B - Foxhall Rd West	231	0	147	51
	C - A12 South	1537	218	1	62
	D - Newbourne Rd East	113	106	95	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	5
	B - Foxhall Rd West	4	0	6	6
	C - A12 South	8	5	0	1
	D - Newbourne Rd East	4	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.81	3.7	9.4	A	1639	2458
B - Foxhall Rd West	0.79	28.27	3.5	18.3	D	394	590
C - A12 South	0.82	8.27	4.5	17.0	A	1668	2501
D - Newbourne Rd East	0.70	23.52	2.2	10.6	C	289	434

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1345	336	195	2549	0.527	1340	1412	0.0	1.1	2.966	A
B - Foxhall Rd West	323	81	1287	912	0.354	321	446	0.0	0.5	6.062	A
C - A12 South	1368	342	369	2538	0.539	1364	1212	0.0	1.2	3.053	A
D - Newbourne Rd East	237	59	1345	820	0.289	236	190	0.0	0.4	6.141	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1606	401	234	2526	0.636	1603	1689	1.1	1.7	3.890	A
B - Foxhall Rd West	386	96	1539	780	0.495	384	533	0.5	1.0	9.058	A
C - A12 South	1634	408	441	2494	0.655	1631	1450	1.2	1.9	4.157	A
D - Newbourne Rd East	283	71	1609	685	0.414	282	228	0.4	0.7	8.907	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1966	492	283	2496	0.788	1959	2058	1.7	3.6	6.612	A
B - Foxhall Rd West	472	118	1878	601	0.785	463	650	1.0	3.2	24.598	C
C - A12 South	2001	500	537	2437	0.821	1991	1769	1.9	4.4	7.895	A
D - Newbourne Rd East	347	87	1965	503	0.690	342	277	0.7	2.1	21.577	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1966	492	287	2494	0.789	1966	2072	3.6	3.7	6.813	A
B - Foxhall Rd West	472	118	1888	596	0.792	471	654	3.2	3.5	28.269	D
C - A12 South	2001	500	542	2434	0.822	2000	1779	4.4	4.5	8.271	A
D - Newbourne Rd East	347	87	1974	499	0.696	347	279	2.1	2.2	23.522	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1606	401	240	2522	0.637	1613	1709	3.7	1.8	3.992	A
B - Foxhall Rd West	386	96	1553	772	0.499	396	539	3.5	1.0	9.801	A
C - A12 South	1634	408	448	2490	0.656	1644	1464	4.5	1.9	4.303	A
D - Newbourne Rd East	283	71	1623	678	0.418	289	230	2.2	0.7	9.380	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1345	336	198	2548	0.528	1347	1422	1.8	1.1	3.003	A
B - Foxhall Rd West	323	81	1294	908	0.355	325	449	1.0	0.6	6.189	A
C - A12 South	1368	342	372	2536	0.540	1371	1220	1.9	1.2	3.101	A
D - Newbourne Rd East	237	59	1353	816	0.291	239	192	0.7	0.4	6.242	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.16	0.55	1.04	1.29	1.29			N/A	N/A
D - Newbourne Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.72	0.04	0.42	4.62	7.96			N/A	N/A
B - Foxhall Rd West	0.96	0.05	0.63	1.91	2.76			N/A	N/A
C - A12 South	1.87	0.04	0.40	5.01	8.97			N/A	N/A
D - Newbourne Rd East	0.69	0.06	0.68	1.21	1.21			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.59	0.03	0.28	3.59	9.37			N/A	N/A
B - Foxhall Rd West	3.24	0.04	0.35	7.58	17.41			N/A	N/A
C - A12 South	4.37	0.03	0.29	4.37	17.02			N/A	N/A
D - Newbourne Rd East	2.06	0.03	0.30	2.67	9.95			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.66	0.03	0.27	3.66	3.66			N/A	N/A
B - Foxhall Rd West	3.52	0.03	0.32	5.91	18.27			N/A	N/A
C - A12 South	4.50	0.03	0.27	4.50	4.94			N/A	N/A
D - Newbourne Rd East	2.18	0.03	0.31	2.82	10.55			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.07	1.09	3.99	5.67			N/A	N/A
B - Foxhall Rd West	1.02	0.04	0.43	2.47	3.88			N/A	N/A
C - A12 South	1.93	0.06	0.92	4.81	7.08			N/A	N/A
D - Newbourne Rd East	0.73	0.05	0.47	1.41	1.94			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.04	0.43	2.78	4.44			N/A	N/A
B - Foxhall Rd West	0.56	0.03	0.31	1.04	2.56			N/A	N/A
C - A12 South	1.18	0.04	0.39	2.98	5.30			N/A	N/A
D - Newbourne Rd East	0.41	0.03	0.33	1.33	1.45			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	9.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1851	100.000
B - Foxhall Rd West		ONE HOUR	✓	414	100.000
C - A12 South		ONE HOUR	✓	1942	100.000
D - Newbourne Rd East		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	243	1476	131
	B - Foxhall Rd West	218	0	137	58
	C - A12 South	1571	334	1	36
	D - Newbourne Rd East	71	128	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	6	3
	B - Foxhall Rd West	0	0	0	5
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.70	3.7	9.6	A	1698	2547
B - Foxhall Rd West	0.68	16.96	2.1	8.4	C	380	570
C - A12 South	0.84	8.86	5.1	21.8	A	1782	2673
D - Newbourne Rd East	0.61	18.07	1.5	7.0	C	258	386

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1393	348	174	2624	0.531	1389	1396	0.0	1.1	2.905	A
B - Foxhall Rd West	312	78	1260	982	0.318	310	528	0.0	0.5	5.346	A
C - A12 South	1462	365	331	2636	0.555	1457	1272	0.0	1.2	3.041	A
D - Newbourne Rd East	211	53	1394	846	0.250	210	169	0.0	0.3	5.649	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1664	416	209	2603	0.639	1661	1670	1.1	1.8	3.815	A
B - Foxhall Rd West	372	93	1507	850	0.438	371	632	0.5	0.8	7.501	A
C - A12 South	1746	436	397	2597	0.672	1742	1522	1.2	2.0	4.200	A
D - Newbourne Rd East	252	63	1667	704	0.358	251	202	0.3	0.6	7.942	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2038	509	254	2575	0.791	2030	2036	1.8	3.7	6.511	A
B - Foxhall Rd West	456	114	1839	672	0.678	451	771	0.8	2.0	15.914	C
C - A12 South	2138	534	483	2544	0.840	2126	1859	2.0	5.0	8.387	A
D - Newbourne Rd East	309	77	2037	512	0.604	305	247	0.6	1.5	17.148	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2038	509	256	2574	0.792	2037	2048	3.7	3.7	6.702	A
B - Foxhall Rd West	456	114	1849	667	0.683	456	775	2.0	2.1	16.962	C
C - A12 South	2138	534	487	2542	0.841	2137	1867	5.0	5.1	8.863	A
D - Newbourne Rd East	309	77	2045	507	0.609	309	248	1.5	1.5	18.065	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1664	416	212	2601	0.640	1671	1687	3.7	1.8	3.905	A
B - Foxhall Rd West	372	93	1521	842	0.442	377	638	2.1	0.8	7.826	A
C - A12 South	1746	436	401	2594	0.673	1758	1534	5.1	2.1	4.368	A
D - Newbourne Rd East	252	63	1679	698	0.362	256	204	1.5	0.6	8.218	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1393	348	176	2623	0.531	1396	1405	1.8	1.1	2.940	A
B - Foxhall Rd West	312	78	1268	978	0.319	313	532	0.8	0.5	5.426	A
C - A12 South	1462	365	334	2635	0.555	1465	1280	2.1	1.3	3.086	A
D - Newbourne Rd East	211	53	1401	842	0.251	212	170	0.6	0.3	5.724	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C - A12 South	1.24	0.56	1.11	1.44	1.72			N/A	N/A
D - Newbourne Rd East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.04	0.41	4.69	8.18			N/A	N/A
B - Foxhall Rd West	0.77	0.06	0.72	1.06	1.61			N/A	N/A
C - A12 South	2.02	0.04	0.40	5.43	9.96			N/A	N/A
D - Newbourne Rd East	0.55	0.06	0.59	1.32	1.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.66	0.03	0.28	3.66	9.56			N/A	N/A
B - Foxhall Rd West	2.00	0.03	0.29	2.00	8.10			N/A	N/A
C - A12 South	4.98	0.03	0.30	4.98	21.83			N/A	N/A
D - Newbourne Rd East	1.45	0.03	0.28	1.45	4.23			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.73	0.03	0.27	3.73	3.73			N/A	N/A
B - Foxhall Rd West	2.09	0.03	0.29	2.09	8.36			N/A	N/A
C - A12 South	5.13	0.03	0.28	5.13	8.02			N/A	N/A
D - Newbourne Rd East	1.51	0.03	0.30	1.67	6.97			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.07	1.10	4.08	5.78			N/A	N/A
B - Foxhall Rd West	0.80	0.05	0.61	1.48	1.93			N/A	N/A
C - A12 South	2.09	0.06	0.82	5.40	8.14			N/A	N/A
D - Newbourne Rd East	0.57	0.05	0.49	1.35	1.46			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.04	0.43	2.82	4.54			N/A	N/A
B - Foxhall Rd West	0.47	0.04	0.35	1.40	1.53			N/A	N/A
C - A12 South	1.26	0.04	0.37	3.20	5.93			N/A	N/A
D - Newbourne Rd East	0.34	0.03	0.32	1.10	1.34			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	890	100.000
B - Foxhall Rd West		ONE HOUR	✓	211	100.000
C - A12 South		ONE HOUR	✓	746	100.000
D - Newbourne Rd East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	817	32
	B - Foxhall Rd West	105	0	82	24
	C - A12 South	678	37	0	32
	D - Newbourne Rd East	16	21	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	9
	C - A12 South	9	5	0	5
	D - Newbourne Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.20	0.6	2.8	A	816	1225
B - Foxhall Rd West	0.20	3.89	0.3	0.9	A	194	291
C - A12 South	0.31	1.96	0.4	1.7	A	685	1027
D - Newbourne Rd East	0.09	4.36	0.1	0.5	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	670	167	104	2648	0.253	668	600	0.0	0.3	1.818	A
B - Foxhall Rd West	159	40	545	1294	0.123	159	74	0.0	0.1	3.169	A
C - A12 South	562	140	58	2670	0.211	561	703	0.0	0.3	1.707	A
D - Newbourne Rd East	55	14	706	1058	0.052	55	66	0.0	0.1	3.590	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	800	200	124	2635	0.304	799	717	0.3	0.4	1.961	A
B - Foxhall Rd West	190	47	652	1237	0.154	190	89	0.1	0.2	3.438	A
C - A12 South	671	168	70	2663	0.252	671	840	0.3	0.3	1.806	A
D - Newbourne Rd East	66	17	844	994	0.066	66	79	0.1	0.1	3.880	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	980	245	152	2617	0.374	979	878	0.4	0.6	2.196	A
B - Foxhall Rd West	233	58	798	1158	0.201	232	109	0.2	0.3	3.887	A
C - A12 South	822	205	86	2653	0.310	821	1029	0.3	0.4	1.965	A
D - Newbourne Rd East	81	20	1034	906	0.089	81	97	0.1	0.1	4.363	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	980	245	152	2617	0.374	980	879	0.6	0.6	2.198	A
B - Foxhall Rd West	233	58	799	1158	0.201	233	109	0.3	0.3	3.889	A
C - A12 South	822	205	86	2653	0.310	822	1030	0.4	0.4	1.965	A
D - Newbourne Rd East	81	20	1035	906	0.089	81	97	0.1	0.1	4.364	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	800	200	125	2635	0.304	800	718	0.6	0.4	1.964	A
B - Foxhall Rd West	190	47	653	1236	0.154	190	89	0.3	0.2	3.441	A
C - A12 South	671	168	70	2663	0.252	672	842	0.4	0.3	1.810	A
D - Newbourne Rd East	66	17	845	993	0.066	66	79	0.1	0.1	3.885	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	670	167	104	2648	0.253	670	601	0.4	0.3	1.822	A
B - Foxhall Rd West	159	40	546	1293	0.123	159	74	0.2	0.1	3.177	A
C - A12 South	562	140	59	2669	0.211	562	705	0.3	0.3	1.707	A
D - Newbourne Rd East	55	14	708	1057	0.052	55	67	0.1	0.1	3.597	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.25	0.60	0.60			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.45	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.29	1.27	2.75			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.27	0.49	0.93			N/A	N/A
C - A12 South	0.45	0.03	0.33	1.39	1.72			N/A	N/A
D - Newbourne Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	16.10	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1627	100.000
B - Foxhall Rd West		ONE HOUR	✓	534	100.000
C - A12 South		ONE HOUR	✓	1663	100.000
D - Newbourne Rd East		ONE HOUR	✓	220	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	206	1360	61
	B - Foxhall Rd West	309	0	165	61
	C - A12 South	1521	93	0	49
	D - Newbourne Rd East	119	33	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	7	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	12	19	17	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	5.03	2.5	5.4	A	1493	2240
B - Foxhall Rd West	0.98	85.85	13.7	53.2	F	490	735
C - A12 South	0.74	5.50	2.8	6.0	A	1526	2289
D - Newbourne Rd East	0.48	13.89	0.9	4.4	B	202	302

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1225	306	205	2566	0.478	1222	1461	0.0	0.9	2.672	A
B - Foxhall Rd West	402	101	1267	920	0.437	399	249	0.0	0.8	6.868	A
C - A12 South	1252	313	268	2562	0.489	1248	1195	0.0	0.9	2.732	A
D - Newbourne Rd East	165	41	1299	780	0.212	164	128	0.0	0.3	5.836	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1463	366	245	2540	0.576	1461	1748	0.9	1.3	3.331	A
B - Foxhall Rd West	480	120	1516	786	0.611	477	298	0.8	1.5	11.539	B
C - A12 South	1495	374	321	2530	0.591	1493	1429	0.9	1.4	3.466	A
D - Newbourne Rd East	197	49	1554	662	0.298	197	153	0.3	0.4	7.729	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1792	448	287	2513	0.713	1787	2120	1.3	2.4	4.934	A
B - Foxhall Rd West	588	147	1853	604	0.973	554	364	1.5	10.0	53.270	F
C - A12 South	1831	458	392	2486	0.736	1825	1739	1.4	2.7	5.412	A
D - Newbourne Rd East	242	60	1891	505	0.479	240	184	0.4	0.9	13.464	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1792	448	296	2508	0.715	1792	2137	2.4	2.5	5.027	A
B - Foxhall Rd West	588	147	1859	601	0.978	573	365	10.0	13.7	85.851	F
C - A12 South	1831	458	394	2485	0.737	1831	1749	2.7	2.8	5.495	A
D - Newbourne Rd East	242	60	1901	501	0.483	242	186	0.9	0.9	13.885	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1463	366	267	2526	0.579	1467	1785	2.5	1.4	3.416	A
B - Foxhall Rd West	480	120	1524	782	0.614	528	299	13.7	1.7	16.851	C
C - A12 South	1495	374	324	2528	0.591	1500	1451	2.8	1.5	3.517	A
D - Newbourne Rd East	197	49	1575	652	0.303	199	159	0.9	0.4	7.989	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1225	306	208	2564	0.478	1227	1471	1.4	0.9	2.698	A
B - Foxhall Rd West	402	101	1274	917	0.439	406	250	1.7	0.8	7.090	A
C - A12 South	1252	313	270	2561	0.489	1254	1202	1.5	1.0	2.760	A
D - Newbourne Rd East	165	41	1306	777	0.213	166	129	0.4	0.3	5.902	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.77	0.22	0.94	1.39	1.45			N/A	N/A
C - A12 South	0.95	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.05	0.46	3.43	5.44			N/A	N/A
B - Foxhall Rd West	1.52	0.04	0.45	3.94	6.43			N/A	N/A
C - A12 South	1.43	0.04	0.44	3.72	6.05			N/A	N/A
D - Newbourne Rd East	0.42	0.00	0.00	0.42	0.42			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.44	0.03	0.27	2.44	2.44			N/A	N/A
B - Foxhall Rd West	9.97	0.20	4.93	25.18	34.81			N/A	N/A
C - A12 South	2.73	0.03	0.27	2.73	2.76			N/A	N/A
D - Newbourne Rd East	0.89	0.03	0.26	0.89	0.89			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.48	0.03	0.26	2.48	2.48			N/A	N/A
B - Foxhall Rd West	13.66	0.15	5.33	36.95	53.22			N/A	N/A
C - A12 South	2.76	0.03	0.26	2.76	2.76			N/A	N/A
D - Newbourne Rd East	0.92	0.03	0.30	1.28	4.44			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.14	1.20	2.35	2.92			N/A	N/A
B - Foxhall Rd West	1.65	0.03	0.34	3.86	8.58			N/A	N/A
C - A12 South	1.46	0.11	1.18	2.73	3.59			N/A	N/A
D - Newbourne Rd East	0.44	0.04	0.35	1.16	1.33			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.06	0.70	1.75	2.40			N/A	N/A
B - Foxhall Rd West	0.79	0.03	0.28	0.79	2.49			N/A	N/A
C - A12 South	0.96	0.05	0.58	1.95	2.86			N/A	N/A
D - Newbourne Rd East	0.27	0.03	0.26	0.47	0.50			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	224.34	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1886	100.000
B - Foxhall Rd West		ONE HOUR	✓	618	100.000
C - A12 South		ONE HOUR	✓	2202	100.000
D - Newbourne Rd East		ONE HOUR	✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	177	1583	127
	B - Foxhall Rd West	355	0	194	69
	C - A12 South	1926	166	1	109
	D - Newbourne Rd East	190	44	126	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	8	6	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	8.19	4.6	18.2	A	1731	2596
B - Foxhall Rd West	2.19	1709.95	208.1	208.1	F	567	850
C - A12 South	0.98	38.96	25.5	113.7	E	2021	3031
D - Newbourne Rd East	0.88	55.94	5.7	29.8	F	330	495

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1420	355	277	2500	0.568	1415	1848	0.0	1.3	3.300	A
B - Foxhall Rd West	465	116	1668	720	0.645	458	290	0.0	1.7	13.389	B
C - A12 South	1658	415	307	2552	0.650	1651	1426	0.0	1.8	3.962	A
D - Newbourne Rd East	271	68	1464	732	0.370	269	228	0.0	0.6	7.734	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1696	424	316	2477	0.685	1692	2188	1.3	2.1	4.571	A
B - Foxhall Rd West	555	139	1993	544	1.020	511	347	1.7	12.9	72.594	F
C - A12 South	1980	495	367	2516	0.787	1973	1694	1.8	3.6	6.545	A
D - Newbourne Rd East	323	81	1740	597	0.542	321	268	0.6	1.1	12.934	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2077	519	259	2511	0.827	2067	2458	2.1	4.6	7.947	A
B - Foxhall Rd West	680	170	2385	333	2.043	332	418	12.9	99.8	644.081	F
C - A12 South	2425	606	441	2472	0.981	2362	1973	3.6	19.3	24.699	C
D - Newbourne Rd East	396	99	2034	453	0.875	381	293	1.1	5.0	43.282	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2077	519	252	2515	0.826	2077	2485	4.6	4.6	8.188	A
B - Foxhall Rd West	680	170	2426	310	2.192	310	424	99.8	192.3	1709.949	F
C - A12 South	2425	606	450	2466	0.983	2400	1979	19.3	25.5	38.956	E
D - Newbourne Rd East	396	99	2036	452	0.876	393	293	5.0	5.7	55.942	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1696	424	313	2479	0.684	1705	2270	4.6	2.2	4.713	A
B - Foxhall Rd West	555	139	2090	492	1.129	492	357	192.3	208.1	1297.594	F
C - A12 South	1980	495	382	2507	0.790	2066	1706	25.5	3.9	9.738	A
D - Newbourne Rd East	323	81	1746	594	0.544	341	272	5.7	1.2	15.191	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1420	355	385	2435	0.583	1423	2008	2.2	1.4	3.570	A
B - Foxhall Rd West	465	116	1685	711	0.654	708	292	208.1	147.4	904.984	F
C - A12 South	1658	415	311	2550	0.650	1666	1513	3.9	1.9	4.110	A
D - Newbourne Rd East	271	68	1551	690	0.392	273	257	1.2	0.7	8.675	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.57	1.16	1.58	1.79			N/A	N/A
B - Foxhall Rd West	1.75	0.03	0.26	1.75	1.75			N/A	N/A
C - A12 South	1.83	0.24	1.05	3.08	3.89			N/A	N/A
D - Newbourne Rd East	0.58	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.14	0.04	0.42	5.81	10.20			N/A	N/A
B - Foxhall Rd West	12.92	0.10	3.42	36.64	55.37			N/A	N/A
C - A12 South	3.57	0.04	0.43	9.92	18.15			N/A	N/A
D - Newbourne Rd East	1.15	0.05	0.62	2.59	3.75			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.56	0.03	0.30	4.56	18.16			N/A	N/A
B - Foxhall Rd West	99.83	59.56	96.93	135.02	147.38			N/A	N/A
C - A12 South	19.30	0.16	7.33	52.92	76.71			N/A	N/A
D - Newbourne Rd East	4.96	0.06	1.04	14.13	22.74			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.63	0.03	0.27	4.63	4.66			N/A	N/A
B - Foxhall Rd West	192.30	191.05	191.50	192.30	192.30			N/A	N/A
C - A12 South	25.47	0.11	6.12	73.87	113.65			N/A	N/A
D - Newbourne Rd East	5.71	0.04	0.44	15.93	29.76			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.20	0.06	0.90	5.68	8.53			N/A	N/A
B - Foxhall Rd West	208.14	>199	>199	>199	>199			N/A	N/A
C - A12 South	3.91	0.04	0.43	10.83	19.99			N/A	N/A
D - Newbourne Rd East	1.23	0.04	0.36	3.10	5.90			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.41	0.04	0.40	3.70	6.42			N/A	N/A
B - Foxhall Rd West	147.38	>199	>199	>199	>199			N/A	N/A
C - A12 South	1.88	0.03	0.30	2.18	8.84			N/A	N/A
D - Newbourne Rd East	0.66	0.03	0.29	1.26	2.95			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	21.59	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1876	100.000
B - Foxhall Rd West		ONE HOUR	✓	535	100.000
C - A12 South		ONE HOUR	✓	1884	100.000
D - Newbourne Rd East		ONE HOUR	✓	332	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	310	1418	146
	B - Foxhall Rd West	331	0	148	56
	C - A12 South	1599	219	1	66
	D - Newbourne Rd East	117	96	118	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	5
	B - Foxhall Rd West	3	0	6	5
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	4	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	7.56	4.2	14.1	A	1721	2582
B - Foxhall Rd West	1.01	108.54	18.0	58.3	F	491	736
C - A12 South	0.84	9.31	5.2	22.8	A	1729	2594
D - Newbourne Rd East	0.77	32.07	3.1	16.4	D	305	457

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1412	353	203	2594	0.545	1408	1536	0.0	1.2	3.022	A
B - Foxhall Rd West	403	101	1339	907	0.444	400	469	0.0	0.8	7.044	A
C - A12 South	1419	355	394	2571	0.552	1414	1263	0.0	1.2	3.099	A
D - Newbourne Rd East	250	63	1409	803	0.311	248	201	0.0	0.4	6.467	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1686	422	242	2569	0.656	1684	1837	1.2	1.9	4.052	A
B - Foxhall Rd West	481	120	1602	771	0.624	478	561	0.8	1.6	12.145	B
C - A12 South	1694	424	472	2524	0.671	1691	1511	1.2	2.0	4.305	A
D - Newbourne Rd East	299	75	1685	664	0.450	297	241	0.4	0.8	9.777	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2066	516	282	2544	0.812	2057	2217	1.9	4.1	7.245	A
B - Foxhall Rd West	589	147	1952	588	1.001	548	683	1.6	11.9	61.372	F
C - A12 South	2075	519	573	2463	0.843	2063	1833	2.0	5.0	8.747	A
D - Newbourne Rd East	366	91	2048	481	0.761	358	290	0.8	2.8	27.625	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2066	516	289	2540	0.813	2065	2240	4.1	4.2	7.558	A
B - Foxhall Rd West	589	147	1964	582	1.012	564	688	11.9	18.0	108.541	F
C - A12 South	2075	519	579	2459	0.844	2074	1847	5.0	5.2	9.309	A
D - Newbourne Rd East	366	91	2061	475	0.771	365	293	2.8	3.1	32.073	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1686	422	269	2553	0.661	1696	1896	4.2	2.0	4.244	A
B - Foxhall Rd West	481	120	1619	762	0.631	546	568	18.0	1.8	21.768	C
C - A12 South	1694	424	480	2518	0.673	1707	1542	5.2	2.1	4.500	A
D - Newbourne Rd East	299	75	1715	649	0.460	308	250	3.1	0.9	10.806	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1412	353	206	2592	0.545	1415	1548	2.0	1.2	3.067	A
B - Foxhall Rd West	403	101	1348	903	0.446	407	472	1.8	0.8	7.306	A
C - A12 South	1419	355	398	2569	0.552	1422	1272	2.1	1.2	3.148	A
D - Newbourne Rd East	250	63	1418	799	0.313	252	203	0.9	0.5	6.604	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.19	0.55	1.04	1.35	1.35			N/A	N/A
B - Foxhall Rd West	0.79	0.16	0.92	1.40	1.46			N/A	N/A
C - A12 South	1.22	0.56	1.10	1.40	1.70			N/A	N/A
D - Newbourne Rd East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.89	0.04	0.41	5.06	8.99			N/A	N/A
B - Foxhall Rd West	1.60	0.04	0.44	4.23	6.93			N/A	N/A
C - A12 South	2.01	0.04	0.40	5.42	9.88			N/A	N/A
D - Newbourne Rd East	0.80	0.06	0.64	1.43	1.88			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.14	0.03	0.29	4.14	14.10			N/A	N/A
B - Foxhall Rd West	11.90	0.43	7.29	27.85	36.96			N/A	N/A
C - A12 South	5.04	0.03	0.31	5.04	22.83			N/A	N/A
D - Newbourne Rd East	2.81	0.03	0.35	6.48	15.04			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.25	0.03	0.27	4.25	4.25			N/A	N/A
B - Foxhall Rd West	18.03	0.48	10.74	43.50	58.30			N/A	N/A
C - A12 South	5.22	0.03	0.28	5.22	9.40			N/A	N/A
D - Newbourne Rd East	3.09	0.03	0.33	5.95	16.44			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.97	0.07	1.04	4.78	6.89			N/A	N/A
B - Foxhall Rd West	1.79	0.03	0.34	4.06	9.35			N/A	N/A
C - A12 South	2.08	0.06	0.79	5.43	8.23			N/A	N/A
D - Newbourne Rd East	0.87	0.04	0.43	1.94	3.03			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.04	0.40	3.05	5.20			N/A	N/A
B - Foxhall Rd West	0.82	0.03	0.27	0.82	2.04			N/A	N/A
C - A12 South	1.24	0.04	0.37	3.13	5.92			N/A	N/A
D - Newbourne Rd East	0.46	0.03	0.31	1.38	1.95			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	15.75	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2006	100.000
B - Foxhall Rd West		ONE HOUR	✓	455	100.000
C - A12 South		ONE HOUR	✓	2078	100.000
D - Newbourne Rd East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	349	1523	133
	B - Foxhall Rd West	255	0	137	62
	C - A12 South	1700	337	1	40
	D - Newbourne Rd East	72	116	109	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	4	1	0	4
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	8.64	5.2	21.6	A	1840	2761
B - Foxhall Rd West	0.84	34.82	4.6	24.8	D	418	626
C - A12 South	0.92	16.52	9.9	50.6	C	1907	2860
D - Newbourne Rd East	0.74	30.04	2.6	13.7	D	272	408

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1510	377	180	2674	0.565	1505	1520	0.0	1.3	3.064	A
B - Foxhall Rd West	343	86	1360	934	0.367	340	601	0.0	0.6	6.038	A
C - A12 South	1564	391	403	2610	0.599	1558	1328	0.0	1.5	3.404	A
D - Newbourne Rd East	223	56	1508	803	0.278	222	177	0.0	0.4	6.182	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1803	451	215	2653	0.680	1800	1818	1.3	2.1	4.206	A
B - Foxhall Rd West	409	102	1626	793	0.516	407	719	0.6	1.0	9.289	A
C - A12 South	1868	467	482	2562	0.729	1863	1588	1.5	2.6	5.121	A
D - Newbourne Rd East	267	67	1804	652	0.409	265	211	0.4	0.7	9.287	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2208	552	259	2625	0.841	2197	2204	2.1	5.0	8.182	A
B - Foxhall Rd West	501	125	1973	609	0.823	489	873	1.0	3.9	27.915	D
C - A12 South	2288	572	585	2499	0.916	2262	1934	2.6	9.1	13.903	B
D - Newbourne Rd East	327	82	2199	450	0.725	320	256	0.7	2.4	26.318	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2208	552	264	2623	0.842	2208	2229	5.0	5.2	8.644	A
B - Foxhall Rd West	501	125	1994	598	0.838	499	881	3.9	4.6	34.823	D
C - A12 South	2288	572	591	2495	0.917	2284	1948	9.1	9.9	16.518	C
D - Newbourne Rd East	327	82	2213	444	0.736	326	259	2.4	2.6	30.043	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1803	451	223	2648	0.681	1815	1856	5.2	2.2	4.384	A
B - Foxhall Rd West	409	102	1656	777	0.527	423	730	4.6	1.1	10.537	B
C - A12 South	1868	467	490	2557	0.731	1897	1607	9.9	2.8	5.684	A
D - Newbourne Rd East	267	67	1823	642	0.415	274	215	2.6	0.7	9.967	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1510	377	182	2673	0.565	1513	1533	2.2	1.3	3.115	A
B - Foxhall Rd West	343	86	1370	929	0.369	345	605	1.1	0.6	6.186	A
C - A12 South	1564	391	406	2608	0.600	1569	1336	2.8	1.5	3.485	A
D - Newbourne Rd East	223	56	1518	798	0.280	225	178	0.7	0.4	6.296	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.56	1.15	1.58	1.79			N/A	N/A
B - Foxhall Rd West	0.57	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.48	0.53	1.37	1.95	2.45			N/A	N/A
D - Newbourne Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.09	0.04	0.40	5.63	10.35			N/A	N/A
B - Foxhall Rd West	1.04	0.05	0.55	2.30	3.38			N/A	N/A
C - A12 South	2.64	0.04	0.40	7.06	13.40			N/A	N/A
D - Newbourne Rd East	0.68	0.06	0.61	1.38	1.38			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.01	0.03	0.30	5.01	21.64			N/A	N/A
B - Foxhall Rd West	3.95	0.04	0.40	10.57	20.91			N/A	N/A
C - A12 South	9.13	0.04	0.42	24.18	49.90			N/A	N/A
D - Newbourne Rd East	2.38	0.03	0.33	4.66	12.61			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.17	0.03	0.28	5.17	7.54			N/A	N/A
B - Foxhall Rd West	4.55	0.04	0.35	10.19	24.78			N/A	N/A
C - A12 South	9.95	0.03	0.33	15.19	50.62			N/A	N/A
D - Newbourne Rd East	2.60	0.03	0.32	4.82	13.68			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.17	0.06	0.86	5.62	8.47			N/A	N/A
B - Foxhall Rd West	1.14	0.04	0.41	2.86	4.76			N/A	N/A
C - A12 South	2.77	0.05	0.46	7.71	13.16			N/A	N/A
D - Newbourne Rd East	0.72	0.04	0.43	1.52	2.22			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.04	0.38	3.37	6.18			N/A	N/A
B - Foxhall Rd West	0.59	0.03	0.30	1.45	2.78			N/A	N/A
C - A12 South	1.51	0.03	0.32	2.96	7.86			N/A	N/A
D - Newbourne Rd East	0.39	0.03	0.31	1.28	1.56			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	891	100.000
B - Foxhall Rd West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	884	100.000
D - Newbourne Rd East		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	818	32
	B - Foxhall Rd West	112	0	82	24
	C - A12 South	816	37	0	32
	D - Newbourne Rd East	18	21	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	9
	C - A12 South	11	5	0	5
	D - Newbourne Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.20	0.6	2.8	A	817	1226
B - Foxhall Rd West	0.22	4.33	0.3	1.2	A	200	300
C - A12 South	0.37	2.18	0.6	2.7	A	812	1217
D - Newbourne Rd East	0.09	4.36	0.1	0.5	A	69	104

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	671	168	104	2648	0.253	669	710	0.0	0.3	1.819	A
B - Foxhall Rd West	164	41	650	1236	0.133	164	74	0.0	0.2	3.355	A
C - A12 South	666	166	60	2643	0.252	665	703	0.0	0.3	1.820	A
D - Newbourne Rd East	57	14	707	1061	0.054	57	66	0.0	0.1	3.584	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	801	200	124	2635	0.304	800	849	0.3	0.4	1.962	A
B - Foxhall Rd West	196	49	778	1167	0.168	196	89	0.2	0.2	3.706	A
C - A12 South	795	199	72	2636	0.302	795	841	0.3	0.4	1.955	A
D - Newbourne Rd East	68	17	845	997	0.068	68	79	0.1	0.1	3.875	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	981	245	152	2617	0.375	980	1040	0.4	0.6	2.197	A
B - Foxhall Rd West	240	60	952	1073	0.224	240	109	0.2	0.3	4.321	A
C - A12 South	974	243	88	2626	0.371	973	1030	0.4	0.6	2.178	A
D - Newbourne Rd East	83	21	1035	908	0.091	83	97	0.1	0.1	4.361	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	981	245	152	2617	0.375	981	1041	0.6	0.6	2.199	A
B - Foxhall Rd West	240	60	953	1072	0.224	240	109	0.3	0.3	4.326	A
C - A12 South	974	243	88	2626	0.371	974	1031	0.6	0.6	2.178	A
D - Newbourne Rd East	83	21	1036	908	0.091	83	97	0.1	0.1	4.362	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	801	200	125	2635	0.304	801	851	0.6	0.4	1.965	A
B - Foxhall Rd West	196	49	779	1167	0.168	197	89	0.3	0.2	3.714	A
C - A12 South	795	199	72	2636	0.302	796	843	0.6	0.4	1.958	A
D - Newbourne Rd East	68	17	846	996	0.068	68	80	0.1	0.1	3.880	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	671	168	104	2648	0.253	671	712	0.4	0.3	1.820	A
B - Foxhall Rd West	164	41	652	1235	0.133	165	74	0.2	0.2	3.364	A
C - A12 South	666	166	60	2643	0.252	666	705	0.4	0.3	1.823	A
D - Newbourne Rd East	57	14	709	1060	0.054	57	67	0.1	0.1	3.591	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Foxhall Rd West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.25	0.60	0.60			N/A	N/A
B - Foxhall Rd West	0.29	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.59	0.03	0.25	0.59	0.59			N/A	N/A
D - Newbourne Rd East	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.29	1.27	2.75			N/A	N/A
B - Foxhall Rd West	0.29	0.03	0.30	0.93	1.23			N/A	N/A
C - A12 South	0.59	0.03	0.29	1.30	2.73			N/A	N/A
D - Newbourne Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Foxhall Rd West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	36.96	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1632	100.000
B - Foxhall Rd West		ONE HOUR	✓	542	100.000
C - A12 South		ONE HOUR	✓	1764	100.000
D - Newbourne Rd East		ONE HOUR	✓	222	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	196	1375	61
	B - Foxhall Rd West	317	0	165	61
	C - A12 South	1622	93	0	49
	D - Newbourne Rd East	121	33	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	11	5	0	12
	D - Newbourne Rd East	12	19	17	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.97	2.5	5.5	A	1498	2247
B - Foxhall Rd West	1.16	248.69	45.7	85.0	F	497	746
C - A12 South	0.80	7.33	3.9	11.7	A	1618	2428
D - Newbourne Rd East	0.48	13.66	0.9	4.4	B	203	305

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1229	307	205	2562	0.480	1225	1544	0.0	0.9	2.687	A
B - Foxhall Rd West	408	102	1344	862	0.473	405	241	0.0	0.9	7.803	A
C - A12 South	1328	332	262	2505	0.530	1323	1206	0.0	1.1	3.035	A
D - Newbourne Rd East	167	42	1302	779	0.214	166	128	0.0	0.3	5.866	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	244	2536	0.579	1466	1846	0.9	1.4	3.356	A
B - Foxhall Rd West	487	122	1608	717	0.680	483	289	0.9	2.0	15.091	C
C - A12 South	1586	396	314	2475	0.641	1583	1442	1.1	1.8	4.026	A
D - Newbourne Rd East	199	50	1558	660	0.302	199	153	0.3	0.4	7.793	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1797	449	264	2524	0.712	1793	2206	1.4	2.4	4.896	A
B - Foxhall Rd West	597	149	1964	520	1.147	505	353	2.0	24.9	114.361	F
C - A12 South	1942	485	383	2433	0.798	1934	1738	1.8	3.8	7.093	A
D - Newbourne Rd East	244	61	1880	510	0.478	242	177	0.4	0.9	13.334	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1797	449	267	2522	0.713	1797	2219	2.4	2.5	4.966	A
B - Foxhall Rd West	597	149	1972	516	1.157	513	354	24.9	45.7	248.689	F
C - A12 South	1942	485	385	2432	0.798	1942	1745	3.8	3.9	7.326	A
D - Newbourne Rd East	244	61	1886	507	0.481	244	178	0.9	0.9	13.661	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	318	2489	0.590	1472	1961	2.5	1.4	3.549	A
B - Foxhall Rd West	487	122	1620	710	0.686	660	291	45.7	2.6	115.287	F
C - A12 South	1586	396	316	2473	0.641	1594	1502	3.9	1.8	4.131	A
D - Newbourne Rd East	199	50	1617	632	0.315	201	173	0.9	0.5	8.388	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1229	307	209	2559	0.480	1231	1557	1.4	0.9	2.714	A
B - Foxhall Rd West	408	102	1352	858	0.476	415	243	2.6	0.9	8.238	A
C - A12 South	1328	332	264	2504	0.530	1330	1214	1.8	1.1	3.073	A
D - Newbourne Rd East	167	42	1311	774	0.215	168	129	0.5	0.3	5.941	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.88	0.07	0.76	1.56	1.95			N/A	N/A
C - A12 South	1.12	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.05	0.46	3.47	5.49			N/A	N/A
B - Foxhall Rd West	2.02	0.04	0.42	5.47	9.54			N/A	N/A
C - A12 South	1.76	0.04	0.41	4.72	8.20			N/A	N/A
D - Newbourne Rd East	0.43	0.00	0.00	0.43	0.43			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.43	0.03	0.27	2.43	2.43			N/A	N/A
B - Foxhall Rd West	24.91	6.88	21.96	42.79	50.38			N/A	N/A
C - A12 South	3.81	0.03	0.29	3.81	11.74			N/A	N/A
D - Newbourne Rd East	0.89	0.03	0.26	0.89	0.89			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.46	0.03	0.26	2.46	2.46			N/A	N/A
B - Foxhall Rd West	45.74	16.68	42.00	73.79	84.99			N/A	N/A
C - A12 South	3.88	0.03	0.27	3.88	3.88			N/A	N/A
D - Newbourne Rd East	0.91	0.03	0.30	1.19	4.36			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.16	1.26	2.44	2.97			N/A	N/A
B - Foxhall Rd West	2.61	0.03	0.33	5.46	13.94			N/A	N/A
C - A12 South	1.81	0.07	1.03	4.26	6.06			N/A	N/A
D - Newbourne Rd East	0.47	0.04	0.39	1.23	1.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.06	0.71	1.76	2.43			N/A	N/A
B - Foxhall Rd West	0.92	0.03	0.26	0.92	0.92			N/A	N/A
C - A12 South	1.14	0.04	0.42	2.85	4.70			N/A	N/A
D - Newbourne Rd East	0.28	0.03	0.26	0.47	0.50			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	215.45	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1905	100.000
B - Foxhall Rd West		ONE HOUR	✓	569	100.000
C - A12 South		ONE HOUR	✓	2223	100.000
D - Newbourne Rd East		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	175	1603	128
	B - Foxhall Rd West	306	0	194	69
	C - A12 South	1947	166	1	109
	D - Newbourne Rd East	191	54	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	10	8	0	7
	D - Newbourne Rd East	8	5	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	8.91	5.1	22.0	A	1748	2623
B - Foxhall Rd West	2.17	1671.33	199.3	199.3	F	522	783
C - A12 South	1.02	63.84	45.9	137.8	F	2040	3060
D - Newbourne Rd East	0.91	70.56	7.2	34.9	F	331	497

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1434	359	277	2485	0.577	1429	1828	0.0	1.4	3.393	A
B - Foxhall Rd West	428	107	1684	690	0.621	422	296	0.0	1.6	13.145	B
C - A12 South	1674	418	314	2492	0.672	1666	1433	0.0	2.0	4.317	A
D - Newbourne Rd East	272	68	1478	721	0.377	269	229	0.0	0.6	7.927	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1713	428	317	2461	0.696	1709	2167	1.4	2.3	4.766	A
B - Foxhall Rd West	511	128	2012	509	1.004	472	354	1.6	11.3	69.882	F
C - A12 South	1999	500	375	2456	0.814	1990	1703	2.0	4.2	7.591	A
D - Newbourne Rd East	324	81	1757	584	0.555	322	270	0.6	1.2	13.608	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2098	524	259	2495	0.841	2087	2422	2.3	5.0	8.588	A
B - Foxhall Rd West	626	157	2371	310	2.017	310	423	11.3	90.3	627.400	F
C - A12 South	2448	612	448	2413	1.015	2347	1984	4.2	29.5	34.018	D
D - Newbourne Rd East	397	99	2054	437	0.909	378	293	1.2	6.0	50.602	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2098	524	251	2500	0.839	2097	2449	5.0	5.1	8.908	A
B - Foxhall Rd West	626	157	2412	288	2.172	288	429	90.3	174.8	1671.329	F
C - A12 South	2448	612	458	2407	1.017	2382	1990	29.5	45.9	63.838	F
D - Newbourne Rd East	397	99	2056	436	0.912	392	292	6.0	7.2	70.564	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1713	428	298	2472	0.693	1724	2301	5.1	2.3	4.880	A
B - Foxhall Rd West	511	128	2186	413	1.238	413	372	174.8	199.3	1351.677	F
C - A12 South	1999	500	394	2444	0.818	2163	1704	45.9	4.8	20.076	C
D - Newbourne Rd East	324	81	1750	587	0.553	348	272	7.2	1.3	16.497	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1434	359	396	2414	0.594	1438	1983	2.3	1.5	3.703	A
B - Foxhall Rd West	428	107	1704	679	0.631	675	299	199.3	137.5	899.139	F
C - A12 South	1674	418	318	2490	0.672	1685	1529	4.8	2.1	4.531	A
D - Newbourne Rd East	272	68	1572	676	0.402	274	261	1.3	0.7	9.013	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.57	1.23	1.68	1.85			N/A	N/A
B - Foxhall Rd West	1.57	0.03	0.26	1.57	1.57			N/A	N/A
C - A12 South	2.02	0.18	1.10	3.79	4.85			N/A	N/A
D - Newbourne Rd East	0.60	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.25	0.04	0.42	6.14	10.84			N/A	N/A
B - Foxhall Rd West	11.27	0.09	2.51	32.32	49.72			N/A	N/A
C - A12 South	4.19	0.05	0.46	11.86	20.93			N/A	N/A
D - Newbourne Rd East	1.21	0.05	0.56	2.82	4.18			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.98	0.03	0.30	4.98	22.05			N/A	N/A
B - Foxhall Rd West	90.30	53.04	87.52	122.91	134.42			N/A	N/A
C - A12 South	29.50	1.47	19.85	67.70	88.39			N/A	N/A
D - Newbourne Rd East	5.96	0.08	1.49	16.49	24.78			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.08	0.03	0.28	5.08	7.40			N/A	N/A
B - Foxhall Rd West	174.77	174.05	174.50	174.90	174.95			N/A	N/A
C - A12 South	45.89	1.79	31.16	105.58	137.75			N/A	N/A
D - Newbourne Rd East	7.23	0.06	1.08	21.00	34.91			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.29	0.06	0.76	6.07	9.38			N/A	N/A
B - Foxhall Rd West	199.35	>199	>199	>199	>199			N/A	N/A
C - A12 South	4.80	0.04	0.44	13.37	24.79			N/A	N/A
D - Newbourne Rd East	1.28	0.03	0.35	3.08	6.41			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.48	0.04	0.39	3.87	6.95			N/A	N/A
B - Foxhall Rd West	137.53	>199	>199	>199	>199			N/A	N/A
C - A12 South	2.08	0.03	0.29	2.08	8.98			N/A	N/A
D - Newbourne Rd East	0.68	0.03	0.29	1.04	2.84			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	26.36	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1924	100.000
B - Foxhall Rd West		ONE HOUR	✓	506	100.000
C - A12 South		ONE HOUR	✓	1927	100.000
D - Newbourne Rd East		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	313	1461	148
	B - Foxhall Rd West	302	0	148	56
	C - A12 South	1642	219	1	66
	D - Newbourne Rd East	117	95	120	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	5
	B - Foxhall Rd West	3	0	6	5
	C - A12 South	8	5	0	1
	D - Newbourne Rd East	4	6	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	9.24	5.3	23.1	A	1766	2648
B - Foxhall Rd West	1.04	133.97	21.8	60.6	F	464	696
C - A12 South	0.88	12.30	7.0	35.4	B	1769	2653
D - Newbourne Rd East	0.84	47.86	4.5	24.3	E	306	459

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	203	2556	0.567	1443	1546	0.0	1.3	3.223	A
B - Foxhall Rd West	381	95	1371	874	0.436	378	470	0.0	0.8	7.218	A
C - A12 South	1451	363	396	2519	0.576	1446	1296	0.0	1.3	3.338	A
D - Newbourne Rd East	251	63	1443	775	0.324	249	203	0.0	0.5	6.816	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1730	432	242	2531	0.683	1726	1849	1.3	2.1	4.453	A
B - Foxhall Rd West	455	114	1639	731	0.622	451	563	0.8	1.6	12.723	B
C - A12 South	1733	433	473	2473	0.701	1729	1551	1.3	2.3	4.813	A
D - Newbourne Rd East	300	75	1726	631	0.475	298	243	0.5	0.9	10.771	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2118	530	279	2509	0.844	2106	2225	2.1	5.1	8.693	A
B - Foxhall Rd West	557	139	1993	543	1.025	510	684	1.6	13.3	70.768	F
C - A12 South	2122	531	572	2414	0.879	2105	1877	2.3	6.6	11.070	B
D - Newbourne Rd East	367	92	2094	442	0.830	355	291	0.9	3.9	37.214	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2118	530	285	2505	0.846	2118	2249	5.1	5.3	9.239	A
B - Foxhall Rd West	557	139	2011	534	1.043	523	690	13.3	21.8	133.969	F
C - A12 South	2122	531	580	2410	0.881	2121	1893	6.6	7.0	12.302	B
D - Newbourne Rd East	367	92	2108	435	0.844	364	294	3.9	4.5	47.862	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1730	432	276	2510	0.689	1742	1923	5.3	2.3	4.758	A
B - Foxhall Rd West	455	114	1665	718	0.634	535	572	21.8	1.8	28.509	D
C - A12 South	1733	433	486	2465	0.703	1751	1592	7.0	2.4	5.163	A
D - Newbourne Rd East	300	75	1764	611	0.490	314	254	4.5	1.0	12.665	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	206	2554	0.567	1452	1560	2.3	1.3	3.278	A
B - Foxhall Rd West	381	95	1381	869	0.439	385	474	1.8	0.8	7.506	A
C - A12 South	1451	363	400	2517	0.577	1455	1307	2.4	1.4	3.403	A
D - Newbourne Rd East	251	63	1453	770	0.326	253	205	1.0	0.5	6.987	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.57	1.17	1.60	1.80			N/A	N/A
B - Foxhall Rd West	0.76	0.12	0.87	1.40	1.47			N/A	N/A
C - A12 South	1.35	0.56	1.24	1.73	1.89			N/A	N/A
D - Newbourne Rd East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.04	0.41	5.75	10.42			N/A	N/A
B - Foxhall Rd West	1.59	0.04	0.43	4.18	6.94			N/A	N/A
C - A12 South	2.30	0.04	0.40	6.20	11.49			N/A	N/A
D - Newbourne Rd East	0.89	0.05	0.53	1.80	2.60			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.11	0.03	0.31	5.11	23.12			N/A	N/A
B - Foxhall Rd West	13.30	0.92	9.19	29.17	37.59			N/A	N/A
C - A12 South	6.59	0.03	0.34	12.63	35.41			N/A	N/A
D - Newbourne Rd East	3.89	0.05	0.45	10.94	19.53			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.29	0.03	0.28	5.29	9.26			N/A	N/A
B - Foxhall Rd West	21.78	1.21	15.67	47.40	60.65			N/A	N/A
C - A12 South	6.97	0.03	0.29	6.97	25.11			N/A	N/A
D - Newbourne Rd East	4.54	0.04	0.40	12.03	24.34			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.25	0.06	0.87	5.87	8.88			N/A	N/A
B - Foxhall Rd West	1.82	0.03	0.34	4.01	9.58			N/A	N/A
C - A12 South	2.41	0.05	0.50	6.59	10.62			N/A	N/A
D - Newbourne Rd East	0.99	0.04	0.39	2.45	4.16			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.04	0.37	3.38	6.35			N/A	N/A
B - Foxhall Rd West	0.79	0.03	0.27	0.79	1.53			N/A	N/A
C - A12 South	1.37	0.03	0.34	3.19	7.00			N/A	N/A
D - Newbourne Rd East	0.49	0.03	0.29	1.16	2.20			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	17.11	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2015	100.000
B - Foxhall Rd West		ONE HOUR	✓	450	100.000
C - A12 South		ONE HOUR	✓	2076	100.000
D - Newbourne Rd East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	364	1516	134
	B - Foxhall Rd West	250	0	137	62
	C - A12 South	1698	337	1	40
	D - Newbourne Rd East	72	110	115	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	5	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	4	1	0	4
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	9.85	5.9	27.4	A	1849	2773
B - Foxhall Rd West	0.84	34.76	4.5	24.5	D	413	620
C - A12 South	0.92	17.80	10.7	56.7	C	1905	2857
D - Newbourne Rd East	0.78	36.60	3.1	16.9	E	272	408

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1517	379	180	2632	0.576	1511	1515	0.0	1.3	3.197	A
B - Foxhall Rd West	339	85	1358	930	0.364	337	607	0.0	0.6	6.039	A
C - A12 South	1563	391	409	2591	0.603	1557	1327	0.0	1.5	3.461	A
D - Newbourne Rd East	223	56	1514	787	0.284	222	177	0.0	0.4	6.348	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1811	453	215	2610	0.694	1808	1812	1.3	2.2	4.466	A
B - Foxhall Rd West	405	101	1624	788	0.513	403	727	0.6	1.0	9.290	A
C - A12 South	1866	467	490	2542	0.734	1861	1587	1.5	2.7	5.248	A
D - Newbourne Rd East	267	67	1811	633	0.421	265	212	0.4	0.7	9.748	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2218	555	259	2583	0.859	2204	2194	2.2	5.7	9.183	A
B - Foxhall Rd West	496	124	1969	604	0.820	484	882	1.0	3.9	27.785	D
C - A12 South	2285	571	594	2479	0.922	2257	1931	2.7	9.7	14.683	B
D - Newbourne Rd East	327	82	2206	429	0.762	318	257	0.7	2.8	30.632	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2218	555	264	2581	0.860	2217	2220	5.7	5.9	9.850	A
B - Foxhall Rd West	496	124	1991	592	0.836	493	891	3.9	4.5	34.756	D
C - A12 South	2285	571	600	2475	0.923	2281	1946	9.7	10.7	17.798	C
D - Newbourne Rd East	327	82	2221	421	0.776	325	260	2.8	3.1	36.599	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1811	453	223	2606	0.695	1825	1852	5.9	2.3	4.698	A
B - Foxhall Rd West	405	101	1657	771	0.525	418	740	4.5	1.1	10.575	B
C - A12 South	1866	467	499	2537	0.736	1897	1609	10.7	2.8	5.897	A
D - Newbourne Rd East	267	67	1832	622	0.428	276	216	3.1	0.8	10.666	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1517	379	182	2630	0.577	1521	1527	2.3	1.4	3.254	A
B - Foxhall Rd West	339	85	1369	925	0.366	341	612	1.1	0.6	6.186	A
C - A12 South	1563	391	413	2589	0.604	1568	1336	2.8	1.5	3.542	A
D - Newbourne Rd East	223	56	1524	782	0.286	225	179	0.8	0.4	6.479	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.57	1.23	1.70	1.86			N/A	N/A
B - Foxhall Rd West	0.57	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.50	0.52	1.38	1.99	2.57			N/A	N/A
D - Newbourne Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.23	0.04	0.40	5.99	11.10			N/A	N/A
B - Foxhall Rd West	1.03	0.05	0.55	2.25	3.29			N/A	N/A
C - A12 South	2.70	0.04	0.40	7.26	13.72			N/A	N/A
D - Newbourne Rd East	0.71	0.05	0.57	1.10	1.67			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.67	0.03	0.32	7.19	27.39			N/A	N/A
B - Foxhall Rd West	3.88	0.04	0.40	10.33	20.62			N/A	N/A
C - A12 South	9.69	0.04	0.44	26.64	52.48			N/A	N/A
D - Newbourne Rd East	2.79	0.04	0.36	6.72	14.86			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.89	0.03	0.28	5.89	13.29			N/A	N/A
B - Foxhall Rd West	4.49	0.04	0.35	10.03	24.46			N/A	N/A
C - A12 South	10.68	0.03	0.35	19.15	56.72			N/A	N/A
D - Newbourne Rd East	3.13	0.03	0.35	6.97	16.86			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.32	0.05	0.72	6.19	9.64			N/A	N/A
B - Foxhall Rd West	1.13	0.04	0.41	2.83	4.69			N/A	N/A
C - A12 South	2.85	0.05	0.45	7.91	13.64			N/A	N/A
D - Newbourne Rd East	0.76	0.04	0.41	1.73	2.71			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.37	0.04	0.36	3.45	6.75			N/A	N/A
B - Foxhall Rd West	0.58	0.03	0.30	1.45	2.75			N/A	N/A
C - A12 South	1.54	0.03	0.32	2.89	7.96			N/A	N/A
D - Newbourne Rd East	0.40	0.03	0.30	1.25	1.74			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	924	100.000
B - Foxhall Rd West		ONE HOUR	✓	263	100.000
C - A12 South		ONE HOUR	✓	793	100.000
D - Newbourne Rd East		ONE HOUR	✓	78	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	850	33
	B - Foxhall Rd West	153	0	83	27
	C - A12 South	721	38	0	35
	D - Newbourne Rd East	17	23	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	9	5	0	4
	D - Newbourne Rd East	0	14	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.26	0.6	2.7	A	848	1271
B - Foxhall Rd West	0.25	4.24	0.3	1.4	A	242	362
C - A12 South	0.33	2.02	0.5	2.0	A	728	1092
D - Newbourne Rd East	0.10	4.45	0.1	0.5	A	72	108

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	695	174	109	2644	0.263	694	669	0.0	0.4	1.846	A
B - Foxhall Rd West	198	50	580	1284	0.154	198	76	0.0	0.2	3.312	A
C - A12 South	597	149	61	2675	0.223	596	730	0.0	0.3	1.731	A
D - Newbourne Rd East	59	15	731	1054	0.056	59	72	0.0	0.1	3.616	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	830	208	131	2631	0.316	830	800	0.4	0.5	1.999	A
B - Foxhall Rd West	237	59	694	1223	0.194	236	92	0.2	0.2	3.649	A
C - A12 South	713	178	73	2668	0.267	713	873	0.3	0.4	1.840	A
D - Newbourne Rd East	71	18	875	987	0.071	70	86	0.1	0.1	3.925	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1017	254	160	2612	0.389	1016	980	0.5	0.6	2.255	A
B - Foxhall Rd West	290	72	850	1139	0.254	290	112	0.2	0.3	4.235	A
C - A12 South	874	218	89	2658	0.329	873	1069	0.4	0.5	2.016	A
D - Newbourne Rd East	86	22	1071	896	0.096	86	105	0.1	0.1	4.446	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1017	254	160	2612	0.389	1017	980	0.6	0.6	2.257	A
B - Foxhall Rd West	290	72	850	1139	0.255	290	112	0.3	0.3	4.239	A
C - A12 South	874	218	89	2658	0.329	874	1069	0.5	0.5	2.016	A
D - Newbourne Rd East	86	22	1072	895	0.096	86	105	0.1	0.1	4.448	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	830	208	131	2630	0.316	831	801	0.6	0.5	2.001	A
B - Foxhall Rd West	237	59	695	1222	0.194	237	92	0.3	0.2	3.654	A
C - A12 South	713	178	73	2668	0.267	714	874	0.5	0.4	1.841	A
D - Newbourne Rd East	71	18	876	987	0.071	71	86	0.1	0.1	3.930	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	695	174	110	2644	0.263	696	671	0.5	0.4	1.847	A
B - Foxhall Rd West	198	50	582	1283	0.154	198	77	0.2	0.2	3.318	A
C - A12 South	597	149	61	2675	0.223	598	732	0.4	0.3	1.735	A
D - Newbourne Rd East	59	15	733	1053	0.056	59	72	0.1	0.1	3.620	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Foxhall Rd West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	0.36	0.00	0.00	0.36	0.36			N/A	N/A
D - Newbourne Rd East	0.08	0.03	0.25	0.46	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.03	0.25	0.64	0.64			N/A	N/A
B - Foxhall Rd West	0.34	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Newbourne Rd East	0.11	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.03	0.29	1.08	2.73			N/A	N/A
B - Foxhall Rd West	0.34	0.03	0.32	1.15	1.41			N/A	N/A
C - A12 South	0.49	0.03	0.31	1.44	2.04			N/A	N/A
D - Newbourne Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Foxhall Rd West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Newbourne Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	39.86	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1748	100.000
B - Foxhall Rd West		ONE HOUR	✓	595	100.000
C - A12 South		ONE HOUR	✓	1742	100.000
D - Newbourne Rd East		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	240	1445	63
	B - Foxhall Rd West	360	0	166	70
	C - A12 South	1595	94	0	53
	D - Newbourne Rd East	121	37	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	7	5	0	11
	D - Newbourne Rd East	12	17	17	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	5.82	3.1	7.0	A	1604	2407
B - Foxhall Rd West	1.16	252.02	50.8	92.1	F	546	819
C - A12 South	0.77	6.37	3.3	7.3	A	1598	2397
D - Newbourne Rd East	0.55	17.40	1.2	5.7	C	211	316

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1316	329	215	2585	0.509	1312	1556	0.0	1.0	2.818	A
B - Foxhall Rd West	448	112	1327	896	0.500	444	278	0.0	1.0	7.892	A
C - A12 South	1311	328	298	2567	0.511	1307	1262	0.0	1.0	2.847	A
D - Newbourne Rd East	173	43	1389	746	0.232	172	139	0.0	0.3	6.256	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1572	393	257	2558	0.614	1570	1860	1.0	1.6	3.634	A
B - Foxhall Rd West	535	134	1588	757	0.707	530	333	1.0	2.3	15.503	C
C - A12 South	1566	391	357	2531	0.619	1563	1509	1.0	1.6	3.709	A
D - Newbourne Rd East	206	52	1661	621	0.333	206	166	0.3	0.5	8.656	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1925	481	277	2545	0.756	1919	2217	1.6	3.0	5.698	A
B - Foxhall Rd West	655	164	1940	568	1.153	554	407	2.3	27.6	114.528	F
C - A12 South	1918	479	436	2483	0.772	1911	1819	1.6	3.3	6.215	A
D - Newbourne Rd East	253	63	2004	463	0.546	250	192	0.5	1.2	16.722	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1925	481	280	2543	0.757	1925	2229	3.0	3.1	5.822	A
B - Foxhall Rd West	655	164	1947	564	1.161	562	408	27.6	50.8	252.020	F
C - A12 South	1918	479	438	2482	0.773	1917	1827	3.3	3.3	6.371	A
D - Newbourne Rd East	253	63	2012	459	0.551	253	193	1.2	1.2	17.398	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1572	393	334	2508	0.627	1577	1988	3.1	1.7	3.889	A
B - Foxhall Rd West	535	134	1598	751	0.712	725	335	50.8	3.3	134.724	F
C - A12 South	1566	391	360	2529	0.619	1573	1571	3.3	1.6	3.788	A
D - Newbourne Rd East	206	52	1722	592	0.349	209	189	1.2	0.5	9.468	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1316	329	221	2582	0.510	1319	1571	1.7	1.0	2.856	A
B - Foxhall Rd West	448	112	1334	893	0.502	457	280	3.3	1.0	8.437	A
C - A12 South	1311	328	301	2566	0.511	1314	1272	1.6	1.1	2.882	A
D - Newbourne Rd East	173	43	1399	741	0.233	174	141	0.5	0.3	6.354	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.98	0.07	0.81	1.79	2.42			N/A	N/A
C - A12 South	1.04	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.04	0.43	4.16	6.95			N/A	N/A
B - Foxhall Rd West	2.28	0.04	0.44	6.25	10.75			N/A	N/A
C - A12 South	1.60	0.04	0.42	4.26	7.27			N/A	N/A
D - Newbourne Rd East	0.49	0.04	0.45	1.27	1.39			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.03	0.03	0.27	3.03	4.49			N/A	N/A
B - Foxhall Rd West	27.60	8.26	24.62	46.59	54.53			N/A	N/A
C - A12 South	3.29	0.03	0.28	3.29	6.86			N/A	N/A
D - Newbourne Rd East	1.16	0.03	0.27	1.16	1.87			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.07	0.03	0.26	3.07	3.07			N/A	N/A
B - Foxhall Rd West	50.83	19.83	47.08	80.45	92.11			N/A	N/A
C - A12 South	3.35	0.03	0.27	3.35	3.35			N/A	N/A
D - Newbourne Rd East	1.20	0.03	0.30	1.48	5.66			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.70	0.11	1.27	3.39	4.50			N/A	N/A
B - Foxhall Rd West	3.33	0.04	0.37	8.27	17.82			N/A	N/A
C - A12 South	1.64	0.08	1.13	3.54	4.83			N/A	N/A
D - Newbourne Rd East	0.54	0.05	0.51	1.31	1.41			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.05	0.49	2.38	3.55			N/A	N/A
B - Foxhall Rd West	1.03	0.03	0.26	1.03	1.03			N/A	N/A
C - A12 South	1.05	0.05	0.46	2.51	3.83			N/A	N/A
D - Newbourne Rd East	0.31	0.03	0.30	0.93	1.22			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	257.14	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2059	100.000
B - Foxhall Rd West		ONE HOUR	✓	653	100.000
C - A12 South		ONE HOUR	✓	2217	100.000
D - Newbourne Rd East		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	227	1702	131
	B - Foxhall Rd West	372	0	196	85
	C - A12 South	1932	167	1	117
	D - Newbourne Rd East	195	44	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	7	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	8	6	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	13.28	8.0	42.3	B	1890	2835
B - Foxhall Rd West	2.23	1818.66	244.3	244.3	F	599	898
C - A12 South	0.99	44.42	29.8	120.8	E	2035	3052
D - Newbourne Rd East	1.14	239.33	31.0	63.9	F	356	534

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1550	388	296	2516	0.616	1544	1868	0.0	1.6	3.680	A
B - Foxhall Rd West	491	123	1682	718	0.684	483	328	0.0	2.1	14.853	B
C - A12 South	1669	417	348	2540	0.657	1662	1533	0.0	1.9	4.066	A
D - Newbourne Rd East	292	73	1592	682	0.428	289	249	0.0	0.7	9.102	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1851	463	329	2495	0.742	1846	2199	1.6	2.8	5.505	A
B - Foxhall Rd West	587	147	2009	541	1.084	520	392	2.1	18.8	96.003	F
C - A12 South	1993	498	415	2499	0.798	1986	1815	1.9	3.8	6.914	A
D - Newbourne Rd East	349	87	1886	539	0.647	345	290	0.7	1.7	18.191	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2267	567	274	2529	0.897	2248	2444	2.8	7.7	12.056	B
B - Foxhall Rd West	719	180	2374	345	2.085	344	468	18.8	112.4	717.144	F
C - A12 South	2441	610	472	2466	0.990	2370	2102	3.8	21.7	26.965	D
D - Newbourne Rd East	427	107	2210	381	1.121	365	313	1.7	17.3	116.979	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2267	567	267	2533	0.895	2266	2470	7.7	8.0	13.285	B
B - Foxhall Rd West	719	180	2415	323	2.226	323	473	112.4	211.3	1818.661	F
C - A12 South	2441	610	479	2461	0.992	2409	2114	21.7	29.8	44.416	E
D - Newbourne Rd East	427	107	2220	376	1.136	372	313	17.3	31.0	239.330	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1851	463	307	2509	0.738	1872	2317	8.0	2.9	5.829	A
B - Foxhall Rd West	587	147	2169	455	1.290	455	417	211.3	244.3	1487.834	F
C - A12 South	1993	498	492	2451	0.813	2094	1863	29.8	4.6	12.788	B
D - Newbourne Rd East	349	87	1890	536	0.650	464	289	31.0	2.1	90.530	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1550	388	392	2457	0.631	1555	2014	2.9	1.7	4.010	A
B - Foxhall Rd West	491	123	1702	707	0.695	704	332	244.3	191.1	1114.286	F
C - A12 South	1669	417	354	2536	0.658	1680	1611	4.6	2.0	4.257	A
D - Newbourne Rd East	292	73	1668	645	0.453	297	279	2.1	0.8	10.491	B

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.59	0.57	1.50	1.99	2.54			N/A	N/A
B - Foxhall Rd West	2.06	0.03	0.26	2.06	2.06			N/A	N/A
C - A12 South	1.89	0.22	1.07	3.35	4.20			N/A	N/A
D - Newbourne Rd East	0.74	0.07	0.72	1.43	1.43			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.81	0.04	0.43	7.76	13.95			N/A	N/A
B - Foxhall Rd West	18.82	0.19	7.96	50.51	72.04			N/A	N/A
C - A12 South	3.80	0.04	0.44	10.67	19.18			N/A	N/A
D - Newbourne Rd East	1.74	0.04	0.45	4.64	7.63			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.68	0.04	0.37	17.30	42.26			N/A	N/A
B - Foxhall Rd West	112.36	65.95	109.00	153.23	167.61			N/A	N/A
C - A12 South	21.73	0.25	10.22	57.05	80.04			N/A	N/A
D - Newbourne Rd East	17.34	3.31	14.53	31.81	38.35			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.03	0.03	0.30	8.03	33.39			N/A	N/A
B - Foxhall Rd West	211.30	>199	>199	>199	>199			N/A	N/A
C - A12 South	29.77	0.18	10.95	82.72	120.82			N/A	N/A
D - Newbourne Rd East	30.98	8.23	27.25	54.06	63.91			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.88	0.05	0.47	8.03	13.55			N/A	N/A
B - Foxhall Rd West	244.29	>199	>199	>199	>199			N/A	N/A
C - A12 South	4.59	0.05	0.48	13.06	22.83			N/A	N/A
D - Newbourne Rd East	2.10	0.03	0.32	4.10	11.09			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.03	0.35	4.08	8.98			N/A	N/A
B - Foxhall Rd West	191.15	>199	>199	>199	>199			N/A	N/A
C - A12 South	1.95	0.03	0.30	2.03	8.97			N/A	N/A
D - Newbourne Rd East	0.84	0.03	0.27	0.84	1.18			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	86.66	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2089	100.000
B - Foxhall Rd West		ONE HOUR	✓	630	100.000
C - A12 South		ONE HOUR	✓	2070	100.000
D - Newbourne Rd East		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	369	1557	161
	B - Foxhall Rd West	416	0	148	66
	C - A12 South	1774	222	1	74
	D - Newbourne Rd East	128	82	155	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	5	4
	B - Foxhall Rd West	2	0	6	6
	C - A12 South	4	5	0	2
	D - Newbourne Rd East	3	9	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	12.22	7.5	39.0	B	1917	2875
B - Foxhall Rd West	1.42	531.99	104.7	146.8	F	578	867
C - A12 South	0.93	19.67	11.7	64.4	C	1900	2850
D - Newbourne Rd East	1.01	129.49	14.7	46.9	F	336	504

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1573	393	216	2610	0.603	1567	1737	0.0	1.5	3.432	A
B - Foxhall Rd West	474	119	1484	842	0.563	469	505	0.0	1.3	9.536	A
C - A12 South	1559	390	436	2565	0.608	1553	1394	0.0	1.5	3.535	A
D - Newbourne Rd East	276	69	1556	737	0.374	273	226	0.0	0.6	7.723	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1878	469	256	2584	0.727	1874	2073	1.5	2.6	5.034	A
B - Foxhall Rd West	566	142	1774	691	0.819	556	604	1.3	3.9	24.806	C
C - A12 South	1861	465	521	2513	0.741	1856	1665	1.5	2.8	5.440	A
D - Newbourne Rd East	329	82	1860	585	0.562	327	270	0.6	1.2	13.775	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2300	575	250	2588	0.889	2282	2387	2.6	7.2	11.134	B
B - Foxhall Rd West	694	173	2140	501	1.384	497	728	3.9	53.1	224.280	F
C - A12 South	2279	570	619	2454	0.929	2249	1974	2.8	10.4	15.700	C
D - Newbourne Rd East	403	101	2223	404	0.998	370	309	1.2	9.6	73.616	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2300	575	248	2590	0.888	2299	2406	7.2	7.5	12.221	B
B - Foxhall Rd West	694	173	2167	487	1.424	487	736	53.1	104.7	531.986	F
C - A12 South	2279	570	629	2447	0.932	2274	1990	10.4	11.7	19.668	C
D - Newbourne Rd East	403	101	2236	397	1.015	383	310	9.6	14.7	129.488	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1878	469	292	2562	0.733	1897	2194	7.5	2.8	5.562	A
B - Foxhall Rd West	566	142	1829	663	0.854	657	624	104.7	82.2	486.485	F
C - A12 South	1861	465	557	2490	0.747	1896	1730	11.7	3.0	6.398	A
D - Newbourne Rd East	329	82	1905	563	0.585	382	284	14.7	1.5	25.686	D

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1573	393	327	2539	0.619	1577	1966	2.8	1.6	3.760	A
B - Foxhall Rd West	474	119	1496	835	0.568	797	509	82.2	1.6	174.941	F
C - A12 South	1559	390	441	2562	0.608	1565	1481	3.0	1.6	3.630	A
D - Newbourne Rd East	276	69	1643	693	0.398	279	262	1.5	0.7	8.751	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.57	1.41	1.90	2.19			N/A	N/A
B - Foxhall Rd West	1.26	0.04	0.40	3.24	5.55			N/A	N/A
C - A12 South	1.53	0.51	1.40	2.15	2.69			N/A	N/A
D - Newbourne Rd East	0.59	0.08	0.77	1.35	1.43			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.61	0.04	0.41	7.10	13.07			N/A	N/A
B - Foxhall Rd West	3.93	0.05	0.70	11.11	18.23			N/A	N/A
C - A12 South	2.79	0.04	0.40	7.56	14.18			N/A	N/A
D - Newbourne Rd East	1.24	0.04	0.44	3.11	4.98			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.19	0.04	0.35	14.62	39.04			N/A	N/A
B - Foxhall Rd West	53.07	28.32	50.83	74.91	82.90			N/A	N/A
C - A12 South	10.42	0.05	0.48	29.49	55.10			N/A	N/A
D - Newbourne Rd East	9.59	0.37	5.80	22.31	29.62			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.51	0.03	0.30	7.51	27.95			N/A	N/A
B - Foxhall Rd West	104.73	67.95	102.39	136.10	146.82			N/A	N/A
C - A12 South	11.73	0.04	0.37	24.86	64.42			N/A	N/A
D - Newbourne Rd East	14.68	0.44	8.79	35.06	46.86			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.81	0.05	0.56	7.77	12.59			N/A	N/A
B - Foxhall Rd West	82.16	54.32	80.34	105.56	113.57			N/A	N/A
C - A12 South	3.03	0.05	0.46	8.49	14.55			N/A	N/A
D - Newbourne Rd East	1.48	0.03	0.34	3.36	7.63			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.65	0.04	0.35	4.01	8.47			N/A	N/A
B - Foxhall Rd West	1.57	0.03	0.26	1.57	1.57			N/A	N/A
C - A12 South	1.57	0.03	0.31	2.80	8.08			N/A	N/A
D - Newbourne Rd East	0.67	0.03	0.27	0.67	1.70			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	61.97	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2265	100.000
B - Foxhall Rd West		ONE HOUR	✓	539	100.000
C - A12 South		ONE HOUR	✓	2249	100.000
D - Newbourne Rd East		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	387	1738	139
	B - Foxhall Rd West	308	0	138	92
	C - A12 South	1814	343	1	91
	D - Newbourne Rd East	75	133	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	25.60	16.7	90.5	D	2078	3117
B - Foxhall Rd West	1.12	199.03	36.2	75.5	F	495	742
C - A12 South	0.99	45.15	30.8	122.6	E	2063	3095
D - Newbourne Rd East	1.12	207.88	22.9	52.9	F	302	452

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1705	426	241	2660	0.641	1698	1646	0.0	1.8	3.716	A
B - Foxhall Rd West	406	101	1485	876	0.463	402	646	0.0	0.9	7.558	A
C - A12 South	1693	423	446	2603	0.650	1686	1497	0.0	1.8	3.892	A
D - Newbourne Rd East	247	62	1698	712	0.347	245	242	0.0	0.5	7.674	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2036	509	288	2631	0.774	2030	1967	1.8	3.3	5.929	A
B - Foxhall Rd West	485	121	1775	723	0.670	480	772	0.9	1.9	14.556	B
C - A12 South	2022	505	532	2550	0.793	2014	1790	1.8	3.7	6.629	A
D - Newbourne Rd East	295	74	2029	545	0.542	293	289	0.5	1.1	14.137	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2493	623	323	2609	0.956	2450	2311	3.3	14.3	18.912	C
B - Foxhall Rd West	594	148	2109	547	1.085	525	913	1.9	19.0	90.491	F
C - A12 South	2476	619	620	2496	0.992	2401	2133	3.7	22.3	27.082	D
D - Newbourne Rd East	362	90	2435	340	1.064	318	338	1.1	12.2	99.792	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2493	623	324	2608	0.956	2484	2344	14.3	16.7	25.602	D
B - Foxhall Rd West	594	148	2143	529	1.122	525	925	19.0	36.2	199.033	F
C - A12 South	2476	619	627	2492	0.994	2442	2159	22.3	30.8	45.152	E
D - Newbourne Rd East	362	90	2467	324	1.117	319	341	12.2	22.9	207.883	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2036	509	351	2592	0.786	2087	2156	16.7	3.8	7.835	A
B - Foxhall Rd West	485	121	1891	662	0.732	616	835	36.2	3.4	104.548	F
C - A12 South	2022	505	598	2510	0.805	2127	1901	30.8	4.3	11.968	B
D - Newbourne Rd East	295	74	2118	500	0.590	381	320	22.9	1.5	50.900	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1705	426	248	2656	0.642	1713	1669	3.8	1.8	3.850	A
B - Foxhall Rd West	406	101	1501	867	0.468	416	654	3.4	0.9	8.136	A
C - A12 South	1693	423	452	2599	0.651	1703	1514	4.3	1.9	4.057	A
D - Newbourne Rd East	247	62	1715	704	0.352	251	245	1.5	0.5	8.030	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.34	1.06	2.82	3.51			N/A	N/A
B - Foxhall Rd West	0.85	0.08	0.84	1.21	1.67			N/A	N/A
C - A12 South	1.84	0.19	1.50	3.27	4.10			N/A	N/A
D - Newbourne Rd East	0.53	0.05	0.50	1.30	1.40			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.33	0.04	0.42	9.15	16.95			N/A	N/A
B - Foxhall Rd West	1.94	0.04	0.44	5.24	8.77			N/A	N/A
C - A12 South	3.70	0.04	0.43	10.27	18.83			N/A	N/A
D - Newbourne Rd East	1.14	0.04	0.40	2.89	4.92			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.27	0.07	1.79	41.92	68.24			N/A	N/A
B - Foxhall Rd West	19.01	2.98	15.53	36.27	44.26			N/A	N/A
C - A12 South	22.32	0.27	10.85	58.20	81.26			N/A	N/A
D - Newbourne Rd East	12.17	1.45	9.14	24.81	31.12			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	16.68	0.05	0.48	46.66	90.45			N/A	N/A
B - Foxhall Rd West	36.15	9.32	31.72	63.70	75.47			N/A	N/A
C - A12 South	30.83	0.20	12.06	84.73	122.59			N/A	N/A
D - Newbourne Rd East	22.87	3.84	18.89	43.45	52.89			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.79	0.05	0.47	10.70	18.46			N/A	N/A
B - Foxhall Rd West	3.36	0.04	0.44	9.40	16.67			N/A	N/A
C - A12 South	4.34	0.05	0.46	12.28	21.91			N/A	N/A
D - Newbourne Rd East	1.55	0.03	0.33	3.42	8.00			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.03	0.31	2.80	9.13			N/A	N/A
B - Foxhall Rd West	0.89	0.03	0.27	0.89	1.32			N/A	N/A
C - A12 South	1.89	0.03	0.30	1.89	8.53			N/A	N/A
D - Newbourne Rd East	0.55	0.03	0.26	0.55	0.65			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	925	100.000
B - Foxhall Rd West		ONE HOUR	✓	263	100.000
C - A12 South		ONE HOUR	✓	794	100.000
D - Newbourne Rd East		ONE HOUR	✓	78	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	850	34
	B - Foxhall Rd West	153	0	83	27
	C - A12 South	722	38	0	35
	D - Newbourne Rd East	17	23	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	9	5	0	4
	D - Newbourne Rd East	0	14	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.26	0.6	2.7	A	848	1273
B - Foxhall Rd West	0.25	4.24	0.3	1.4	A	242	362
C - A12 South	0.33	2.02	0.5	2.0	A	729	1094
D - Newbourne Rd East	0.10	4.45	0.1	0.5	A	72	108

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	696	174	109	2645	0.263	695	670	0.0	0.4	1.846	A
B - Foxhall Rd West	198	50	581	1284	0.154	198	76	0.0	0.2	3.313	A
C - A12 South	598	150	61	2676	0.224	597	730	0.0	0.3	1.732	A
D - Newbourne Rd East	59	15	731	1054	0.056	59	72	0.0	0.1	3.616	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	831	208	131	2631	0.316	831	801	0.4	0.5	2.000	A
B - Foxhall Rd West	237	59	695	1222	0.194	236	92	0.2	0.2	3.651	A
C - A12 South	714	179	73	2668	0.268	714	873	0.3	0.4	1.841	A
D - Newbourne Rd East	71	18	875	987	0.071	70	87	0.1	0.1	3.925	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1018	255	160	2612	0.390	1017	981	0.5	0.6	2.256	A
B - Foxhall Rd West	290	72	851	1139	0.255	290	112	0.2	0.3	4.237	A
C - A12 South	875	219	89	2659	0.329	874	1069	0.4	0.5	2.017	A
D - Newbourne Rd East	86	22	1071	896	0.096	86	106	0.1	0.1	4.446	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1018	255	160	2612	0.390	1018	981	0.6	0.6	2.258	A
B - Foxhall Rd West	290	72	852	1138	0.255	290	112	0.3	0.3	4.242	A
C - A12 South	875	219	89	2659	0.329	875	1069	0.5	0.5	2.017	A
D - Newbourne Rd East	86	22	1072	895	0.096	86	106	0.1	0.1	4.448	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	831	208	131	2631	0.316	832	802	0.6	0.5	2.003	A
B - Foxhall Rd West	237	59	696	1222	0.194	237	92	0.3	0.2	3.655	A
C - A12 South	714	179	73	2668	0.268	715	874	0.5	0.4	1.845	A
D - Newbourne Rd East	71	18	876	987	0.071	71	87	0.1	0.1	3.929	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	696	174	110	2644	0.263	697	672	0.5	0.4	1.850	A
B - Foxhall Rd West	198	50	583	1283	0.155	198	77	0.2	0.2	3.320	A
C - A12 South	598	150	61	2675	0.224	598	732	0.4	0.3	1.732	A
D - Newbourne Rd East	59	15	733	1053	0.056	59	73	0.1	0.1	3.620	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Foxhall Rd West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	0.36	0.00	0.00	0.36	0.36			N/A	N/A
D - Newbourne Rd East	0.08	0.03	0.25	0.46	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.03	0.25	0.64	0.64			N/A	N/A
B - Foxhall Rd West	0.34	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Newbourne Rd East	0.11	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.03	0.29	1.08	2.73			N/A	N/A
B - Foxhall Rd West	0.34	0.03	0.32	1.15	1.41			N/A	N/A
C - A12 South	0.49	0.03	0.31	1.44	2.04			N/A	N/A
D - Newbourne Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Foxhall Rd West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Newbourne Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	37.21	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1743	100.000
B - Foxhall Rd West		ONE HOUR	✓	584	100.000
C - A12 South		ONE HOUR	✓	1745	100.000
D - Newbourne Rd East		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	235	1445	63
	B - Foxhall Rd West	349	0	166	70
	C - A12 South	1598	94	0	53
	D - Newbourne Rd East	121	37	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	7	5	0	11
	D - Newbourne Rd East	12	17	17	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	5.79	3.0	6.9	A	1600	2400
B - Foxhall Rd West	1.15	235.93	46.7	87.5	F	536	804
C - A12 South	0.77	6.40	3.4	7.3	A	1601	2401
D - Newbourne Rd East	0.55	17.27	1.2	5.6	C	211	316

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1313	328	215	2585	0.508	1308	1550	0.0	1.0	2.811	A
B - Foxhall Rd West	440	110	1329	894	0.492	436	274	0.0	1.0	7.796	A
C - A12 South	1313	328	294	2567	0.512	1309	1262	0.0	1.0	2.853	A
D - Newbourne Rd East	173	43	1385	748	0.231	172	139	0.0	0.3	6.239	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1567	392	257	2558	0.613	1565	1853	1.0	1.6	3.619	A
B - Foxhall Rd West	525	131	1590	754	0.696	520	328	1.0	2.2	15.075	C
C - A12 South	1568	392	352	2532	0.620	1566	1509	1.0	1.6	3.719	A
D - Newbourne Rd East	206	52	1656	623	0.332	206	166	0.3	0.5	8.617	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1920	480	279	2543	0.755	1914	2213	1.6	3.0	5.667	A
B - Foxhall Rd West	643	161	1943	565	1.138	549	401	2.2	25.6	108.668	F
C - A12 South	1921	480	430	2484	0.773	1914	1821	1.6	3.3	6.240	A
D - Newbourne Rd East	253	63	2000	465	0.544	250	193	0.5	1.1	16.601	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1920	480	283	2541	0.756	1919	2226	3.0	3.0	5.790	A
B - Foxhall Rd West	643	161	1950	561	1.146	559	403	25.6	46.7	235.927	F
C - A12 South	1921	480	433	2483	0.774	1921	1829	3.3	3.4	6.400	A
D - Newbourne Rd East	253	63	2008	461	0.549	253	194	1.1	1.2	17.273	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1567	392	330	2511	0.624	1573	1971	3.0	1.7	3.859	A
B - Foxhall Rd West	525	131	1601	749	0.701	700	330	46.7	2.8	113.988	F
C - A12 South	1568	392	356	2529	0.620	1575	1568	3.4	1.6	3.798	A
D - Newbourne Rd East	206	52	1715	595	0.347	209	188	1.2	0.5	9.383	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1313	328	220	2582	0.508	1315	1564	1.7	1.0	2.849	A
B - Foxhall Rd West	440	110	1337	890	0.494	447	276	2.8	1.0	8.258	A
C - A12 South	1313	328	297	2565	0.512	1316	1271	1.6	1.1	2.885	A
D - Newbourne Rd East	173	43	1394	743	0.233	174	141	0.5	0.3	6.335	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.95	0.07	0.83	1.68	2.12			N/A	N/A
C - A12 South	1.04	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.57	0.04	0.43	4.12	6.89			N/A	N/A
B - Foxhall Rd West	2.17	0.04	0.43	5.93	10.22			N/A	N/A
C - A12 South	1.61	0.04	0.42	4.29	7.32			N/A	N/A
D - Newbourne Rd East	0.49	0.04	0.44	1.27	1.38			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.27	3.00	4.31			N/A	N/A
B - Foxhall Rd West	25.61	6.93	22.53	44.26	52.21			N/A	N/A
C - A12 South	3.31	0.03	0.28	3.31	7.01			N/A	N/A
D - Newbourne Rd East	1.15	0.03	0.27	1.15	1.79			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.05	0.03	0.26	3.05	3.05			N/A	N/A
B - Foxhall Rd West	46.69	16.62	42.75	75.86	87.55			N/A	N/A
C - A12 South	3.37	0.03	0.27	3.37	3.37			N/A	N/A
D - Newbourne Rd East	1.19	0.03	0.30	1.47	5.62			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.11	1.27	3.34	4.43			N/A	N/A
B - Foxhall Rd West	2.84	0.03	0.34	6.35	15.26			N/A	N/A
C - A12 South	1.65	0.08	1.12	3.57	4.87			N/A	N/A
D - Newbourne Rd East	0.54	0.05	0.50	1.31	1.41			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.05	0.49	2.35	3.50			N/A	N/A
B - Foxhall Rd West	0.99	0.03	0.27	0.99	1.01			N/A	N/A
C - A12 South	1.06	0.05	0.45	2.52	3.85			N/A	N/A
D - Newbourne Rd East	0.31	0.03	0.30	0.92	1.22			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	253.64	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2080	100.000
B - Foxhall Rd West		ONE HOUR	✓	648	100.000
C - A12 South		ONE HOUR	✓	2217	100.000
D - Newbourne Rd East		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	218	1732	131
	B - Foxhall Rd West	367	0	196	85
	C - A12 South	1932	167	1	117
	D - Newbourne Rd East	195	50	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	7	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	8	5	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	14.48	8.8	45.9	B	1909	2863
B - Foxhall Rd West	2.21	1785.04	240.9	241.0	F	594	891
C - A12 South	0.99	43.54	29.1	119.6	E	2035	3052
D - Newbourne Rd East	1.17	276.60	36.1	68.8	F	357	535

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	392	296	2516	0.622	1560	1865	0.0	1.6	3.737	A
B - Foxhall Rd West	488	122	1682	717	0.680	479	326	0.0	2.0	14.717	B
C - A12 South	1669	417	346	2538	0.658	1662	1551	0.0	1.9	4.075	A
D - Newbourne Rd East	293	73	1607	674	0.434	290	249	0.0	0.8	9.289	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1870	468	330	2495	0.749	1865	2196	1.6	2.9	5.666	A
B - Foxhall Rd West	582	146	2009	540	1.078	517	389	2.0	18.2	93.792	F
C - A12 South	1993	498	413	2498	0.798	1986	1838	1.9	3.8	6.931	A
D - Newbourne Rd East	350	87	1905	530	0.660	345	290	0.8	1.8	19.102	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2290	573	276	2528	0.906	2269	2440	2.9	8.4	12.905	B
B - Foxhall Rd West	713	178	2371	345	2.069	344	462	18.2	110.4	703.748	F
C - A12 South	2441	610	462	2468	0.989	2371	2126	3.8	21.4	26.690	D
D - Newbourne Rd East	428	107	2231	370	1.156	357	313	1.8	19.6	131.210	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2290	573	269	2533	0.904	2289	2465	8.4	8.8	14.476	B
B - Foxhall Rd West	713	178	2411	323	2.205	323	468	110.4	207.8	1785.041	F
C - A12 South	2441	610	468	2465	0.990	2411	2138	21.4	29.1	43.536	E
D - Newbourne Rd East	428	107	2244	364	1.175	362	313	19.6	36.1	276.598	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1870	468	306	2510	0.745	1893	2319	8.8	3.0	6.051	A
B - Foxhall Rd West	582	146	2176	450	1.295	450	418	207.8	240.9	1478.270	F
C - A12 South	1993	498	503	2441	0.817	2091	1893	29.1	4.7	12.963	B
D - Newbourne Rd East	350	87	1911	526	0.664	484	288	36.1	2.4	126.790	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	392	394	2456	0.638	1571	2011	3.0	1.8	4.089	A
B - Foxhall Rd West	488	122	1703	705	0.692	702	330	240.9	187.3	1098.725	F
C - A12 South	1669	417	353	2534	0.659	1680	1632	4.7	2.0	4.273	A
D - Newbourne Rd East	293	73	1685	637	0.460	299	280	2.4	0.9	10.834	B

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.63	0.56	1.03	2.21	2.69			N/A	N/A
B - Foxhall Rd West	2.02	0.03	0.26	2.02	2.02			N/A	N/A
C - A12 South	1.90	0.22	1.08	3.35	4.19			N/A	N/A
D - Newbourne Rd East	0.75	0.06	0.66	1.14	1.67			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.92	0.04	0.43	8.08	14.54			N/A	N/A
B - Foxhall Rd West	18.21	0.18	7.56	49.07	70.21			N/A	N/A
C - A12 South	3.81	0.04	0.45	10.71	19.21			N/A	N/A
D - Newbourne Rd East	1.83	0.04	0.44	4.90	8.18			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.35	0.04	0.39	20.41	45.88			N/A	N/A
B - Foxhall Rd West	110.37	64.78	107.06	150.49	164.60			N/A	N/A
C - A12 South	21.43	0.23	9.84	56.64	79.83			N/A	N/A
D - Newbourne Rd East	19.62	4.82	16.99	34.36	40.75			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.80	0.03	0.31	9.23	40.43			N/A	N/A
B - Foxhall Rd West	207.80	>199	>199	>199	>199			N/A	N/A
C - A12 South	29.06	0.16	10.09	81.30	119.56			N/A	N/A
D - Newbourne Rd East	36.10	12.15	32.76	59.36	68.83			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.05	0.46	8.38	14.31			N/A	N/A
B - Foxhall Rd West	240.93	>199	>199	>199	>199			N/A	N/A
C - A12 South	4.70	0.05	0.49	13.40	23.06			N/A	N/A
D - Newbourne Rd East	2.40	0.03	0.33	5.03	12.80			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.03	0.34	4.06	9.27			N/A	N/A
B - Foxhall Rd West	187.30	>199	>199	>199	>199			N/A	N/A
C - A12 South	1.96	0.03	0.30	2.08	9.03			N/A	N/A
D - Newbourne Rd East	0.87	0.03	0.26	0.87	0.89			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	84.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2080	100.000
B - Foxhall Rd West		ONE HOUR	✓	624	100.000
C - A12 South		ONE HOUR	✓	2072	100.000
D - Newbourne Rd East		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	360	1557	161
	B - Foxhall Rd West	410	0	148	66
	C - A12 South	1776	222	1	74
	D - Newbourne Rd East	128	89	148	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	5	4
	B - Foxhall Rd West	2	0	6	6
	C - A12 South	4	5	0	2
	D - Newbourne Rd East	3	8	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	11.93	7.3	37.8	B	1909	2863
B - Foxhall Rd West	1.41	521.17	102.1	144.1	F	573	859
C - A12 South	0.93	19.79	11.8	64.9	C	1902	2852
D - Newbourne Rd East	1.00	122.48	13.7	45.8	F	336	504

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	391	216	2608	0.600	1560	1734	0.0	1.5	3.416	A
B - Foxhall Rd West	470	117	1485	841	0.559	465	503	0.0	1.2	9.454	A
C - A12 South	1560	390	434	2566	0.608	1554	1389	0.0	1.5	3.536	A
D - Newbourne Rd East	276	69	1550	740	0.373	273	226	0.0	0.6	7.677	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1870	467	256	2583	0.724	1866	2070	1.5	2.6	4.991	A
B - Foxhall Rd West	561	140	1776	690	0.813	551	602	1.2	3.8	24.222	C
C - A12 South	1863	466	519	2514	0.741	1858	1659	1.5	2.8	5.445	A
D - Newbourne Rd East	329	82	1852	589	0.559	327	270	0.6	1.2	13.605	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2290	573	252	2586	0.886	2272	2386	2.6	7.0	10.915	B
B - Foxhall Rd West	687	172	2143	500	1.374	495	725	3.8	51.7	219.594	F
C - A12 South	2282	570	617	2455	0.930	2251	1969	2.8	10.5	15.757	C
D - Newbourne Rd East	403	101	2215	408	0.989	371	309	1.2	9.2	70.925	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2290	573	249	2587	0.885	2289	2406	7.0	7.3	11.926	B
B - Foxhall Rd West	687	172	2170	486	1.415	485	734	51.7	102.1	521.168	F
C - A12 South	2282	570	628	2448	0.932	2276	1984	10.5	11.8	19.786	C
D - Newbourne Rd East	403	101	2227	401	1.005	385	311	9.2	13.7	122.477	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1870	467	294	2559	0.731	1888	2192	7.3	2.8	5.506	A
B - Foxhall Rd West	561	140	1830	662	0.847	656	623	102.1	78.4	471.801	F
C - A12 South	1863	466	554	2492	0.748	1898	1722	11.8	3.0	6.404	A
D - Newbourne Rd East	329	82	1898	566	0.582	378	284	13.7	1.5	24.170	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	391	323	2540	0.617	1571	1952	2.8	1.6	3.733	A
B - Foxhall Rd West	470	117	1498	834	0.563	777	508	78.4	1.5	158.146	F
C - A12 South	1560	390	440	2563	0.609	1566	1473	3.0	1.6	3.632	A
D - Newbourne Rd East	276	69	1633	698	0.395	279	260	1.5	0.7	8.659	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.49	0.57	1.39	1.88	2.08			N/A	N/A
B - Foxhall Rd West	1.24	0.04	0.41	3.15	5.35			N/A	N/A
C - A12 South	1.54	0.51	1.40	2.16	2.69			N/A	N/A
D - Newbourne Rd East	0.59	0.08	0.78	1.36	1.43			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.57	0.04	0.41	6.99	12.89			N/A	N/A
B - Foxhall Rd West	3.79	0.05	0.62	10.73	17.73			N/A	N/A
C - A12 South	2.80	0.04	0.40	7.57	14.21			N/A	N/A
D - Newbourne Rd East	1.23	0.04	0.44	3.04	4.89			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.00	0.03	0.35	13.72	37.80			N/A	N/A
B - Foxhall Rd West	51.71	27.26	49.45	73.31	81.22			N/A	N/A
C - A12 South	10.48	0.05	0.48	29.68	55.28			N/A	N/A
D - Newbourne Rd East	9.16	0.30	5.29	21.74	29.13			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.31	0.03	0.29	7.31	26.02			N/A	N/A
B - Foxhall Rd West	102.11	65.65	99.76	133.33	144.06			N/A	N/A
C - A12 South	11.81	0.04	0.37	25.26	64.94			N/A	N/A
D - Newbourne Rd East	13.75	0.32	7.67	33.79	45.84			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.77	0.05	0.59	7.67	12.34			N/A	N/A
B - Foxhall Rd West	78.38	51.27	76.56	101.21	109.04			N/A	N/A
C - A12 South	3.04	0.05	0.46	8.49	14.58			N/A	N/A
D - Newbourne Rd East	1.46	0.03	0.34	3.36	7.51			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.04	0.35	3.98	8.33			N/A	N/A
B - Foxhall Rd West	1.47	0.03	0.26	1.47	1.47			N/A	N/A
C - A12 South	1.57	0.03	0.31	2.79	8.09			N/A	N/A
D - Newbourne Rd East	0.66	0.03	0.27	0.66	1.78			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	61.62	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2269	100.000
B - Foxhall Rd West		ONE HOUR	✓	543	100.000
C - A12 South		ONE HOUR	✓	2241	100.000
D - Newbourne Rd East		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	366	1763	139
	B - Foxhall Rd West	310	0	138	94
	C - A12 South	1807	343	1	90
	D - Newbourne Rd East	75	152	102	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	26.25	17.1	92.2	D	2082	3123
B - Foxhall Rd West	1.12	201.76	37.0	76.4	F	498	748
C - A12 South	0.99	42.07	28.3	119.1	E	2056	3084
D - Newbourne Rd East	1.12	212.91	23.5	53.5	F	302	452

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1708	427	242	2659	0.642	1701	1643	0.0	1.8	3.729	A
B - Foxhall Rd West	409	102	1479	879	0.465	405	644	0.0	0.9	7.549	A
C - A12 South	1687	422	444	2604	0.648	1680	1502	0.0	1.8	3.865	A
D - Newbourne Rd East	247	62	1701	711	0.348	245	242	0.0	0.5	7.698	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2039	510	289	2630	0.775	2033	1963	1.8	3.4	5.967	A
B - Foxhall Rd West	488	122	1768	727	0.672	484	770	0.9	2.0	14.547	B
C - A12 South	2014	504	530	2551	0.790	2007	1795	1.8	3.6	6.532	A
D - Newbourne Rd East	295	74	2033	543	0.544	293	289	0.5	1.2	14.234	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2498	624	324	2609	0.958	2453	2308	3.4	14.6	19.226	C
B - Foxhall Rd West	598	149	2104	550	1.088	528	908	2.0	19.4	91.489	F
C - A12 South	2467	617	615	2499	0.987	2398	2140	3.6	21.0	25.920	D
D - Newbourne Rd East	362	90	2438	339	1.068	317	339	1.2	12.4	101.524	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2498	624	325	2608	0.958	2488	2341	14.6	17.1	26.245	D
B - Foxhall Rd West	598	149	2138	532	1.125	528	921	19.4	37.0	201.760	F
C - A12 South	2467	617	621	2495	0.989	2438	2167	21.0	28.3	42.068	E
D - Newbourne Rd East	362	90	2470	322	1.123	318	342	12.4	23.5	212.914	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2039	510	353	2591	0.787	2093	2146	17.1	3.8	7.969	A
B - Foxhall Rd West	488	122	1876	670	0.728	623	837	37.0	3.3	104.831	F
C - A12 South	2014	504	602	2507	0.803	2110	1905	28.3	4.3	11.213	B
D - Newbourne Rd East	295	74	2124	498	0.594	383	321	23.5	1.6	54.255	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1708	427	248	2655	0.643	1716	1665	3.8	1.8	3.865	A
B - Foxhall Rd West	409	102	1495	871	0.470	418	652	3.3	0.9	8.122	A
C - A12 South	1687	422	451	2600	0.649	1697	1519	4.3	1.9	4.026	A
D - Newbourne Rd East	247	62	1718	702	0.352	251	246	1.6	0.6	8.061	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.33	1.06	2.85	3.55			N/A	N/A
B - Foxhall Rd West	0.86	0.08	0.84	1.25	1.70			N/A	N/A
C - A12 South	1.82	0.20	1.50	3.16	3.97			N/A	N/A
D - Newbourne Rd East	0.53	0.05	0.50	1.30	1.40			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.36	0.04	0.42	9.23	17.09			N/A	N/A
B - Foxhall Rd West	1.95	0.04	0.44	5.28	8.86			N/A	N/A
C - A12 South	3.63	0.04	0.43	10.06	18.50			N/A	N/A
D - Newbourne Rd East	1.15	0.04	0.40	2.91	4.97			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.58	0.07	2.01	42.71	68.84			N/A	N/A
B - Foxhall Rd West	19.42	3.18	15.97	36.83	44.86			N/A	N/A
C - A12 South	20.99	0.21	9.24	56.02	79.49			N/A	N/A
D - Newbourne Rd East	12.41	1.07	9.41	25.09	31.37			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.13	0.05	0.51	48.46	92.17			N/A	N/A
B - Foxhall Rd West	36.98	9.87	32.60	64.66	76.40			N/A	N/A
C - A12 South	28.29	0.15	9.06	80.05	119.09			N/A	N/A
D - Newbourne Rd East	23.47	4.22	19.57	44.10	53.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.83	0.05	0.47	10.83	18.69			N/A	N/A
B - Foxhall Rd West	3.29	0.04	0.43	9.14	16.56			N/A	N/A
C - A12 South	4.28	0.05	0.46	12.12	21.47			N/A	N/A
D - Newbourne Rd East	1.58	0.03	0.33	3.49	8.16			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.03	0.31	2.78	9.15			N/A	N/A
B - Foxhall Rd West	0.90	0.03	0.27	0.90	1.31			N/A	N/A
C - A12 South	1.87	0.03	0.30	1.91	8.55			N/A	N/A
D - Newbourne Rd East	0.55	0.03	0.26	0.55	0.59			N/A	N/A

2023 Reference Case [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	866	100.000
B - Foxhall Rd West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	722	100.000
D - Newbourne Rd East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	795	30
	B - Foxhall Rd West	100	0	81	22
	C - A12 South	656	37	0	30
	D - Newbourne Rd East	15	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	10
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.16	0.6	2.7	A	794	1192
B - Foxhall Rd West	0.19	3.80	0.2	0.5	A	187	280
C - A12 South	0.30	1.94	0.4	1.5	A	663	994
D - Newbourne Rd East	0.09	4.31	0.1	0.5	A	65	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	100	2649	0.246	650	579	0.0	0.3	1.801	A
B - Foxhall Rd West	153	38	526	1301	0.118	153	73	0.0	0.1	3.133	A
C - A12 South	544	136	57	2666	0.204	543	685	0.0	0.3	1.695	A
D - Newbourne Rd East	53	13	689	1060	0.050	53	62	0.0	0.1	3.574	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	778	195	120	2637	0.295	778	692	0.3	0.4	1.936	A
B - Foxhall Rd West	183	46	629	1246	0.147	183	88	0.1	0.2	3.386	A
C - A12 South	650	162	68	2660	0.244	649	819	0.3	0.3	1.789	A
D - Newbourne Rd East	63	16	824	998	0.063	63	74	0.1	0.1	3.852	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	953	238	147	2619	0.364	952	848	0.4	0.6	2.160	A
B - Foxhall Rd West	224	56	771	1170	0.191	224	108	0.2	0.2	3.803	A
C - A12 South	795	199	83	2651	0.300	795	1003	0.3	0.4	1.940	A
D - Newbourne Rd East	78	19	1009	913	0.085	77	91	0.1	0.1	4.311	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	953	238	147	2619	0.364	953	848	0.6	0.6	2.160	A
B - Foxhall Rd West	224	56	771	1170	0.191	224	108	0.2	0.2	3.804	A
C - A12 South	795	199	83	2651	0.300	795	1003	0.4	0.4	1.940	A
D - Newbourne Rd East	78	19	1009	912	0.085	78	91	0.1	0.1	4.312	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	778	195	120	2637	0.295	779	693	0.6	0.4	1.938	A
B - Foxhall Rd West	183	46	630	1245	0.147	183	88	0.2	0.2	3.388	A
C - A12 South	650	162	68	2660	0.244	650	820	0.4	0.3	1.790	A
D - Newbourne Rd East	63	16	825	997	0.064	63	74	0.1	0.1	3.857	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	100	2649	0.246	652	580	0.4	0.3	1.802	A
B - Foxhall Rd West	153	38	528	1300	0.118	153	74	0.2	0.1	3.140	A
C - A12 South	544	136	57	2666	0.204	544	687	0.3	0.3	1.695	A
D - Newbourne Rd East	53	13	691	1059	0.050	53	62	0.1	0.1	3.581	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.25	0.57	0.57			N/A	N/A
B - Foxhall Rd West	0.24	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.43	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.36	2.68			N/A	N/A
B - Foxhall Rd West	0.24	0.03	0.26	0.47	0.52			N/A	N/A
C - A12 South	0.43	0.03	0.33	1.35	1.52			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Reference Case [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	8.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1567	100.000
B - Foxhall Rd West		ONE HOUR	✓	485	100.000
C - A12 South		ONE HOUR	✓	1576	100.000
D - Newbourne Rd East		ONE HOUR	✓	214	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	168	1340	59
	B - Foxhall Rd West	270	0	164	52
	C - A12 South	1434	93	0	49
	D - Newbourne Rd East	118	31	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	1	0	8	10
	C - A12 South	9	5	0	12
	D - Newbourne Rd East	12	20	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	4.61	2.2	4.6	A	1438	2157
B - Foxhall Rd West	0.82	30.52	4.3	22.9	D	445	668
C - A12 South	0.69	4.68	2.2	4.8	A	1446	2169
D - Newbourne Rd East	0.45	12.38	0.8	3.9	B	196	294

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1180	295	198	2566	0.460	1177	1366	0.0	0.8	2.585	A
B - Foxhall Rd West	365	91	1201	950	0.384	363	219	0.0	0.6	6.106	A
C - A12 South	1186	297	238	2572	0.461	1183	1177	0.0	0.9	2.585	A
D - Newbourne Rd East	161	40	1255	797	0.202	160	120	0.0	0.3	5.652	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1409	352	237	2541	0.555	1408	1635	0.8	1.2	3.173	A
B - Foxhall Rd West	436	109	1437	823	0.530	434	262	0.6	1.1	9.216	A
C - A12 South	1417	354	284	2543	0.557	1415	1408	0.9	1.2	3.187	A
D - Newbourne Rd East	192	48	1501	683	0.281	192	143	0.3	0.4	7.319	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1726	431	286	2509	0.688	1722	1995	1.2	2.2	4.551	A
B - Foxhall Rd West	534	134	1758	650	0.822	523	320	1.1	3.9	26.264	D
C - A12 South	1735	434	347	2505	0.693	1731	1720	1.2	2.2	4.630	A
D - Newbourne Rd East	235	59	1834	529	0.445	234	174	0.4	0.8	12.126	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1726	431	290	2506	0.689	1726	2005	2.2	2.2	4.610	A
B - Foxhall Rd West	534	134	1762	648	0.825	533	321	3.9	4.3	30.525	D
C - A12 South	1735	434	349	2504	0.693	1735	1727	2.2	2.2	4.680	A
D - Newbourne Rd East	235	59	1840	526	0.447	235	175	0.8	0.8	12.383	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1409	352	243	2537	0.556	1413	1649	2.2	1.3	3.216	A
B - Foxhall Rd West	436	109	1444	819	0.532	449	263	4.3	1.2	10.020	B
C - A12 South	1417	354	286	2542	0.557	1420	1418	2.2	1.3	3.222	A
D - Newbourne Rd East	192	48	1511	678	0.283	194	145	0.8	0.4	7.455	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1180	295	200	2564	0.460	1182	1374	1.3	0.9	2.608	A
B - Foxhall Rd West	365	91	1207	947	0.386	367	220	1.2	0.6	6.234	A
C - A12 South	1186	297	239	2571	0.461	1188	1183	1.3	0.9	2.607	A
D - Newbourne Rd East	161	40	1261	794	0.203	161	120	0.4	0.3	5.698	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.62	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	0.85	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.05	0.48	2.97	4.64			N/A	N/A
B - Foxhall Rd West	1.10	0.05	0.57	2.49	3.64			N/A	N/A
C - A12 South	1.25	0.05	0.47	3.03	4.75			N/A	N/A
D - Newbourne Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.17	0.03	0.26	2.17	2.17			N/A	N/A
B - Foxhall Rd West	3.95	0.04	0.39	10.36	21.08			N/A	N/A
C - A12 South	2.22	0.03	0.26	2.22	2.22			N/A	N/A
D - Newbourne Rd East	0.78	0.03	0.26	0.78	0.78			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.19	0.03	0.26	2.19	2.19			N/A	N/A
B - Foxhall Rd West	4.28	0.03	0.33	8.20	22.89			N/A	N/A
C - A12 South	2.24	0.03	0.26	2.24	2.24			N/A	N/A
D - Newbourne Rd East	0.80	0.03	0.30	1.22	3.87			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.19	1.16	1.88	2.37			N/A	N/A
B - Foxhall Rd West	1.16	0.04	0.41	2.93	4.92			N/A	N/A
C - A12 South	1.27	0.17	1.16	1.91	2.46			N/A	N/A
D - Newbourne Rd East	0.40	0.03	0.28	0.64	1.07			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.07	0.77	1.45	1.86			N/A	N/A
B - Foxhall Rd West	0.63	0.03	0.31	1.09	2.98			N/A	N/A
C - A12 South	0.86	0.06	0.75	1.50	1.90			N/A	N/A
D - Newbourne Rd East	0.26	0.03	0.25	0.45	0.48			N/A	N/A

2023 Reference Case [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	121.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1759	100.000
B - Foxhall Rd West		ONE HOUR	✓	553	100.000
C - A12 South		ONE HOUR	✓	2158	100.000
D - Newbourne Rd East		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	165	1471	124
	B - Foxhall Rd West	300	0	194	59
	C - A12 South	1884	166	1	107
	D - Newbourne Rd East	188	75	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	9	2	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.46	3.4	8.0	A	1614	2422
B - Foxhall Rd West	1.84	932.57	140.0	182.7	F	507	761
C - A12 South	0.97	31.77	19.9	100.1	D	1981	2971
D - Newbourne Rd East	0.76	29.05	3.0	15.1	D	320	480

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1325	331	269	2494	0.531	1320	1776	0.0	1.1	3.055	A
B - Foxhall Rd West	416	104	1634	736	0.565	411	304	0.0	1.3	10.917	B
C - A12 South	1625	406	320	2544	0.639	1618	1313	0.0	1.7	3.860	A
D - Newbourne Rd East	263	66	1372	774	0.339	261	217	0.0	0.5	6.985	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	395	317	2465	0.642	1579	2117	1.1	1.8	4.052	A
B - Foxhall Rd West	497	124	1953	564	0.881	480	364	1.3	5.4	37.578	E
C - A12 South	1940	485	383	2506	0.774	1934	1566	1.7	3.3	6.223	A
D - Newbourne Rd East	314	78	1637	644	0.487	312	258	0.5	0.9	10.780	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1937	484	276	2489	0.778	1931	2422	1.8	3.4	6.367	A
B - Foxhall Rd West	608	152	2349	350	1.738	349	441	5.4	70.4	419.796	F
C - A12 South	2376	594	464	2457	0.967	2325	1830	3.3	16.1	21.806	C
D - Newbourne Rd East	384	96	1918	506	0.760	376	288	0.9	2.8	26.484	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1937	484	269	2493	0.777	1937	2447	3.4	3.4	6.465	A
B - Foxhall Rd West	608	152	2386	330	1.843	330	446	70.4	140.0	895.860	F
C - A12 South	2376	594	470	2454	0.969	2361	1831	16.1	19.9	31.772	D
D - Newbourne Rd East	384	96	1918	506	0.759	383	289	2.8	3.0	29.054	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	395	339	2451	0.645	1588	2207	3.4	1.8	4.199	A
B - Foxhall Rd West	497	124	2024	525	0.946	521	372	140.0	133.8	932.569	F
C - A12 South	1940	485	391	2501	0.776	2006	1591	19.9	3.6	8.198	A
D - Newbourne Rd East	314	78	1660	633	0.495	321	267	3.0	1.0	11.822	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1325	331	412	2407	0.550	1327	1959	1.8	1.2	3.341	A
B - Foxhall Rd West	416	104	1649	728	0.572	722	307	133.8	57.2	478.609	F
C - A12 South	1625	406	323	2542	0.639	1632	1429	3.6	1.8	3.987	A
D - Newbourne Rd East	263	66	1488	719	0.365	264	252	1.0	0.6	7.949	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.26	0.03	0.28	1.26	4.59			N/A	N/A
C - A12 South	1.75	0.29	1.01	2.84	3.55			N/A	N/A
D - Newbourne Rd East	0.51	0.51	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.04	0.43	4.75	8.00			N/A	N/A
B - Foxhall Rd West	5.41	0.05	0.49	15.51	27.02			N/A	N/A
C - A12 South	3.33	0.04	0.42	9.17	16.93			N/A	N/A
D - Newbourne Rd East	0.93	0.06	0.76	1.71	2.26			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.40	0.03	0.28	3.40	7.73			N/A	N/A
B - Foxhall Rd West	70.36	41.68	68.15	95.17	103.93			N/A	N/A
C - A12 South	16.13	0.10	3.87	46.42	71.14			N/A	N/A
D - Newbourne Rd East	2.81	0.03	0.35	6.39	15.08			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.03	0.27	3.43	3.43			N/A	N/A
B - Foxhall Rd West	139.96	101.29	138.00	172.08	182.68			N/A	N/A
C - A12 South	19.90	0.07	1.50	58.67	100.06			N/A	N/A
D - Newbourne Rd East	2.96	0.03	0.32	4.56	15.00			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.08	1.16	4.13	5.78			N/A	N/A
B - Foxhall Rd West	133.78	91.49	131.42	169.56	181.57			N/A	N/A
C - A12 South	3.58	0.04	0.43	9.91	18.20			N/A	N/A
D - Newbourne Rd East	1.01	0.04	0.44	2.40	3.73			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.05	0.48	2.96	4.59			N/A	N/A
B - Foxhall Rd West	57.20	25.34	53.78	86.79	98.09			N/A	N/A
C - A12 South	1.79	0.03	0.30	2.39	8.71			N/A	N/A
D - Newbourne Rd East	0.58	0.03	0.32	1.24	2.57			N/A	N/A

2023 Reference Case [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	9.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1791	100.000
B - Foxhall Rd West		ONE HOUR	✓	433	100.000
C - A12 South		ONE HOUR	✓	1808	100.000
D - Newbourne Rd East		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	283	1366	140
	B - Foxhall Rd West	235	0	147	51
	C - A12 South	1528	218	1	62
	D - Newbourne Rd East	112	106	95	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	5
	B - Foxhall Rd West	4	0	6	6
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	4	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.36	3.4	7.6	A	1643	2465
B - Foxhall Rd West	0.77	24.56	3.1	15.5	C	397	596
C - A12 South	0.81	7.48	4.1	13.0	A	1659	2489
D - Newbourne Rd East	0.67	21.38	2.0	9.3	C	288	433

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	195	2594	0.520	1344	1408	0.0	1.1	2.870	A
B - Foxhall Rd West	326	81	1279	929	0.351	324	456	0.0	0.5	5.925	A
C - A12 South	1361	340	378	2578	0.528	1357	1206	0.0	1.1	2.937	A
D - Newbourne Rd East	237	59	1349	830	0.285	235	190	0.0	0.4	6.032	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	403	234	2571	0.626	1608	1684	1.1	1.7	3.729	A
B - Foxhall Rd West	389	97	1530	800	0.487	388	545	0.5	0.9	8.700	A
C - A12 South	1626	406	452	2533	0.642	1623	1443	1.1	1.8	3.945	A
D - Newbourne Rd East	282	71	1614	697	0.405	281	228	0.4	0.7	8.638	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1972	493	284	2540	0.776	1965	2053	1.7	3.4	6.190	A
B - Foxhall Rd West	477	119	1868	625	0.762	469	665	0.9	2.9	21.984	C
C - A12 South	1991	498	551	2473	0.805	1982	1761	1.8	4.0	7.205	A
D - Newbourne Rd East	346	86	1971	517	0.669	341	278	0.7	1.9	19.900	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1972	493	287	2538	0.777	1972	2066	3.4	3.4	6.356	A
B - Foxhall Rd West	477	119	1877	621	0.768	476	669	2.9	3.1	24.557	C
C - A12 South	1991	498	555	2471	0.806	1991	1770	4.0	4.1	7.484	A
D - Newbourne Rd East	346	86	1980	513	0.674	346	279	1.9	2.0	21.384	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	403	239	2567	0.627	1617	1701	3.4	1.7	3.813	A
B - Foxhall Rd West	389	97	1543	793	0.491	398	550	3.1	1.0	9.288	A
C - A12 South	1626	406	458	2529	0.643	1635	1456	4.1	1.8	4.064	A
D - Newbourne Rd East	282	71	1626	691	0.409	288	230	2.0	0.7	9.033	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	197	2593	0.520	1351	1417	1.7	1.1	2.904	A
B - Foxhall Rd West	326	81	1287	926	0.352	328	458	1.0	0.5	6.036	A
C - A12 South	1361	340	381	2576	0.528	1364	1214	1.8	1.1	2.978	A
D - Newbourne Rd East	237	59	1357	826	0.286	238	192	0.7	0.4	6.128	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.11	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.04	0.42	4.43	7.60			N/A	N/A
B - Foxhall Rd West	0.93	0.06	0.67	1.81	2.54			N/A	N/A
C - A12 South	1.77	0.04	0.41	4.73	8.37			N/A	N/A
D - Newbourne Rd East	0.67	0.06	0.68	1.40	1.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.37	0.03	0.28	3.37	7.21			N/A	N/A
B - Foxhall Rd West	2.91	0.03	0.33	5.87	15.55			N/A	N/A
C - A12 South	3.97	0.03	0.29	3.97	13.00			N/A	N/A
D - Newbourne Rd East	1.89	0.03	0.30	1.89	8.46			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.03	0.27	3.43	3.43			N/A	N/A
B - Foxhall Rd West	3.11	0.03	0.31	4.07	15.10			N/A	N/A
C - A12 South	4.06	0.03	0.27	4.06	4.06			N/A	N/A
D - Newbourne Rd East	1.99	0.03	0.30	2.23	9.28			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.70	0.08	1.14	3.71	5.08			N/A	N/A
B - Foxhall Rd West	0.98	0.05	0.45	2.28	3.52			N/A	N/A
C - A12 South	1.82	0.07	1.01	4.34	6.22			N/A	N/A
D - Newbourne Rd East	0.70	0.05	0.49	1.22	1.77			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.05	0.46	2.63	4.00			N/A	N/A
B - Foxhall Rd West	0.55	0.03	0.32	1.11	2.40			N/A	N/A
C - A12 South	1.13	0.04	0.41	2.84	4.77			N/A	N/A
D - Newbourne Rd East	0.40	0.03	0.33	1.26	1.26			N/A	N/A

2023 Reference Case [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	8.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1869	100.000
B - Foxhall Rd West		ONE HOUR	✓	422	100.000
C - A12 South		ONE HOUR	✓	1903	100.000
D - Newbourne Rd East		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	302	1436	130
	B - Foxhall Rd West	226	0	137	58
	C - A12 South	1532	334	1	36
	D - Newbourne Rd East	71	128	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	3
	B - Foxhall Rd West	0	0	0	5
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.35	3.6	8.0	A	1715	2572
B - Foxhall Rd West	0.67	15.62	2.0	7.4	C	387	581
C - A12 South	0.83	8.58	4.9	19.9	A	1746	2619
D - Newbourne Rd East	0.60	17.27	1.4	6.6	C	258	386

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1407	352	174	2674	0.526	1402	1373	0.0	1.1	2.823	A
B - Foxhall Rd West	318	79	1231	1000	0.318	316	572	0.0	0.5	5.247	A
C - A12 South	1432	358	376	2620	0.547	1428	1243	0.0	1.2	3.008	A
D - Newbourne Rd East	211	53	1408	852	0.248	210	168	0.0	0.3	5.594	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1680	420	209	2653	0.633	1677	1642	1.1	1.7	3.683	A
B - Foxhall Rd West	379	95	1472	872	0.435	378	685	0.5	0.8	7.276	A
C - A12 South	1711	428	450	2575	0.664	1708	1486	1.2	2.0	4.138	A
D - Newbourne Rd East	252	63	1685	711	0.355	251	201	0.3	0.5	7.814	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2057	514	254	2624	0.784	2050	2003	1.7	3.5	6.191	A
B - Foxhall Rd West	465	116	1796	699	0.665	460	836	0.8	1.9	14.785	B
C - A12 South	2095	524	548	2515	0.833	2084	1815	2.0	4.7	8.153	A
D - Newbourne Rd East	309	77	2058	521	0.593	306	246	0.5	1.4	16.475	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2057	514	256	2623	0.784	2057	2014	3.5	3.6	6.353	A
B - Foxhall Rd West	465	116	1806	694	0.669	464	840	1.9	2.0	15.620	C
C - A12 South	2095	524	552	2513	0.834	2094	1823	4.7	4.9	8.581	A
D - Newbourne Rd East	309	77	2066	517	0.598	309	247	1.4	1.4	17.272	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1680	420	212	2651	0.634	1687	1658	3.6	1.7	3.763	A
B - Foxhall Rd West	379	95	1485	865	0.439	384	691	2.0	0.8	7.561	A
C - A12 South	1711	428	454	2572	0.665	1722	1497	4.9	2.0	4.291	A
D - Newbourne Rd East	252	63	1696	706	0.357	256	203	1.4	0.6	8.064	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1407	352	176	2673	0.526	1409	1381	1.7	1.1	2.856	A
B - Foxhall Rd West	318	79	1238	996	0.319	319	576	0.8	0.5	5.323	A
C - A12 South	1432	358	378	2618	0.547	1436	1250	2.0	1.2	3.052	A
D - Newbourne Rd East	211	53	1416	848	0.249	212	169	0.6	0.3	5.668	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C - A12 South	1.20	0.56	1.07	1.22	1.61			N/A	N/A
D - Newbourne Rd East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.04	0.41	4.57	7.94			N/A	N/A
B - Foxhall Rd West	0.76	0.07	0.73	1.49	1.53			N/A	N/A
C - A12 South	1.95	0.04	0.40	5.24	9.56			N/A	N/A
D - Newbourne Rd East	0.54	0.05	0.58	1.32	1.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.52	0.03	0.28	3.52	7.97			N/A	N/A
B - Foxhall Rd West	1.89	0.03	0.29	1.89	6.87			N/A	N/A
C - A12 South	4.74	0.03	0.30	4.74	19.86			N/A	N/A
D - Newbourne Rd East	1.40	0.03	0.28	1.40	3.57			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.58	0.03	0.27	3.58	3.58			N/A	N/A
B - Foxhall Rd West	1.97	0.03	0.29	1.97	7.40			N/A	N/A
C - A12 South	4.88	0.03	0.27	4.88	6.63			N/A	N/A
D - Newbourne Rd East	1.45	0.03	0.30	1.54	6.63			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.08	1.13	3.87	5.41			N/A	N/A
B - Foxhall Rd West	0.79	0.06	0.65	1.38	1.84			N/A	N/A
C - A12 South	2.01	0.06	0.86	5.12	7.68			N/A	N/A
D - Newbourne Rd East	0.56	0.05	0.49	1.33	1.44			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.04	0.45	2.73	4.26			N/A	N/A
B - Foxhall Rd West	0.47	0.04	0.36	1.38	1.41			N/A	N/A
C - A12 South	1.22	0.04	0.38	3.08	5.65			N/A	N/A
D - Newbourne Rd East	0.33	0.03	0.32	1.08	1.32			N/A	N/A

2023 Early Years [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	879	100.000
B - Foxhall Rd West		ONE HOUR	✓	205	100.000
C - A12 South		ONE HOUR	✓	794	100.000
D - Newbourne Rd East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	808	30
	B - Foxhall Rd West	102	0	81	22
	C - A12 South	728	37	0	30
	D - Newbourne Rd East	15	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	10
	C - A12 South	12	5	0	5
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.18	0.6	2.7	A	806	1209
B - Foxhall Rd West	0.20	4.03	0.3	1.0	A	188	283
C - A12 South	0.34	2.08	0.5	2.2	A	729	1094
D - Newbourne Rd East	0.09	4.34	0.1	0.5	A	65	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	662	165	100	2652	0.249	660	634	0.0	0.3	1.808	A
B - Foxhall Rd West	155	39	580	1267	0.122	154	73	0.0	0.1	3.234	A
C - A12 South	598	150	57	2617	0.229	597	694	0.0	0.3	1.782	A
D - Newbourne Rd East	53	13	698	1056	0.050	53	62	0.0	0.1	3.590	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	790	197	120	2639	0.299	790	759	0.3	0.4	1.946	A
B - Foxhall Rd West	185	46	694	1205	0.153	184	88	0.1	0.2	3.528	A
C - A12 South	714	179	68	2611	0.274	714	831	0.3	0.4	1.897	A
D - Newbourne Rd East	63	16	835	993	0.064	63	74	0.1	0.1	3.873	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	967	242	147	2621	0.369	967	929	0.4	0.6	2.176	A
B - Foxhall Rd West	226	57	850	1120	0.202	226	108	0.2	0.3	4.027	A
C - A12 South	875	219	83	2602	0.336	874	1017	0.4	0.5	2.084	A
D - Newbourne Rd East	78	19	1023	906	0.086	77	91	0.1	0.1	4.343	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	967	242	147	2621	0.369	967	930	0.6	0.6	2.176	A
B - Foxhall Rd West	226	57	850	1119	0.202	226	108	0.3	0.3	4.030	A
C - A12 South	875	219	83	2602	0.336	875	1018	0.5	0.5	2.084	A
D - Newbourne Rd East	78	19	1024	906	0.086	78	91	0.1	0.1	4.345	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	790	197	120	2639	0.299	791	760	0.6	0.4	1.948	A
B - Foxhall Rd West	185	46	695	1204	0.153	185	88	0.3	0.2	3.532	A
C - A12 South	714	179	68	2611	0.274	715	832	0.5	0.4	1.901	A
D - Newbourne Rd East	63	16	836	992	0.064	63	74	0.1	0.1	3.878	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	662	165	100	2651	0.250	662	636	0.4	0.3	1.811	A
B - Foxhall Rd West	155	39	582	1266	0.122	155	74	0.2	0.1	3.240	A
C - A12 South	598	150	57	2617	0.229	598	696	0.4	0.3	1.782	A
D - Newbourne Rd East	53	13	700	1055	0.050	53	62	0.1	0.1	3.596	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.50	0.03	0.25	0.50	0.50			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.29	1.32	2.73			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.28	0.50	0.97			N/A	N/A
C - A12 South	0.51	0.03	0.31	1.44	2.25			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Early Years [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	20.33	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1610	100.000
B - Foxhall Rd West		ONE HOUR	✓	520	100.000
C - A12 South		ONE HOUR	✓	1679	100.000
D - Newbourne Rd East		ONE HOUR	✓	214	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	166	1385	59
	B - Foxhall Rd West	294	0	170	57
	C - A12 South	1542	93	0	44
	D - Newbourne Rd East	118	31	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	12	5	0	14
	D - Newbourne Rd East	12	20	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	5.03	2.4	5.4	A	1478	2217
B - Foxhall Rd West	1.02	121.25	19.8	59.5	F	477	716
C - A12 South	0.76	6.15	3.1	6.8	A	1540	2311
D - Newbourne Rd East	0.47	13.68	0.9	4.3	B	196	294

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1212	303	202	2542	0.477	1209	1465	0.0	0.9	2.694	A
B - Foxhall Rd West	392	98	1278	891	0.439	388	217	0.0	0.8	7.121	A
C - A12 South	1264	316	236	2498	0.506	1260	1215	0.0	1.0	2.897	A
D - Newbourne Rd East	161	40	1291	775	0.207	160	120	0.0	0.3	5.838	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	241	2517	0.575	1446	1752	0.9	1.3	3.355	A
B - Foxhall Rd West	468	117	1529	752	0.622	464	260	0.8	1.6	12.391	B
C - A12 South	1509	377	283	2471	0.611	1507	1453	1.0	1.6	3.728	A
D - Newbourne Rd East	192	48	1544	657	0.292	191	143	0.3	0.4	7.717	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1773	443	278	2494	0.711	1769	2119	1.3	2.4	4.934	A
B - Foxhall Rd West	573	143	1869	563	1.018	527	318	1.6	12.9	67.327	F
C - A12 South	1848	462	345	2434	0.759	1842	1764	1.6	3.1	6.024	A
D - Newbourne Rd East	235	59	1876	503	0.468	233	170	0.4	0.9	13.279	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1773	443	285	2489	0.712	1773	2135	2.4	2.4	5.026	A
B - Foxhall Rd West	573	143	1876	559	1.024	545	319	12.9	19.8	121.253	F
C - A12 South	1848	462	347	2433	0.760	1848	1774	3.1	3.1	6.155	A
D - Newbourne Rd East	235	59	1886	498	0.472	235	173	0.9	0.9	13.675	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	274	2496	0.580	1452	1804	2.4	1.4	3.463	A
B - Foxhall Rd West	468	117	1538	746	0.626	540	262	19.8	1.8	23.734	C
C - A12 South	1509	377	285	2469	0.611	1515	1484	3.1	1.6	3.799	A
D - Newbourne Rd East	192	48	1575	643	0.299	194	152	0.9	0.4	8.045	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1212	303	205	2540	0.477	1214	1475	1.4	0.9	2.720	A
B - Foxhall Rd West	392	98	1285	887	0.441	395	219	1.8	0.8	7.376	A
C - A12 South	1264	316	238	2497	0.506	1266	1223	1.6	1.0	2.930	A
D - Newbourne Rd East	161	40	1299	772	0.208	162	121	0.4	0.3	5.905	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.77	0.13	0.89	1.40	1.47			N/A	N/A
C - A12 South	1.02	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.05	0.46	3.40	5.37			N/A	N/A
B - Foxhall Rd West	1.59	0.04	0.44	4.19	6.94			N/A	N/A
C - A12 South	1.55	0.04	0.43	4.07	6.81			N/A	N/A
D - Newbourne Rd East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.41	0.03	0.27	2.41	2.41			N/A	N/A
B - Foxhall Rd West	12.93	0.75	8.65	28.92	37.58			N/A	N/A
C - A12 South	3.07	0.03	0.28	3.07	5.38			N/A	N/A
D - Newbourne Rd East	0.86	0.03	0.26	0.86	0.86			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.45	0.03	0.26	2.45	2.45			N/A	N/A
B - Foxhall Rd West	19.83	0.97	13.12	45.48	59.51			N/A	N/A
C - A12 South	3.12	0.03	0.26	3.12	3.12			N/A	N/A
D - Newbourne Rd East	0.88	0.03	0.30	1.29	4.27			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.15	1.21	2.34	2.91			N/A	N/A
B - Foxhall Rd West	1.76	0.03	0.33	3.78	9.22			N/A	N/A
C - A12 South	1.59	0.09	1.15	3.28	4.47			N/A	N/A
D - Newbourne Rd East	0.43	0.03	0.33	1.10	1.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.06	0.71	1.74	2.36			N/A	N/A
B - Foxhall Rd West	0.80	0.03	0.27	0.80	1.71			N/A	N/A
C - A12 South	1.03	0.05	0.48	2.37	3.58			N/A	N/A
D - Newbourne Rd East	0.27	0.03	0.26	0.46	0.49			N/A	N/A

2023 Early Years [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	197.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1784	100.000
B - Foxhall Rd West		ONE HOUR	✓	556	100.000
C - A12 South		ONE HOUR	✓	2202	100.000
D - Newbourne Rd East		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	161	1500	124
	B - Foxhall Rd West	300	0	196	60
	C - A12 South	1928	166	1	107
	D - Newbourne Rd East	188	71	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	11	8	0	7
	D - Newbourne Rd East	9	2	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.85	3.7	9.9	A	1637	2456
B - Foxhall Rd West	2.09	1537.20	179.9	179.9	F	510	765
C - A12 South	1.01	59.16	41.4	133.1	F	2021	3031
D - Newbourne Rd East	0.78	32.41	3.3	17.3	D	320	480

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1343	336	271	2477	0.542	1339	1807	0.0	1.2	3.148	A
B - Foxhall Rd West	418	105	1666	696	0.601	412	298	0.0	1.5	12.445	B
C - A12 South	1658	415	314	2485	0.667	1650	1339	0.0	2.0	4.273	A
D - Newbourne Rd East	263	66	1392	760	0.345	260	218	0.0	0.5	7.174	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1604	401	313	2452	0.654	1601	2147	1.2	1.9	4.219	A
B - Foxhall Rd West	499	125	1991	517	0.967	470	356	1.5	8.9	57.040	F
C - A12 South	1980	495	376	2449	0.809	1972	1593	2.0	4.1	7.415	A
D - Newbourne Rd East	314	78	1657	630	0.498	312	258	0.5	1.0	11.260	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1965	491	259	2484	0.791	1957	2412	1.9	3.7	6.741	A
B - Foxhall Rd West	612	153	2357	314	1.947	313	429	8.9	83.5	567.762	F
C - A12 South	2425	606	455	2402	1.009	2331	1854	4.1	27.6	32.533	D
D - Newbourne Rd East	384	96	1933	492	0.781	375	283	1.0	3.1	29.039	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1965	491	251	2489	0.789	1964	2438	3.7	3.7	6.854	A
B - Foxhall Rd West	612	153	2397	292	2.094	292	434	83.5	163.4	1537.198	F
C - A12 South	2425	606	461	2399	1.011	2369	1854	27.6	41.4	59.164	F
D - Newbourne Rd East	384	96	1932	492	0.780	383	283	3.1	3.3	32.414	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1604	401	304	2457	0.653	1611	2270	3.7	1.9	4.292	A
B - Foxhall Rd West	499	125	2141	434	1.152	434	371	163.4	179.9	1238.831	F
C - A12 South	1980	495	385	2443	0.810	2128	1591	41.4	4.5	16.742	C
D - Newbourne Rd East	314	78	1653	631	0.497	323	262	3.3	1.0	11.998	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1343	336	396	2402	0.559	1346	1971	1.9	1.3	3.415	A
B - Foxhall Rd West	418	105	1684	686	0.610	682	301	179.9	113.9	776.589	F
C - A12 South	1658	415	317	2483	0.668	1668	1441	4.5	2.0	4.469	A
D - Newbourne Rd East	263	66	1494	712	0.369	264	248	1.0	0.6	8.078	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.45	0.03	0.27	1.45	1.45			N/A	N/A
C - A12 South	1.98	0.18	1.09	3.67	4.68			N/A	N/A
D - Newbourne Rd East	0.52	0.52	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.87	0.04	0.43	5.02	8.60			N/A	N/A
B - Foxhall Rd West	8.94	0.07	1.20	25.95	41.60			N/A	N/A
C - A12 South	4.05	0.05	0.46	11.44	20.34			N/A	N/A
D - Newbourne Rd East	0.97	0.06	0.75	1.83	2.55			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.65	0.03	0.28	3.65	9.95			N/A	N/A
B - Foxhall Rd West	83.51	49.26	80.94	113.40	123.95			N/A	N/A
C - A12 South	27.55	1.01	17.55	65.11	86.17			N/A	N/A
D - Newbourne Rd East	3.10	0.04	0.37	7.74	16.54			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.69	0.03	0.27	3.69	3.69			N/A	N/A
B - Foxhall Rd West	163.42	162.05	162.50	163.42	163.42			N/A	N/A
C - A12 South	41.43	1.23	25.73	99.85	133.14			N/A	N/A
D - Newbourne Rd East	3.29	0.03	0.33	5.92	17.31			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.07	1.07	4.53	6.46			N/A	N/A
B - Foxhall Rd West	179.88	179.05	179.50	179.90	179.95			N/A	N/A
C - A12 South	4.53	0.04	0.43	12.50	23.51			N/A	N/A
D - Newbourne Rd East	1.01	0.04	0.41	2.49	4.01			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.05	0.45	3.20	5.04			N/A	N/A
B - Foxhall Rd West	113.89	66.96	110.51	155.25	169.82			N/A	N/A
C - A12 South	2.04	0.03	0.29	2.04	8.91			N/A	N/A
D - Newbourne Rd East	0.59	0.03	0.32	1.19	2.73			N/A	N/A

2023 Early Years [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	10.69	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1786	100.000
B - Foxhall Rd West		ONE HOUR	✓	429	100.000
C - A12 South		ONE HOUR	✓	1817	100.000
D - Newbourne Rd East		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	270	1374	140
	B - Foxhall Rd West	231	0	147	51
	C - A12 South	1537	218	1	62
	D - Newbourne Rd East	113	106	95	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	5
	B - Foxhall Rd West	4	0	6	6
	C - A12 South	8	5	0	1
	D - Newbourne Rd East	4	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.81	3.7	9.4	A	1639	2458
B - Foxhall Rd West	0.79	28.27	3.5	18.3	D	394	590
C - A12 South	0.82	8.27	4.5	17.0	A	1668	2501
D - Newbourne Rd East	0.70	23.52	2.2	10.6	C	289	434

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1345	336	195	2549	0.527	1340	1412	0.0	1.1	2.966	A
B - Foxhall Rd West	323	81	1287	912	0.354	321	446	0.0	0.5	6.062	A
C - A12 South	1368	342	369	2538	0.539	1364	1212	0.0	1.2	3.053	A
D - Newbourne Rd East	237	59	1345	820	0.289	236	190	0.0	0.4	6.141	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1606	401	234	2526	0.636	1603	1689	1.1	1.7	3.890	A
B - Foxhall Rd West	386	96	1539	780	0.495	384	533	0.5	1.0	9.058	A
C - A12 South	1634	408	441	2494	0.655	1631	1450	1.2	1.9	4.157	A
D - Newbourne Rd East	283	71	1609	685	0.414	282	228	0.4	0.7	8.907	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1966	492	283	2496	0.788	1959	2058	1.7	3.6	6.612	A
B - Foxhall Rd West	472	118	1878	601	0.785	463	650	1.0	3.2	24.598	C
C - A12 South	2001	500	537	2437	0.821	1991	1769	1.9	4.4	7.895	A
D - Newbourne Rd East	347	87	1965	503	0.690	342	277	0.7	2.1	21.577	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1966	492	287	2494	0.789	1966	2072	3.6	3.7	6.813	A
B - Foxhall Rd West	472	118	1888	596	0.792	471	654	3.2	3.5	28.269	D
C - A12 South	2001	500	542	2434	0.822	2000	1779	4.4	4.5	8.271	A
D - Newbourne Rd East	347	87	1974	499	0.696	347	279	2.1	2.2	23.522	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1606	401	240	2522	0.637	1613	1709	3.7	1.8	3.992	A
B - Foxhall Rd West	386	96	1553	772	0.499	396	539	3.5	1.0	9.801	A
C - A12 South	1634	408	448	2490	0.656	1644	1464	4.5	1.9	4.303	A
D - Newbourne Rd East	283	71	1623	678	0.418	289	230	2.2	0.7	9.380	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1345	336	198	2548	0.528	1347	1422	1.8	1.1	3.003	A
B - Foxhall Rd West	323	81	1294	908	0.355	325	449	1.0	0.6	6.189	A
C - A12 South	1368	342	372	2536	0.540	1371	1220	1.9	1.2	3.101	A
D - Newbourne Rd East	237	59	1353	816	0.291	239	192	0.7	0.4	6.242	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.16	0.55	1.04	1.29	1.29			N/A	N/A
D - Newbourne Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.72	0.04	0.42	4.62	7.96			N/A	N/A
B - Foxhall Rd West	0.96	0.05	0.63	1.91	2.76			N/A	N/A
C - A12 South	1.87	0.04	0.40	5.01	8.97			N/A	N/A
D - Newbourne Rd East	0.69	0.06	0.68	1.21	1.21			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.59	0.03	0.28	3.59	9.37			N/A	N/A
B - Foxhall Rd West	3.24	0.04	0.35	7.58	17.41			N/A	N/A
C - A12 South	4.37	0.03	0.29	4.37	17.02			N/A	N/A
D - Newbourne Rd East	2.06	0.03	0.30	2.67	9.95			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.66	0.03	0.27	3.66	3.66			N/A	N/A
B - Foxhall Rd West	3.52	0.03	0.32	5.91	18.27			N/A	N/A
C - A12 South	4.50	0.03	0.27	4.50	4.94			N/A	N/A
D - Newbourne Rd East	2.18	0.03	0.31	2.82	10.55			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.07	1.09	3.99	5.67			N/A	N/A
B - Foxhall Rd West	1.02	0.04	0.43	2.47	3.88			N/A	N/A
C - A12 South	1.93	0.06	0.92	4.81	7.08			N/A	N/A
D - Newbourne Rd East	0.73	0.05	0.47	1.41	1.94			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.04	0.43	2.78	4.44			N/A	N/A
B - Foxhall Rd West	0.56	0.03	0.31	1.04	2.56			N/A	N/A
C - A12 South	1.18	0.04	0.39	2.98	5.30			N/A	N/A
D - Newbourne Rd East	0.41	0.03	0.33	1.33	1.45			N/A	N/A

2023 Early Years [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	9.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1851	100.000
B - Foxhall Rd West		ONE HOUR	✓	414	100.000
C - A12 South		ONE HOUR	✓	1942	100.000
D - Newbourne Rd East		ONE HOUR	✓	281	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	243	1476	131
	B - Foxhall Rd West	218	0	137	58
	C - A12 South	1571	334	1	36
	D - Newbourne Rd East	71	128	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	6	3
	B - Foxhall Rd West	0	0	0	5
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.70	3.7	9.6	A	1698	2547
B - Foxhall Rd West	0.68	16.96	2.1	8.4	C	380	570
C - A12 South	0.84	8.86	5.1	21.8	A	1782	2673
D - Newbourne Rd East	0.61	18.07	1.5	7.0	C	258	386

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1393	348	174	2624	0.531	1389	1396	0.0	1.1	2.905	A
B - Foxhall Rd West	312	78	1260	982	0.318	310	528	0.0	0.5	5.346	A
C - A12 South	1462	365	331	2636	0.555	1457	1272	0.0	1.2	3.041	A
D - Newbourne Rd East	211	53	1394	846	0.250	210	169	0.0	0.3	5.649	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1664	416	209	2603	0.639	1661	1670	1.1	1.8	3.815	A
B - Foxhall Rd West	372	93	1507	850	0.438	371	632	0.5	0.8	7.501	A
C - A12 South	1746	436	397	2597	0.672	1742	1522	1.2	2.0	4.200	A
D - Newbourne Rd East	252	63	1667	704	0.358	251	202	0.3	0.6	7.942	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2038	509	254	2575	0.791	2030	2036	1.8	3.7	6.511	A
B - Foxhall Rd West	456	114	1839	672	0.678	451	771	0.8	2.0	15.914	C
C - A12 South	2138	534	483	2544	0.840	2126	1859	2.0	5.0	8.387	A
D - Newbourne Rd East	309	77	2037	512	0.604	305	247	0.6	1.5	17.148	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2038	509	256	2574	0.792	2037	2048	3.7	3.7	6.702	A
B - Foxhall Rd West	456	114	1849	667	0.683	456	775	2.0	2.1	16.962	C
C - A12 South	2138	534	487	2542	0.841	2137	1867	5.0	5.1	8.863	A
D - Newbourne Rd East	309	77	2045	507	0.609	309	248	1.5	1.5	18.065	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1664	416	212	2601	0.640	1671	1687	3.7	1.8	3.905	A
B - Foxhall Rd West	372	93	1521	842	0.442	377	638	2.1	0.8	7.826	A
C - A12 South	1746	436	401	2594	0.673	1758	1534	5.1	2.1	4.368	A
D - Newbourne Rd East	252	63	1679	698	0.362	256	204	1.5	0.6	8.218	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1393	348	176	2623	0.531	1396	1405	1.8	1.1	2.940	A
B - Foxhall Rd West	312	78	1268	978	0.319	313	532	0.8	0.5	5.426	A
C - A12 South	1462	365	334	2635	0.555	1465	1280	2.1	1.3	3.086	A
D - Newbourne Rd East	211	53	1401	842	0.251	212	170	0.6	0.3	5.724	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C - A12 South	1.24	0.56	1.11	1.44	1.72			N/A	N/A
D - Newbourne Rd East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.04	0.41	4.69	8.18			N/A	N/A
B - Foxhall Rd West	0.77	0.06	0.72	1.06	1.61			N/A	N/A
C - A12 South	2.02	0.04	0.40	5.43	9.96			N/A	N/A
D - Newbourne Rd East	0.55	0.06	0.59	1.32	1.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.66	0.03	0.28	3.66	9.56			N/A	N/A
B - Foxhall Rd West	2.00	0.03	0.29	2.00	8.10			N/A	N/A
C - A12 South	4.98	0.03	0.30	4.98	21.83			N/A	N/A
D - Newbourne Rd East	1.45	0.03	0.28	1.45	4.23			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.73	0.03	0.27	3.73	3.73			N/A	N/A
B - Foxhall Rd West	2.09	0.03	0.29	2.09	8.36			N/A	N/A
C - A12 South	5.13	0.03	0.28	5.13	8.02			N/A	N/A
D - Newbourne Rd East	1.51	0.03	0.30	1.67	6.97			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.07	1.10	4.08	5.78			N/A	N/A
B - Foxhall Rd West	0.80	0.05	0.61	1.48	1.93			N/A	N/A
C - A12 South	2.09	0.06	0.82	5.40	8.14			N/A	N/A
D - Newbourne Rd East	0.57	0.05	0.49	1.35	1.46			N/A	N/A

18:00 - 18:15

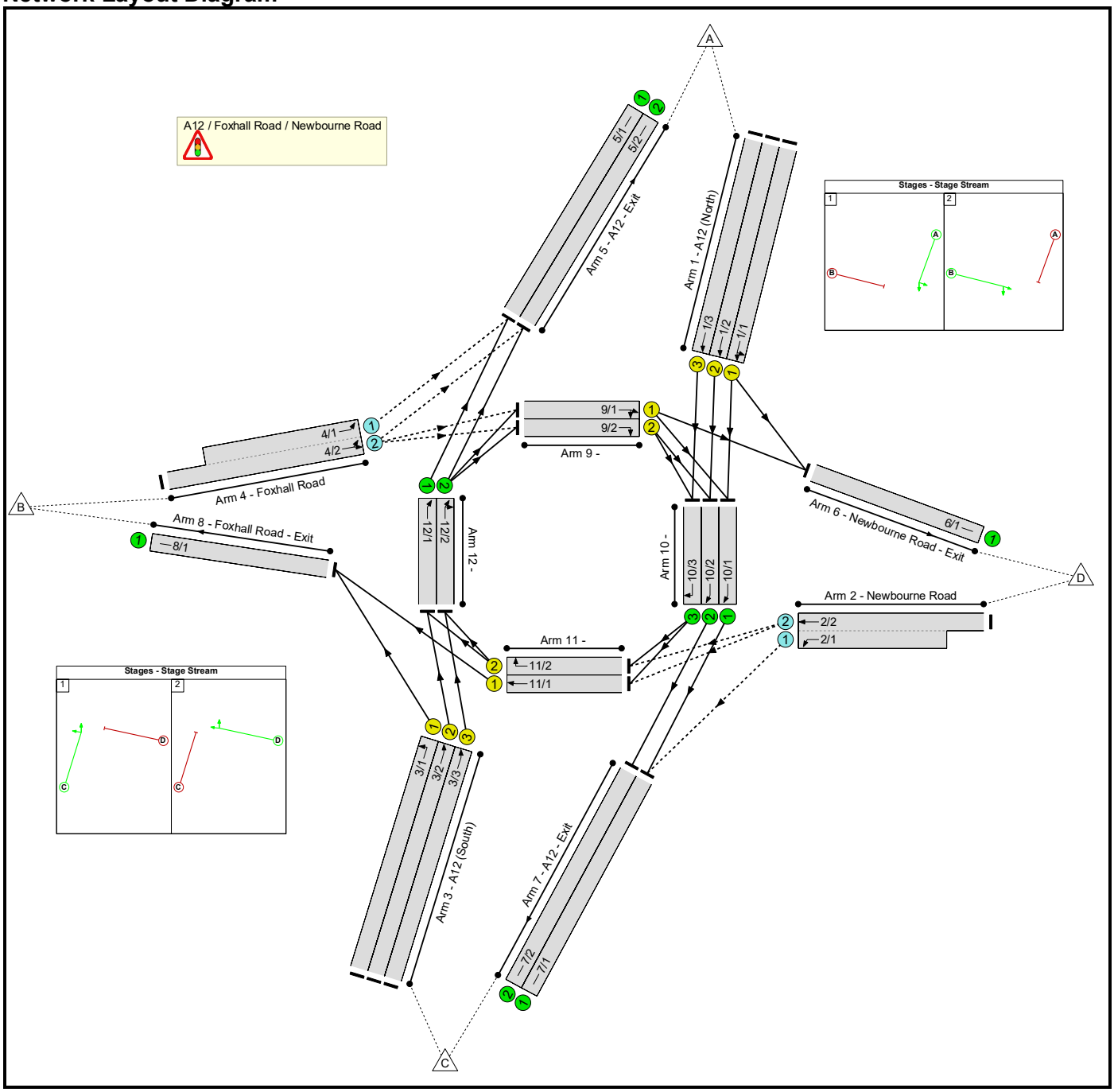
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.04	0.43	2.82	4.54			N/A	N/A
B - Foxhall Rd West	0.47	0.04	0.35	1.40	1.53			N/A	N/A
C - A12 South	1.26	0.04	0.37	3.20	5.93			N/A	N/A
D - Newbourne Rd East	0.34	0.03	0.32	1.10	1.34			N/A	N/A

Full Input Data And Results

User and Project Details

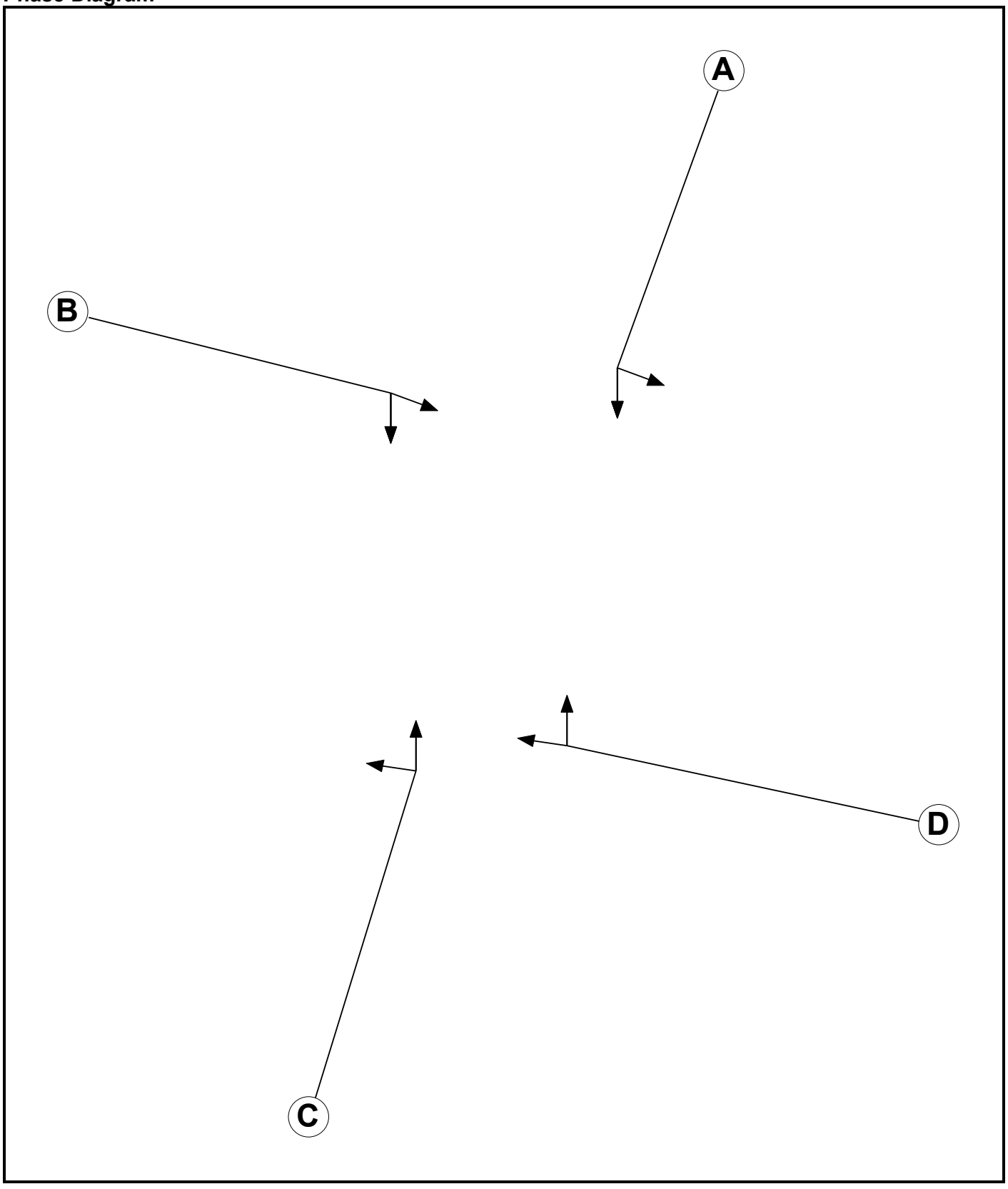
Project:	
Title:	
Location:	
Additional detail:	
File name:	2019.10.23 J22_Model_v16 fixed.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Phase Intergreens Matrix

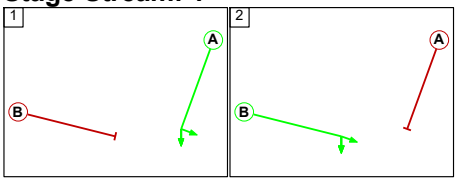
Terminating Phase \ Starting Phase	A	B	C	D
A		5	-	-
B	5		-	-
C	-	-		5
D	-	-	5	

Phases in Stage

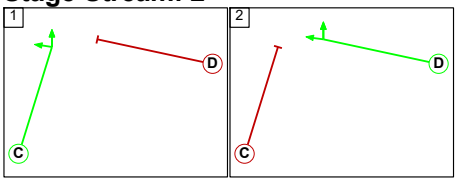
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Prohibited Stage Change

Stage Stream: 1

From Stage \ To Stage		1	2
	1		5
	2	5	

Stage Stream: 2

From Stage \ To Stage		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Newbourne Road)	7/1 (Left)	1000	0	10/1	0.33	All	-	-	-	-	-
				10/2	0.33	All					
				10/3	0.33	All					
2/2 (Newbourne Road)	11/1 (Ahead)	1000	0	10/1	0.33	All	-	-	-	-	-
				10/2	0.33	All					
				10/3	0.33	All					
	11/2 (Ahead)	1000	0	10/1	0.33	All					
				10/2	0.33	All					
				10/3	0.33	All					
4/1 (Foxhall Road)	5/1 (Left)	1000	0	12/1	0.33	All	-	-	-	-	-
				12/2	0.33	All					
4/2 (Foxhall Road)	5/2 (Left)	1000	0	12/1	0.33	All	-	-	-	-	-
				12/2	0.33	All					
	9/1 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					
	9/2 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					

Full Input Data And Results

Lane Input Data

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A12 (North))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	Inf
											Arm 10 Ahead	23.00
1/2 (A12 (North))	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 10 Ahead	23.00
1/3 (A12 (North))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Ahead	23.00
2/1 (Newbourne Road)	O		2	3	20.9	Geom	-	3.50	0.00	Y	Arm 7 Left	14.00
2/2 (Newbourne Road)	O		2	3	34.8	Geom	-	3.50	0.00	Y	Arm 11 Ahead	22.00
3/1 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm 8 Left	20.00
3/2 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	N	Arm 12 Ahead	20.00
3/3 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm 12 Ahead	20.00
4/1 (Foxhall Road)	O		2	3	20.9	Geom	-	3.50	0.00	Y	Arm 5 Left	20.00
4/2 (Foxhall Road)	O		2	3	34.8	Geom	-	3.50	0.00	Y	Arm 5 Left	20.00
											Arm 9 Ahead	20.00
5/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
5/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
6/1 (Newbourne Road - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
7/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
7/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
8/1 (Foxhall Road - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
9/1	U	B	2	3	10.8	Geom	-	3.25	0.00	Y	Arm 6 Ahead	18.00
											Arm 10 Right	18.00
9/2	U	B	2	3	10.8	Geom	-	3.25	0.00	Y	Arm 10 Right	Inf
10/1	U		2	3	8.9	Inf	-	-	-	-	-	-

10/2	U		2	3	8.9	Inf	-	-	-	-	-	-
10/3	U		2	3	8.9	Inf	-	-	-	-	-	-
11/1	U	D	2	3	9.6	Geom	-	3.25	0.00	Y	Arm 8 Ahead	15.00
11/2	U	D	2	3	9.6	Geom	-	3.25	0.00	Y	Arm 12 Right	15.00
12/1	U		2	3	10.4	Inf	-	-	-	-	-	-
12/2	U		2	3	10.4	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '28RC 06:00-07:00'	06:00	07:00	01:00	
2: '28RC 07:00-08:00'	07:00	08:00	01:00	
3: '28RC 08:00-09:00'	08:00	09:00	01:00	
4: '28RC 15:00-16:00'	15:00	16:00	01:00	
5: '28RC 17:00-18:00'	17:00	18:00	01:00	
6: '28PC 06:00-07:00'	06:00	07:00	01:00	
7: '28PC 07:00-08:00'	07:00	08:00	01:00	
8: '28PC 08:00-09:00'	08:00	09:00	01:00	
9: '28PC 15:00-16:00'	15:00	16:00	01:00	
10: '28PC 17:00-18:00'	17:00	18:00	01:00	
11: '34RC 06:00-07:00'	06:00	07:00	01:00	
12: '34RC 07:00-08:00'	07:00	08:00	01:00	
13: '34RC 08:00-09:00'	08:00	09:00	01:00	
14: '34RC 15:00-16:00'	15:00	16:00	01:00	
15: '34RC 17:00-18:00'	17:00	18:00	01:00	
16: '34OP 06:00-07:00'	06:00	07:00	01:00	
17: '34OP 07:00-08:00'	07:00	08:00	01:00	
18: '34OP 08:00-09:00'	08:00	09:00	01:00	
19: '34OP 15:00-16:00'	15:00	16:00	01:00	
20: '34OP 17:00-18:00'	17:00	18:00	01:00	

Scenario 1: '28RC 06:00-07:00' (FG1: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	40	885	34	959
	B	104	0	95	25	224
	C	775	40	0	35	850
	D	16	25	48	0	89
	Tot.	895	105	1028	94	2122

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 28RC 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	430
1/2	489
1/3	40
2/1 (short)	48
2/2 (with short)	89(In) 41(Out)
3/1	40
3/2	435
3/3	375
4/1 (short)	60
4/2 (with short)	224(In) 164(Out)
5/1	503
5/2	392
6/1	94
7/1	453
7/2	575
8/1	105
9/1	69
9/2	86
10/1	405
10/2	575
10/3	40
11/1	65
11/2	16
12/1	443
12/2	383

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	7.9 %	1854	1854
				Arm 10 Ahead	23.00	92.1 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	26.8 %	1828	1828
				Arm 9 Ahead	20.00	73.2 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	87.0 %	1791	1791
				Arm 10 Right	18.00	13.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	212	1508	74	1794
	B	314	0	181	67	562
	C	1681	100	0	62	1843
	D	159	46	95	0	300
	Tot.	2154	358	1784	203	4499

Traffic Lane Flows

Lane	Scenario 2: 28RC 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	755
1/2	827
1/3	212
2/1 (short)	95
2/2 (with short)	300(In) 205(Out)
3/1	100
3/2	911
3/3	832
4/1 (short)	281
4/2 (with short)	562(In) 281(Out)
5/1	1272
5/2	882
6/1	203
7/1	790
7/2	994
8/1	358
9/1	143
9/2	167
10/1	695
10/2	994
10/3	212
11/1	258
11/2	159
12/1	991
12/2	911

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.8 %	1856	1856
				Arm 10 Ahead	23.00	90.2 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	11.7 %	1828	1828
				Arm 9 Ahead	20.00	88.3 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	90.2 %	1791	1791
				Arm 10 Right	18.00	9.8 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	180	1761	157	2098
	B	365	0	208	74	647
	C	2135	183	1	130	2449
	D	272	47	162	0	481
	Tot.	2772	410	2132	361	5675

Traffic Lane Flows

Lane	Scenario 3: 28RC 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	923
1/2	995
1/3	180
2/1 (short)	162
2/2 (with short)	481(In) 319(Out)
3/1	183
3/2	1174
3/3	1092
4/1 (short)	324
4/2 (with short)	647(In) 323(Out)
5/1	1634
5/2	1138
6/1	361
7/1	928
7/2	1204
8/1	410
9/1	204
9/2	209
10/1	766
10/2	1204
10/3	180
11/1	227
11/2	272
12/1	1310
12/2	1228

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	17.0 %	1864	1864
				Arm 10 Ahead	23.00	83.0 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	12.7 %	1828	1828
				Arm 9 Ahead	20.00	87.3 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	317	1540	191	2050
	B	349	0	161	63	573
	C	1753	236	1	83	2073
	D	146	106	135	1	388
	Tot.	2250	659	1837	338	5084

Traffic Lane Flows

Lane	Scenario 4: 28RC 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	833
1/2	898
1/3	319
2/1 (short)	135
2/2 (with short)	388(In) 253(Out)
3/1	236
3/2	955
3/3	882
4/1 (short)	286
4/2 (with short)	573(In) 287(Out)
5/1	1315
5/2	935
6/1	338
7/1	777
7/2	1060
8/1	659
9/1	147
9/2	162
10/1	642
10/2	1060
10/3	319
11/1	423
11/2	149
12/1	1029
12/2	957

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	22.9 %	1871	1871
				Arm 10 Ahead	23.00	77.1 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	22.0 %	1828	1828
				Arm 9 Ahead	20.00	78.0 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	366	1604	167	2139
	B	267	0	137	70	474
	C	1837	343	1	64	2245
	D	103	120	118	0	341
	Tot.	2209	829	1860	301	5199

Traffic Lane Flows

Lane	Scenario 5: 28RC 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	851
1/2	920
1/3	368
2/1 (short)	118
2/2 (with short)	341(In) 223(Out)
3/1	343
3/2	986
3/3	916
4/1 (short)	237
4/2 (with short)	474(In) 237(Out)
5/1	1276
5/2	933
6/1	301
7/1	802
7/2	1058
8/1	829
9/1	134
9/2	138
10/1	684
10/2	1058
10/3	368
11/1	486
11/2	105
12/1	1039
12/2	968

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	19.6 %	1867	1867
				Arm 10 Ahead	23.00	80.4 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	12.7 %	1828	1828
				Arm 9 Ahead	20.00	87.3 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	40	886	34	960
	B	111	0	95	25	231
	C	913	40	0	35	988
	D	18	25	48	0	91
	Tot.	1042	105	1029	94	2270

Traffic Lane Flows

Lane	Scenario 6: 28PC 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	430
1/2	490
1/3	40
2/1 (short)	48
2/2 (with short)	91(In) 43(Out)
3/1	40
3/2	506
3/3	442
4/1 (short)	78
4/2 (with short)	231(In) 153(Out)
5/1	593
5/2	449
6/1	94
7/1	453
7/2	576
8/1	105
9/1	69
9/2	86
10/1	405
10/2	576
10/3	40
11/1	65
11/2	18
12/1	515
12/2	451

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	7.9 %	1854	1854
				Arm 10 Ahead	23.00	92.1 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	21.6 %	1828	1828
				Arm 9 Ahead	20.00	78.4 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	87.0 %	1791	1791
				Arm 10 Right	18.00	13.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	202	1523	74	1799
	B	322	0	181	67	570
	C	1782	100	0	62	1944
	D	161	46	95	0	302
	Tot.	2265	348	1799	203	4615

Traffic Lane Flows

Lane	Scenario 7: 28PC 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	763
1/2	834
1/3	202
2/1 (short)	95
2/2 (with short)	302(In) 207(Out)
3/1	100
3/2	964
3/3	880
4/1 (short)	285
4/2 (with short)	570(In) 285(Out)
5/1	1330
5/2	935
6/1	203
7/1	797
7/2	1002
8/1	348
9/1	142
9/2	168
10/1	702
10/2	1002
10/3	202
11/1	248
11/2	161
12/1	1045
12/2	960

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.7 %	1856	1856
				Arm 10 Ahead	23.00	90.3 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	13.0 %	1828	1828
				Arm 9 Ahead	20.00	87.0 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	90.8 %	1791	1791
				Arm 10 Right	18.00	9.2 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '28PC 08:00-09:00' (FG8: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	178	1781	158	2117
	B	316	0	208	74	598
	C	2156	183	1	130	2470
	D	273	57	152	0	482
	Tot.	2745	418	2142	362	5667

Traffic Lane Flows

Lane	Scenario 8: 28PC 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	933
1/2	1006
1/3	178
2/1 (short)	152
2/2 (with short)	482(In) 330(Out)
3/1	183
3/2	1186
3/3	1101
4/1 (short)	299
4/2 (with short)	598(In) 299(Out)
5/1	1622
5/2	1123
6/1	362
7/1	927
7/2	1215
8/1	418
9/1	204
9/2	209
10/1	775
10/2	1215
10/3	178
11/1	235
11/2	273
12/1	1323
12/2	1237

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	16.9 %	1864	1864
				Arm 10 Ahead	23.00	83.1 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	5.7 %	1828	1828
				Arm 9 Ahead	20.00	94.3 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	320	1583	193	2098
	B	320	0	161	63	544
	C	1796	236	1	83	2116
	D	146	105	137	1	389
	Tot.	2264	661	1882	340	5147

Traffic Lane Flows

Lane	Scenario 9: 28PC 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	855
1/2	921
1/3	322
2/1 (short)	137
2/2 (with short)	389(In) 252(Out)
3/1	236
3/2	977
3/3	903
4/1 (short)	272
4/2 (with short)	544(In) 272(Out)
5/1	1323
5/2	941
6/1	340
7/1	799
7/2	1083
8/1	661
9/1	147
9/2	162
10/1	662
10/2	1083
10/3	322
11/1	425
11/2	149
12/1	1051
12/2	978

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	22.6 %	1871	1871
				Arm 10 Ahead	23.00	77.4 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	17.6 %	1828	1828
				Arm 9 Ahead	20.00	82.4 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	381	1597	168	2148
	B	262	0	137	70	469
	C	1835	343	1	64	2243
	D	103	114	124	0	341
	Tot.	2202	838	1859	302	5201

Traffic Lane Flows

Lane	Scenario 10: 28PC 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	848
1/2	917
1/3	383
2/1 (short)	124
2/2 (with short)	341(In) 217(Out)
3/1	343
3/2	985
3/3	915
4/1 (short)	234
4/2 (with short)	469(In) 235(Out)
5/1	1272
5/2	930
6/1	302
7/1	804
7/2	1055
8/1	838
9/1	134
9/2	138
10/1	680
10/2	1055
10/3	383
11/1	495
11/2	105
12/1	1038
12/2	967

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	19.8 %	1867	1867
				Arm 10 Ahead	23.00	80.2 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	11.9 %	1828	1828
				Arm 9 Ahead	20.00	88.1 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	40	918	35	993
	B	152	0	96	28	276
	C	818	41	0	38	897
	D	17	27	50	0	94
	Tot.	987	108	1064	101	2260

Traffic Lane Flows

Lane	Scenario 11: 34RC 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	447
1/2	506
1/3	40
2/1 (short)	50
2/2 (with short)	94(In) 44(Out)
3/1	41
3/2	460
3/3	396
4/1 (short)	105
4/2 (with short)	276(In) 171(Out)
5/1	574
5/2	413
6/1	101
7/1	468
7/2	596
8/1	108
9/1	72
9/2	90
10/1	418
10/2	596
10/3	40
11/1	67
11/2	17
12/1	469
12/2	404

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	7.8 %	1854	1854
				Arm 10 Ahead	23.00	92.2 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	27.5 %	1828	1828
				Arm 9 Ahead	20.00	72.5 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	91.7 %	1791	1791
				Arm 10 Right	18.00	8.3 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	251	1622	77	1950
	B	366	0	182	77	625
	C	1759	101	0	66	1926
	D	175	52	104	0	331
	Tot.	2300	404	1908	220	4832

Traffic Lane Flows

Lane	Scenario 12: 34RC 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	812
1/2	887
1/3	251
2/1 (short)	104
2/2 (with short)	331(In) 227(Out)
3/1	101
3/2	953
3/3	872
4/1 (short)	312
4/2 (with short)	625(In) 313(Out)
5/1	1353
5/2	947
6/1	220
7/1	846
7/2	1062
8/1	404
9/1	150
9/2	175
10/1	742
10/2	1062
10/3	251
11/1	303
11/2	175
12/1	1041
12/2	959

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.5 %	1855	1855
				Arm 10 Ahead	23.00	90.5 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	17.3 %	1828	1828
				Arm 9 Ahead	20.00	82.7 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	95.3 %	1791	1791
				Arm 10 Right	18.00	4.7 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	232	1906	163	2301
	B	383	0	210	90	683
	C	2152	184	1	139	2476
	D	313	48	192	0	553
	Tot.	2848	464	2309	392	6013

Traffic Lane Flows

Lane	Scenario 13: 34RC 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	997
1/2	1072
1/3	232
2/1 (short)	192
2/2 (with short)	553(In) 361(Out)
3/1	184
3/2	1188
3/3	1104
4/1 (short)	341
4/2 (with short)	683(In) 342(Out)
5/1	1686
5/2	1162
6/1	392
7/1	1026
7/2	1283
8/1	464
9/1	229
9/2	211
10/1	834
10/2	1283
10/3	232
11/1	280
11/2	313
12/1	1345
12/2	1260

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	16.3 %	1863	1863
				Arm 10 Ahead	23.00	83.7 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	12.3 %	1828	1828
				Arm 9 Ahead	20.00	87.7 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	379	1703	227	2311
	B	440	0	161	76	677
	C	1974	239	1	98	2312
	D	170	94	176	1	441
	Tot.	2586	712	2041	402	5741

Traffic Lane Flows

Lane	Scenario 14: 34RC 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	931
1/2	999
1/3	381
2/1 (short)	176
2/2 (with short)	441(In) 265(Out)
3/1	239
3/2	1073
3/3	1000
4/1 (short)	338
4/2 (with short)	677(In) 339(Out)
5/1	1497
5/2	1089
6/1	402
7/1	880
7/2	1161
8/1	712
9/1	175
9/2	162
10/1	704
10/2	1161
10/3	381
11/1	473
11/2	173
12/1	1159
12/2	1087

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	24.4 %	1873	1873
				Arm 10 Ahead	23.00	75.6 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	30.1 %	1828	1828
				Arm 9 Ahead	20.00	69.9 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	410	1850	193	2455
	B	329	0	138	104	571
	C	2029	349	1	130	2509
	D	118	140	134	0	392
	Tot.	2478	899	2123	427	5927

Traffic Lane Flows

Lane	Scenario 15: 34RC 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	985
1/2	1058
1/3	412
2/1 (short)	134
2/2 (with short)	392(In) 258(Out)
3/1	349
3/2	1117
3/3	1043
4/1 (short)	285
4/2 (with short)	571(In) 286(Out)
5/1	1462
5/2	1016
6/1	427
7/1	926
7/2	1197
8/1	899
9/1	234
9/2	139
10/1	792
10/2	1197
10/3	412
11/1	550
11/2	120
12/1	1177
12/2	1103

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	19.6 %	1867	1867
				Arm 10 Ahead	23.00	80.4 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	15.4 %	1828	1828
				Arm 9 Ahead	20.00	84.6 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	40	918	36	994
	B	152	0	96	28	276
	C	819	41	0	38	898
	D	17	27	50	0	94
	Tot.	988	108	1064	102	2262

Traffic Lane Flows

Lane	Scenario 16: 34OP 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	447
1/2	507
1/3	40
2/1 (short)	50
2/2 (with short)	94(In) 44(Out)
3/1	41
3/2	461
3/3	396
4/1 (short)	105
4/2 (with short)	276(In) 171(Out)
5/1	575
5/2	413
6/1	102
7/1	467
7/2	597
8/1	108
9/1	72
9/2	90
10/1	417
10/2	597
10/3	40
11/1	67
11/2	17
12/1	470
12/2	404

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	8.1 %	1854	1854
				Arm 10 Ahead	23.00	91.9 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	27.5 %	1828	1828
				Arm 9 Ahead	20.00	72.5 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	91.7 %	1791	1791
				Arm 10 Right	18.00	8.3 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	246	1622	77	1945
	B	355	0	182	77	614
	C	1762	101	0	66	1929
	D	175	52	104	0	331
	Tot.	2292	399	1908	220	4819

Traffic Lane Flows

Lane	Scenario 17: 34OP 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	812
1/2	887
1/3	246
2/1 (short)	104
2/2 (with short)	331(In) 227(Out)
3/1	101
3/2	954
3/3	874
4/1 (short)	307
4/2 (with short)	614(In) 307(Out)
5/1	1349
5/2	943
6/1	220
7/1	846
7/2	1062
8/1	399
9/1	150
9/2	175
10/1	742
10/2	1062
10/3	246
11/1	298
11/2	175
12/1	1042
12/2	961

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.5 %	1855	1855
				Arm 10 Ahead	23.00	90.5 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	15.6 %	1828	1828
				Arm 9 Ahead	20.00	84.4 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	95.3 %	1791	1791
				Arm 10 Right	18.00	4.7 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	223	1936	163	2322
	B	378	0	210	90	678
	C	2152	184	1	139	2476
	D	313	54	187	0	554
	Tot.	2843	461	2334	392	6030

Traffic Lane Flows

Lane	Scenario 18: 34OP 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	1018
1/2	1081
1/3	223
2/1 (short)	187
2/2 (with short)	554(In) 367(Out)
3/1	184
3/2	1186
3/3	1106
4/1 (short)	339
4/2 (with short)	678(In) 339(Out)
5/1	1682
5/2	1161
6/1	392
7/1	1071
7/2	1263
8/1	461
9/1	258
9/2	182
10/1	884
10/2	1263
10/3	223
11/1	277
11/2	313
12/1	1343
12/2	1262

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	16.0 %	1863	1863
				Arm 10 Ahead	23.00	84.0 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	11.5 %	1828	1828
				Arm 9 Ahead	20.00	88.5 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	88.8 %	1791	1791
				Arm 10 Right	18.00	11.2 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	370	1703	227	2302
	B	434	0	161	76	671
	C	1976	239	1	98	2314
	D	170	100	169	1	440
	Tot.	2582	709	2034	402	5727

Traffic Lane Flows

Lane	Scenario 19: 34OP 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	931
1/2	999
1/3	372
2/1 (short)	169
2/2 (with short)	440(In) 271(Out)
3/1	239
3/2	1074
3/3	1001
4/1 (short)	335
4/2 (with short)	671(In) 336(Out)
5/1	1495
5/2	1087
6/1	402
7/1	873
7/2	1161
8/1	709
9/1	175
9/2	162
10/1	704
10/2	1161
10/3	372
11/1	470
11/2	173
12/1	1160
12/2	1088

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	24.4 %	1873	1873
				Arm 10 Ahead	23.00	75.6 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	29.5 %	1828	1828
				Arm 9 Ahead	20.00	70.5 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	389	1875	193	2459
	B	331	0	138	106	575
	C	2022	349	1	129	2501
	D	118	158	115	0	391
	Tot.	2473	896	2129	428	5926

Traffic Lane Flows

Lane	Scenario 20: 34OP 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	997
1/2	1071
1/3	391
2/1 (short)	115
2/2 (with short)	391(In) 276(Out)
3/1	349
3/2	1113
3/3	1039
4/1 (short)	287
4/2 (with short)	575(In) 288(Out)
5/1	1460
5/2	1013
6/1	428
7/1	919
7/2	1210
8/1	896
9/1	235
9/2	139
10/1	804
10/2	1210
10/3	391
11/1	547
11/2	120
12/1	1173
12/2	1099

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

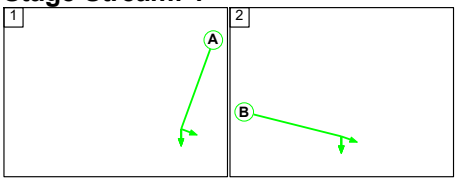
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	19.4 %	1867	1867
				Arm 10 Ahead	23.00	80.6 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	15.3 %	1828	1828
				Arm 9 Ahead	20.00	84.7 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

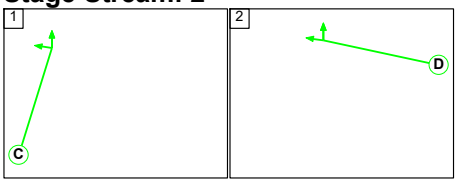
Scenario 1: '28RC 06:00-07:00' (FG1: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

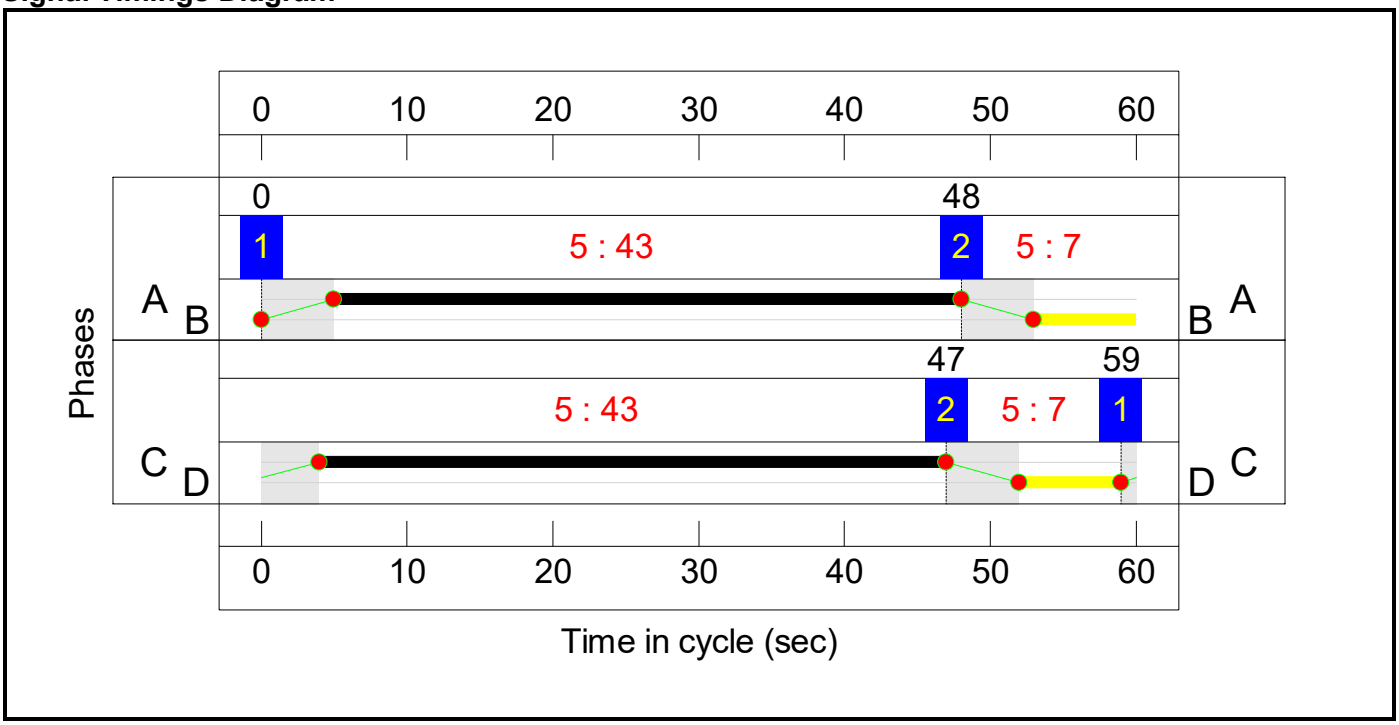
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	59	47

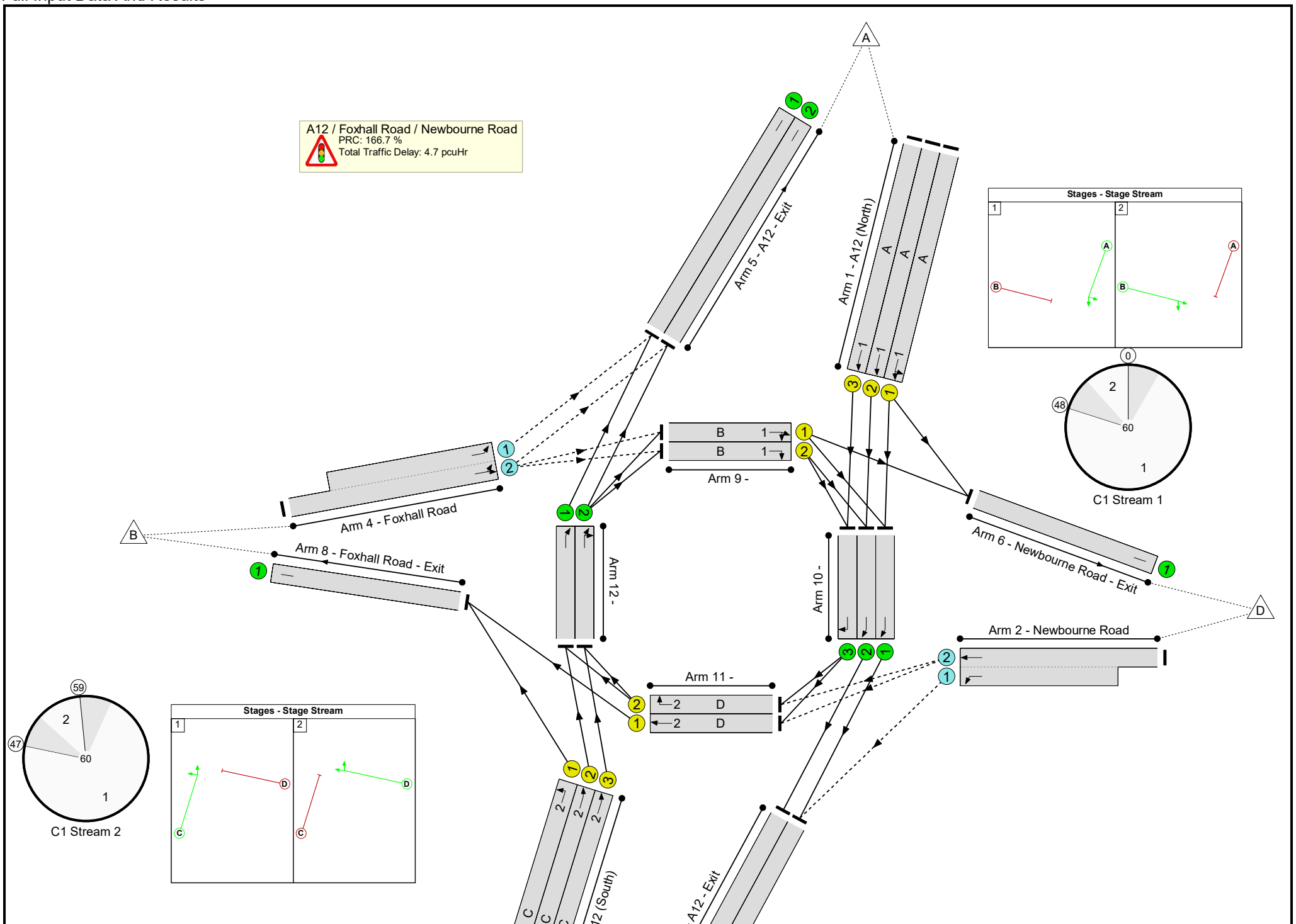
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**33.7%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**33.7%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	430	1854	1360	31.6%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	489	1976	1449	33.7%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	40	1845	1353	3.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	89	1840:1775	665+665	6.2 : 7.2%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	40	1828	1341	3.0%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	435	1958	1436	30.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	375	1828	1341	28.0%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	224	1828:1828	727+266	22.6 : 22.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	69	1791	239	28.9%
9/2	Right	U	1	N/A	B		1	7	-	86	1940	259	33.2%
10/1	Ahead	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	65	1764	235	27.6%
11/2	Right	U	2	N/A	D		1	7	-	16	1764	235	6.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	443	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**626**	**0**	**0**	**2.9**	**1.8**	**0.0**	**4.7**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**626**	**0**	**0**	**2.9**	**1.8**	**0.0**	**4.7**	**-**	**-**	**-**	**-**
1/1	430	430	-	-	-	0.3	0.2	-	0.6	4.7	2.4	0.2	2.6
1/2	489	489	-	-	-	0.4	0.3	-	0.6	4.7	2.9	0.3	3.1
1/3	40	40	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	89	89	178	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.1
3/1	40	40	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	435	435	-	-	-	0.3	0.2	-	0.5	4.5	2.4	0.2	2.6
3/3	375	375	-	-	-	0.3	0.2	-	0.5	4.6	2.1	0.2	2.3
4/2+4/1	224	224	448	0	0	0.0	0.1	-	0.1	2.4	0.2	0.1	0.3
5/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	69	69	-	-	-	0.4	0.2	-	0.6	32.7	1.0	0.2	1.2
9/2	86	86	-	-	-	0.6	0.2	-	0.8	34.0	1.3	0.2	1.5
10/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	65	65	-	-	-	0.4	0.2	-	0.6	32.6	1.0	0.2	1.1
11/2	16	16	-	-	-	0.1	0.0	-	0.1	31.1	0.2	0.0	0.3
12/1	443	443	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

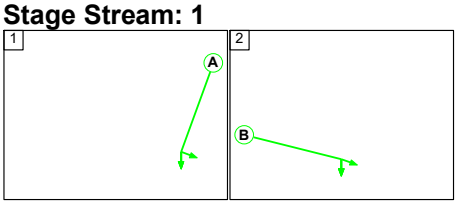
C1	Stream: 1	PRC for Signalled Lanes (%):	166.7	Total Delay for Signalled Lanes (pcuHr):	2.68	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	197.1	Total Delay for Signalled Lanes (pcuHr):	1.79	Cycle Time (s):	60
		PRC Over All Lanes (%):	166.7	Total Delay Over All Lanes(pcuHr):	4.66		

Full Input Data And Results

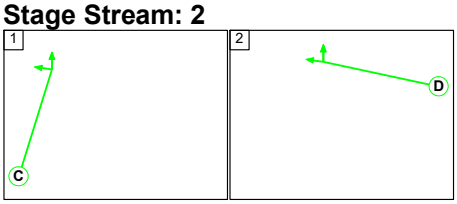
Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

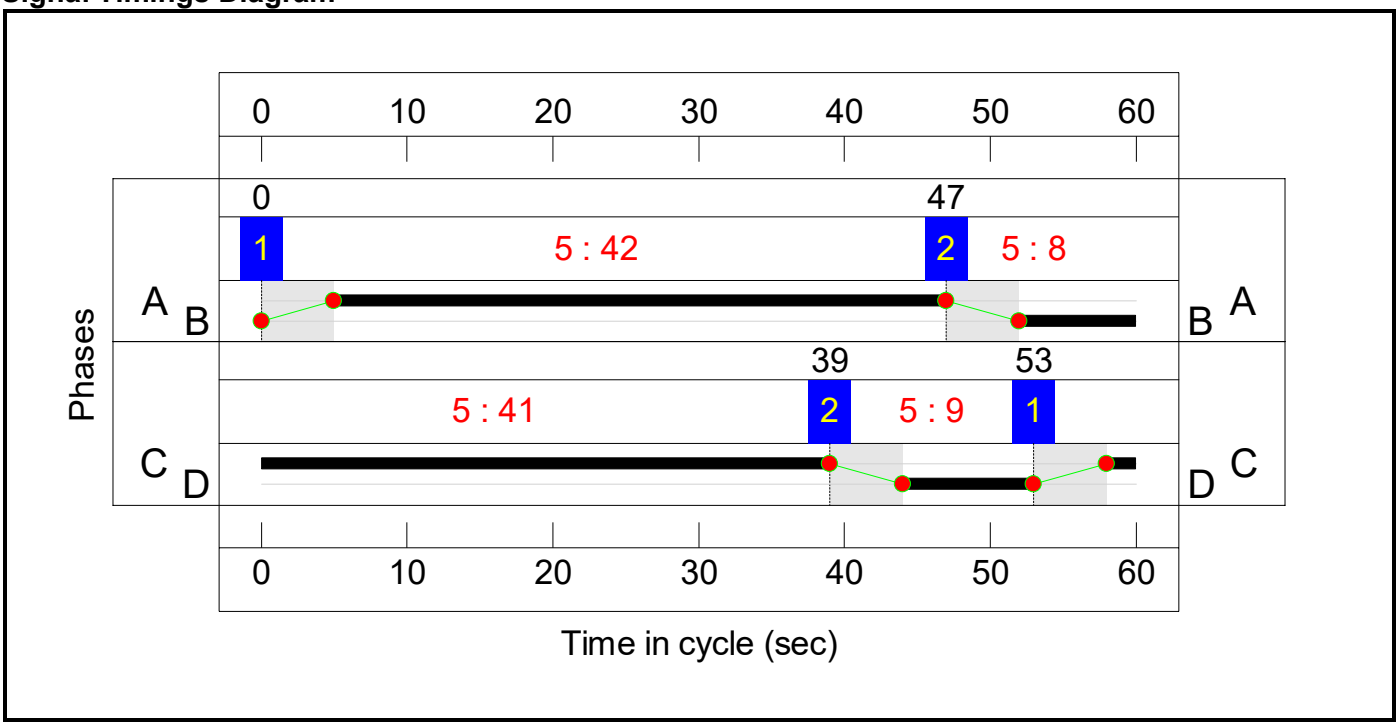
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	41	9
Change Point	53	39

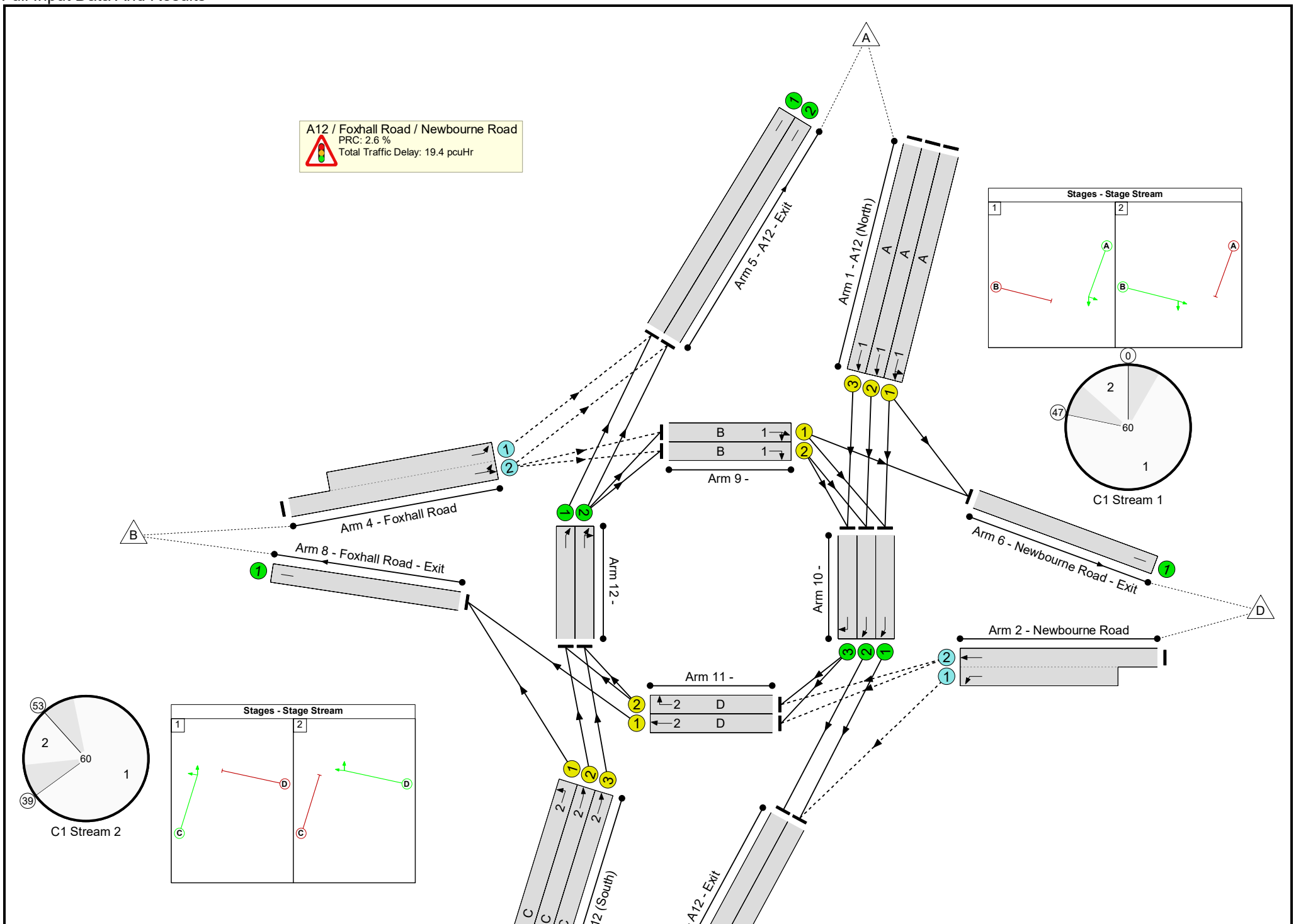
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.8%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.8%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	755	1856	1330	56.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	827	1976	1416	58.4%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	212	1845	1322	16.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	300	1840:1775	416+310	49.3 : 30.6%
3/1	A12 (South) Left	U	2	N/A	C		1	41	-	100	1828	1280	7.8%
3/2	A12 (South) Ahead	U	2	N/A	C		1	41	-	911	1958	1371	66.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	41	-	832	1828	1280	65.0%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	562	1828:1828	411+411	68.4 : 68.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1272	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	882	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	790	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	143	1791	269	53.2%
9/2	Right	U	1	N/A	B		1	8	-	167	1940	291	57.4%
10/1	Ahead	U	N/A	N/A	-		-	-	-	695	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	9	-	258	1764	294	87.8%
11/2	Right	U	2	N/A	D		1	9	-	159	1764	294	54.1%
12/1	Ahead	U	N/A	N/A	-		-	-	-	991	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	911	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1724**	**0**	**0**	**9.7**	**9.7**	**0.0**	**19.4**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1724**	**0**	**0**	**9.7**	**9.7**	**0.0**	**19.4**	**-**	**-**	**-**	**-**
1/1	755	755	-	-	-	0.9	0.7	-	1.5	7.2	5.9	0.7	6.5
1/2	827	827	-	-	-	1.0	0.7	-	1.7	7.2	6.7	0.7	7.4
1/3	212	212	-	-	-	0.2	0.1	-	0.3	4.4	1.1	0.1	1.2
2/2+2/1	300	300	600	0	0	0.2	0.4	-	0.6	6.8	1.5	0.4	1.8
3/1	100	100	-	-	-	0.1	0.0	-	0.1	4.4	0.5	0.0	0.6
3/2	911	911	-	-	-	1.3	1.0	-	2.3	9.0	8.4	1.0	9.3
3/3	832	832	-	-	-	1.1	0.9	-	2.1	9.0	7.6	0.9	8.6
4/2+4/1	562	562	1124	0	0	1.0	1.1	-	2.0	13.0	3.3	1.1	4.4
5/1	1272	1272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	882	882	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	790	790	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	994	994	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	143	143	-	-	-	0.8	0.6	-	1.4	34.6	2.2	0.6	2.7
9/2	167	167	-	-	-	0.8	0.7	-	1.5	32.5	2.4	0.7	3.1
10/1	695	695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	994	994	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	212	212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	258	258	-	-	-	1.6	3.1	-	4.6	64.4	4.2	3.1	7.2
11/2	159	159	-	-	-	0.9	0.6	-	1.5	33.2	2.4	0.6	3.0
12/1	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	911	911	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

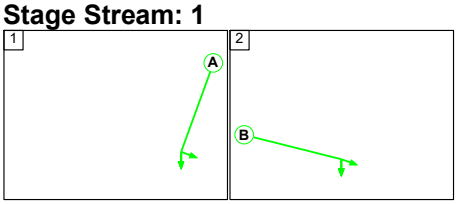
C1	Stream: 1	PRC for Signalled Lanes (%):	54.1	Total Delay for Signalled Lanes (pcuHr):	6.30	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	2.6	Total Delay for Signalled Lanes (pcuHr):	10.54	Cycle Time (s):	60
		PRC Over All Lanes (%):	2.6	Total Delay Over All Lanes(pcuHr):	19.44		

Full Input Data And Results

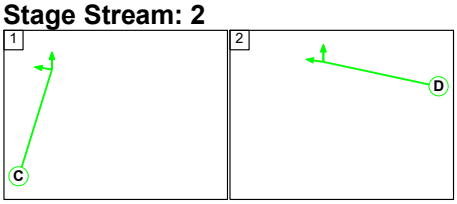
Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

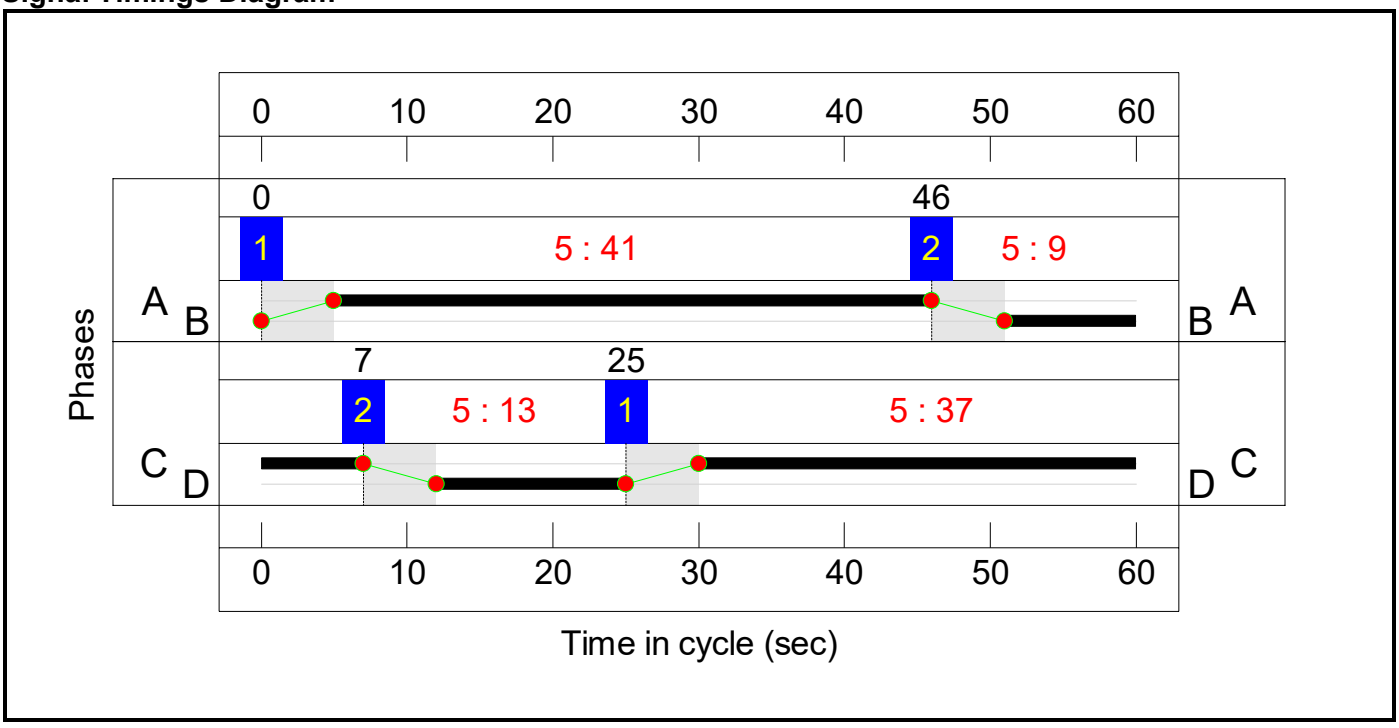
Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

Stage	1	2
Duration	37	13
Change Point	25	7

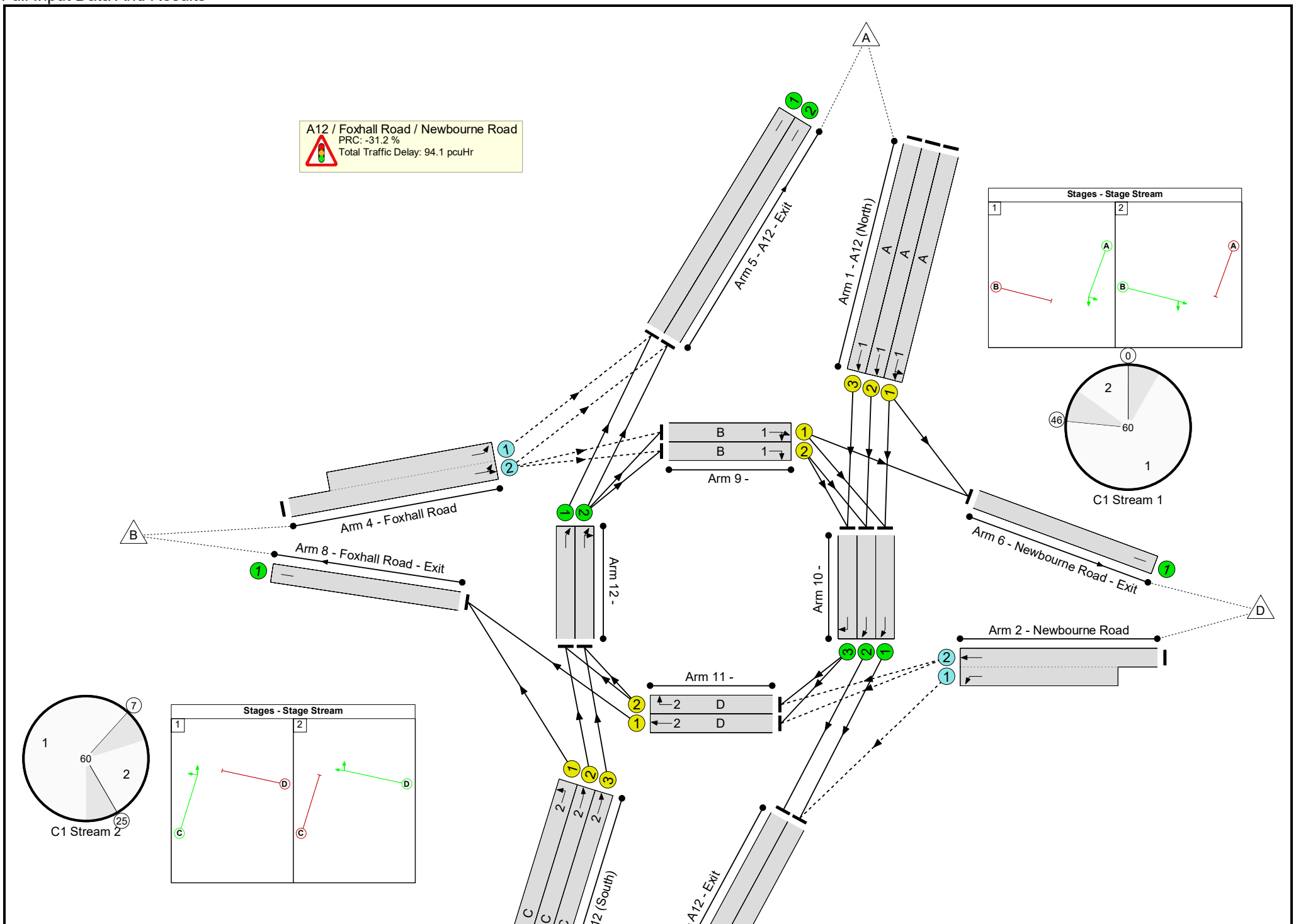
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.1%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.1%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	41	-	923	1864	1305	70.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	41	-	995	1976	1383	71.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	41	-	180	1845	1292	13.9%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	481	1840:1775	355+355	89.8 : 45.6%
3/1	A12 (South) Left	U	2	N/A	C		1	37	-	183	1828	1158	15.8%
3/2	A12 (South) Ahead	U	2	N/A	C		1	37	-	1174	1958	1240	94.7%
3/3	A12 (South) Ahead	U	2	N/A	C		1	37	-	1092	1828	1158	94.3%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	647	1828:1828	274+274	117.7 : 118.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1634	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1138	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	928	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1204	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	9	-	204	1791	299	64.6%
9/2	Right	U	1	N/A	B		1	9	-	209	1940	323	54.9%
10/1	Ahead	U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1204	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	13	-	227	1764	412	55.2%
11/2	Right	U	2	N/A	D		1	13	-	272	1764	412	66.1%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1228	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2059**	**0**	**0**	**20.9**	**73.2**	**0.0**	**94.1**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2059**	**0**	**0**	**20.9**	**73.2**	**0.0**	**94.1**	**-**	**-**	**-**	**-**
1/1	923	923	-	-	-	1.4	1.2	-	2.6	10.0	9.0	1.2	10.2
1/2	995	995	-	-	-	1.5	1.3	-	2.8	10.0	10.0	1.3	11.2
1/3	180	180	-	-	-	0.1	0.1	-	0.2	4.6	0.9	0.1	1.0
2/2+2/1	481	481	962	0	0	1.3	1.0	-	2.4	17.7	4.9	1.0	5.9
3/1	183	183	-	-	-	0.2	0.1	-	0.3	6.3	1.2	0.1	1.3
3/2	1174	1174	-	-	-	3.3	7.3	-	10.6	32.4	17.6	7.3	24.9
3/3	1092	1092	-	-	-	3.0	6.9	-	9.9	32.7	16.4	6.9	23.3
4/2+4/1	647	549	1097	0	0	5.7	52.3	-	58.0	322.5	12.5	52.3	64.8
5/1	1584	1584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1132	1132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	350	350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	928	928	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	193	193	-	-	-	1.2	0.9	-	2.1	39.7	2.9	0.9	3.8
9/2	178	178	-	-	-	0.9	0.6	-	1.5	29.6	3.0	0.6	3.6
10/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	227	227	-	-	-	1.1	0.6	-	1.7	27.1	2.7	0.6	3.3
11/2	272	272	-	-	-	1.1	1.0	-	2.1	27.7	4.5	1.0	5.5
12/1	1310	1310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1228	1228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

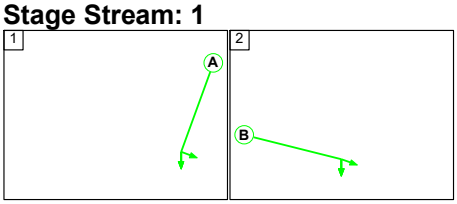
C1	Stream: 1	PRC for Signalled Lanes (%):	25.1	Total Delay for Signalled Lanes (pcuHr):	9.17	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-5.2	Total Delay for Signalled Lanes (pcuHr):	24.60	Cycle Time (s):	60
		PRC Over All Lanes (%):	-31.2	Total Delay Over All Lanes(pcuHr):	94.08		

Full Input Data And Results

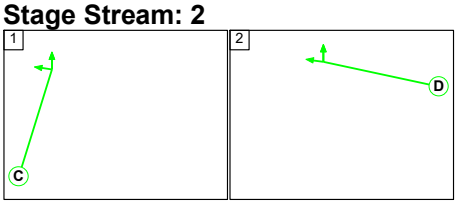
Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

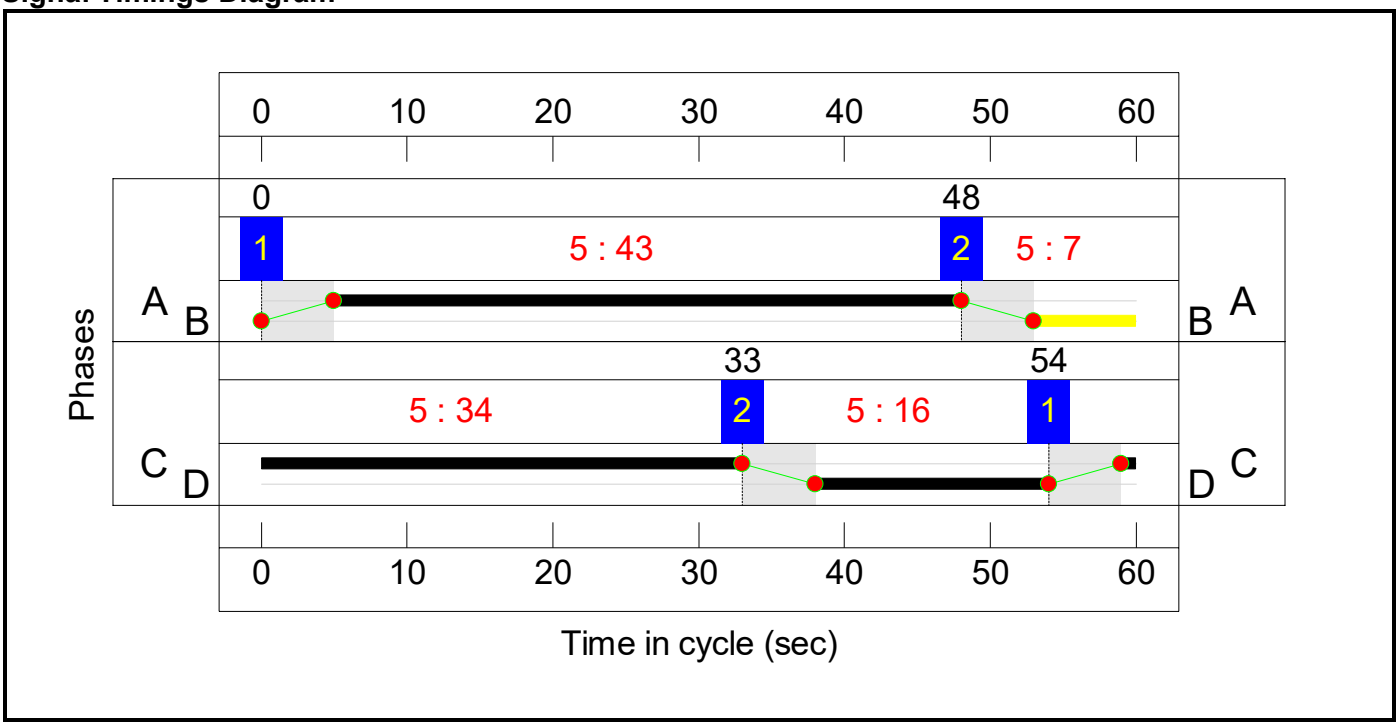
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	34	16
Change Point	54	33

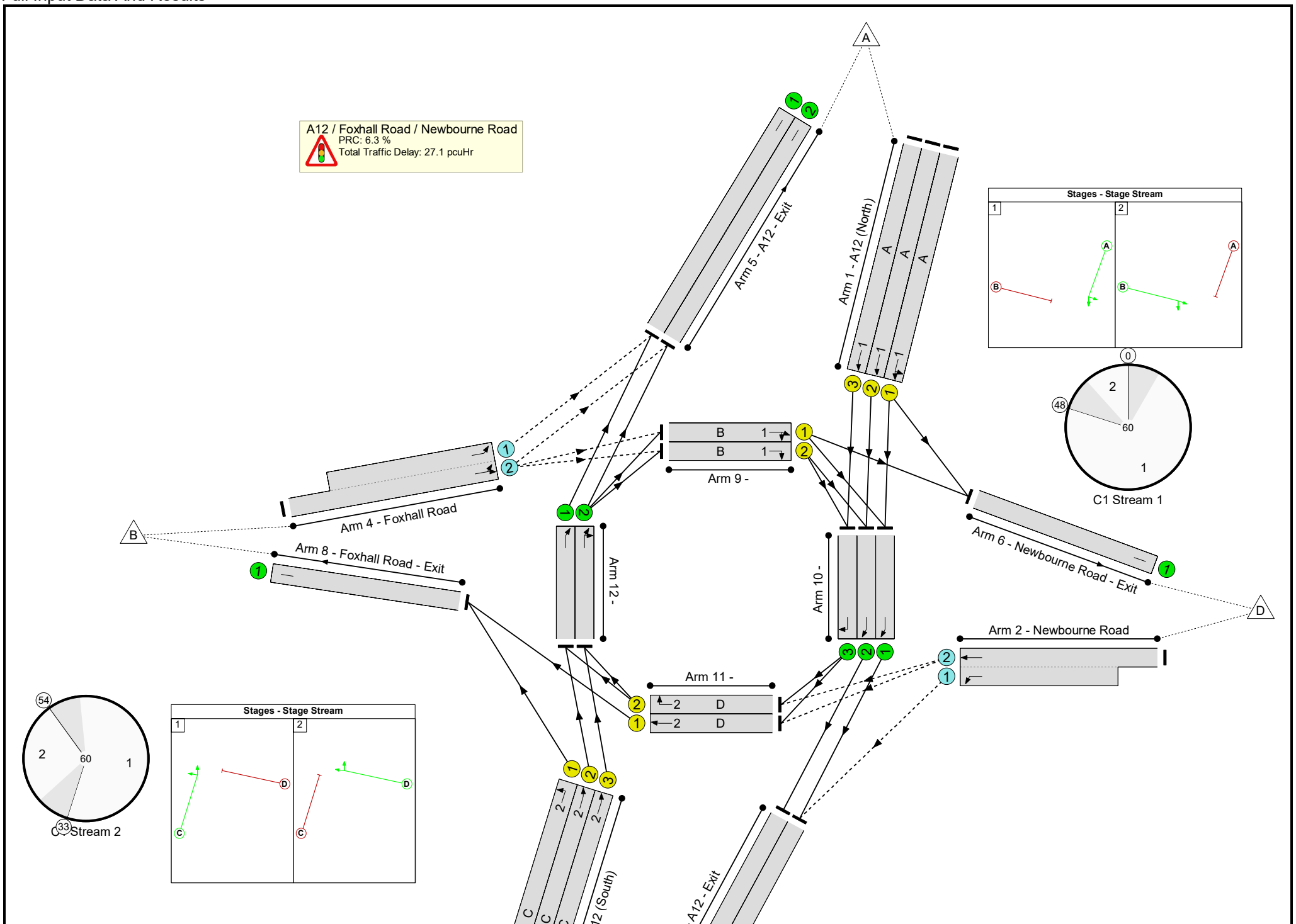
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.6%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.6%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	833	1871	1372	60.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	898	1976	1449	62.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	319	1845	1353	23.6%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	388	1840:1775	383+383	66.1 : 35.3%
3/1	A12 (South) Left	U	2	N/A	C		1	34	-	236	1828	1066	22.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	34	-	955	1958	1142	83.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	34	-	882	1828	1066	82.7%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	573	1828:1828	417+417	68.8 : 68.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1315	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	935	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	338	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1060	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	147	1791	239	61.6%
9/2	Right	U	1	N/A	B		1	7	-	162	1940	259	62.6%
10/1	Ahead	U	N/A	N/A	-		-	-	-	642	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1060	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	319	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	16	-	423	1764	500	84.6%
11/2	Right	U	2	N/A	D		1	16	-	149	1764	500	29.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1029	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	957	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1922**	**0**	**0**	**14.4**	**12.7**	**0.0**	**27.1**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1922**	**0**	**0**	**14.4**	**12.7**	**0.0**	**27.1**	**-**	**-**	**-**	**-**
1/1	833	833	-	-	-	0.9	0.8	-	1.7	7.2	6.5	0.8	7.2
1/2	898	898	-	-	-	1.0	0.8	-	1.8	7.2	7.2	0.8	8.0
1/3	319	319	-	-	-	0.2	0.2	-	0.4	4.3	1.7	0.2	1.8
2/2+2/1	388	388	776	0	0	0.5	0.5	-	1.0	9.2	3.0	0.5	3.5
3/1	236	236	-	-	-	0.4	0.1	-	0.5	8.2	1.8	0.1	2.0
3/2	955	955	-	-	-	2.7	2.5	-	5.2	19.5	12.7	2.5	15.2
3/3	882	882	-	-	-	2.5	2.3	-	4.8	19.6	11.8	2.3	14.1
4/2+4/1	573	573	1146	0	0	1.7	1.1	-	2.8	17.4	3.7	1.1	4.8
5/1	1315	1315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	935	935	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1060	1060	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	147	147	-	-	-	0.9	0.8	-	1.7	41.8	2.3	0.8	3.0
9/2	162	162	-	-	-	0.9	0.8	-	1.7	37.4	2.2	0.8	3.0
10/1	642	642	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1060	1060	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	423	423	-	-	-	2.1	2.6	-	4.7	40.0	6.5	2.6	9.1
11/2	149	149	-	-	-	0.7	0.2	-	0.9	21.6	1.6	0.2	1.8
12/1	1029	1029	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	957	957	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

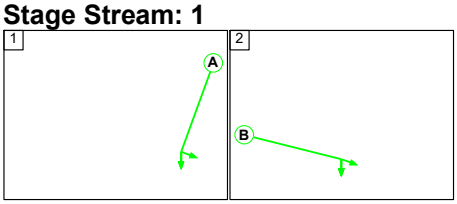
C1	Stream: 1	PRC for Signalled Lanes (%):	43.7	Total Delay for Signalled Lanes (pcuHr):	7.22	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	6.3	Total Delay for Signalled Lanes (pcuHr):	16.12	Cycle Time (s):	60
		PRC Over All Lanes (%):	6.3	Total Delay Over All Lanes(pcuHr):	27.10		

Full Input Data And Results

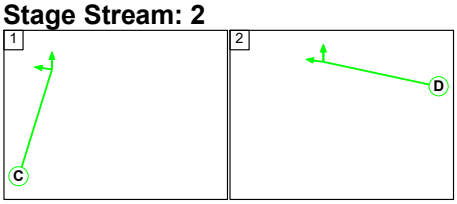
Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

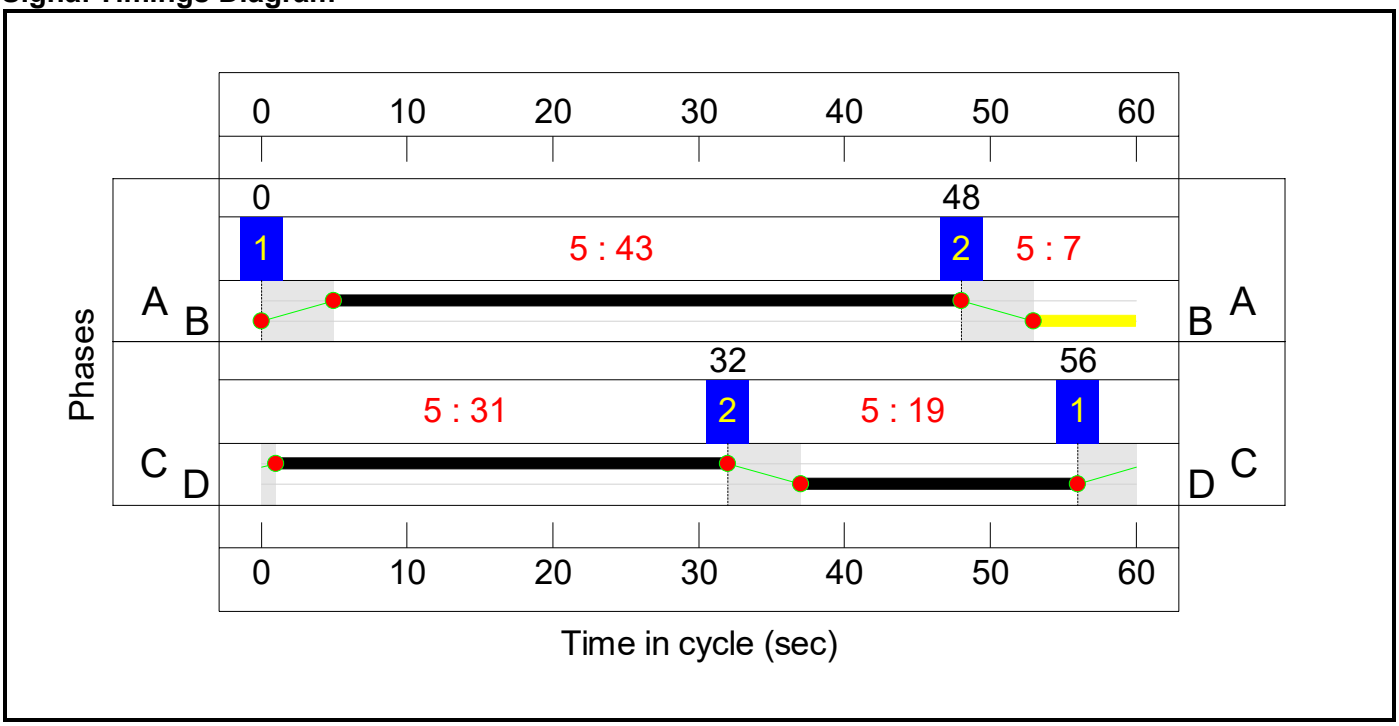
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	31	19
Change Point	56	32

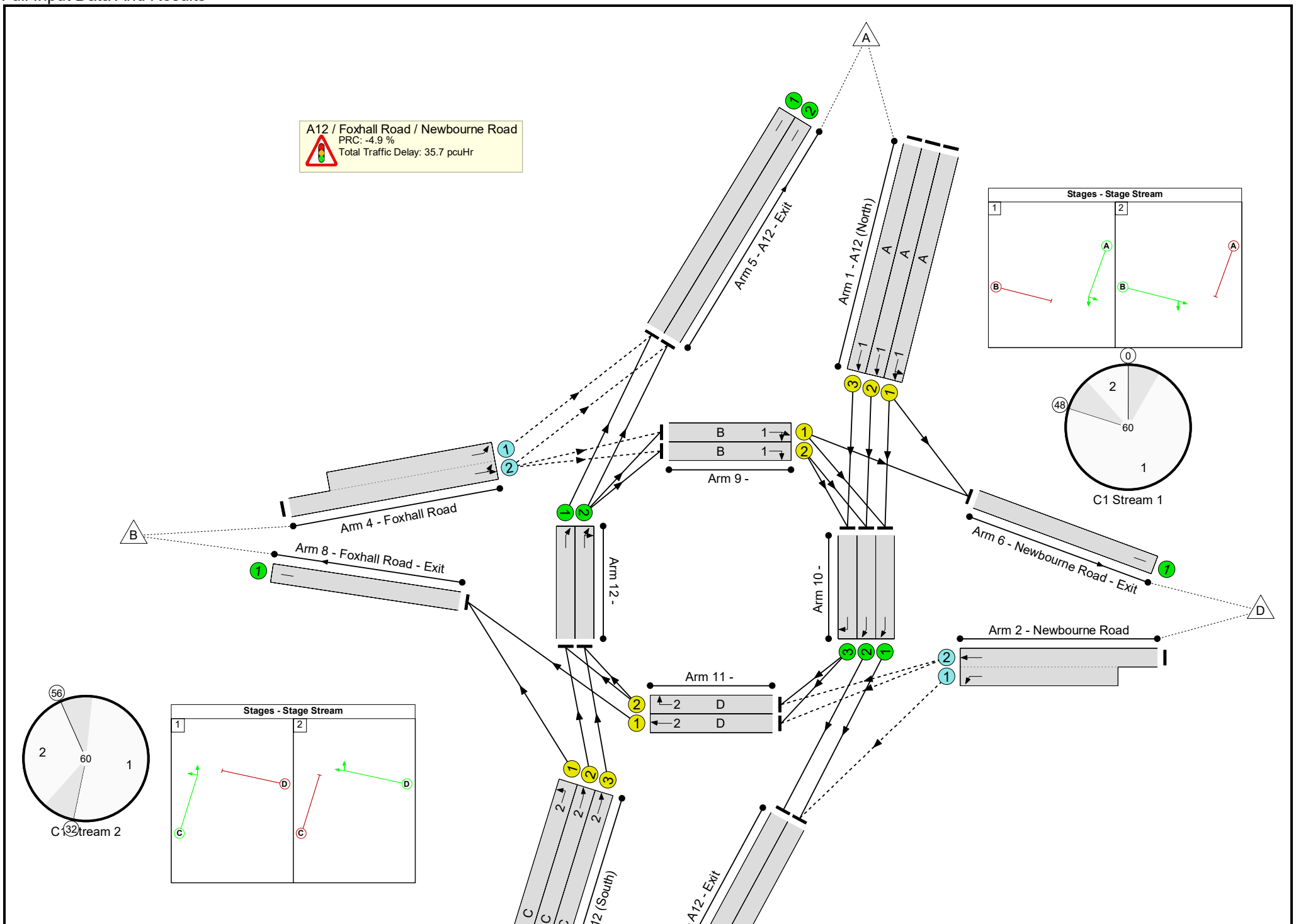
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.4%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.4%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	851	1867	1369	62.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	920	1976	1449	63.5%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	368	1845	1353	27.2%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	341	1840:1775	367+367	60.8 : 32.2%
3/1	A12 (South) Left	U	2	N/A	C		1	31	-	343	1828	975	35.2%
3/2	A12 (South) Ahead	U	2	N/A	C		1	31	-	986	1958	1044	94.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	31	-	916	1828	975	94.0%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	474	1828:1828	430+430	55.1 : 55.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1276	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	933	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	802	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1058	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	829	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	134	1791	239	56.1%
9/2	Right	U	1	N/A	B		1	7	-	138	1940	259	53.4%
10/1	Ahead	U	N/A	N/A	-		-	-	-	684	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1058	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	368	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	19	-	486	1764	588	82.7%
11/2	Right	U	2	N/A	D		1	19	-	105	1764	588	17.9%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1039	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	968	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1630**	**0**	**0**	**15.7**	**20.0**	**0.0**	**35.7**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1630**	**0**	**0**	**15.7**	**20.0**	**0.0**	**35.7**	**-**	**-**	**-**	**-**
1/1	851	851	-	-	-	0.9	0.8	-	1.7	7.4	6.9	0.8	7.7
1/2	920	920	-	-	-	1.0	0.9	-	1.9	7.4	7.4	0.9	8.3
1/3	368	368	-	-	-	0.3	0.2	-	0.5	4.5	1.9	0.2	2.1
2/2+2/1	341	341	682	0	0	0.5	0.4	-	0.9	9.3	2.7	0.4	3.1
3/1	343	343	-	-	-	0.8	0.3	-	1.0	10.9	3.2	0.3	3.5
3/2	986	986	-	-	-	3.6	6.9	-	10.5	38.2	15.3	6.9	22.2
3/3	916	916	-	-	-	3.3	6.4	-	9.7	38.2	14.2	6.4	20.6
4/2+4/1	474	474	948	0	0	1.4	0.6	-	2.0	15.0	2.8	0.6	3.4
5/1	1276	1276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	933	933	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	802	802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1058	1058	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	829	829	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	134	134	-	-	-	0.7	0.6	-	1.4	37.0	1.9	0.6	2.6
9/2	138	138	-	-	-	0.7	0.6	-	1.2	32.1	1.7	0.6	2.3
10/1	684	684	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1058	1058	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	486	486	-	-	-	2.1	2.3	-	4.4	32.8	7.2	2.3	9.5
11/2	105	105	-	-	-	0.4	0.1	-	0.5	17.3	0.9	0.1	1.0
12/1	1039	1039	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	968	968	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

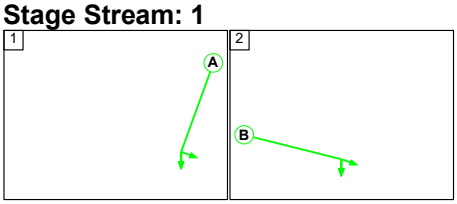
C1	Stream: 1	PRC for Signalled Lanes (%):	41.8	Total Delay for Signalled Lanes (pcuHr):	6.70	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-4.9	Total Delay for Signalled Lanes (pcuHr):	26.15	Cycle Time (s):	60
		PRC Over All Lanes (%):	-4.9	Total Delay Over All Lanes(pcuHr):	35.70		

Full Input Data And Results

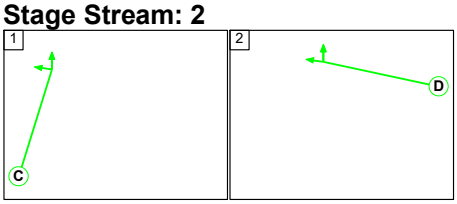
Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

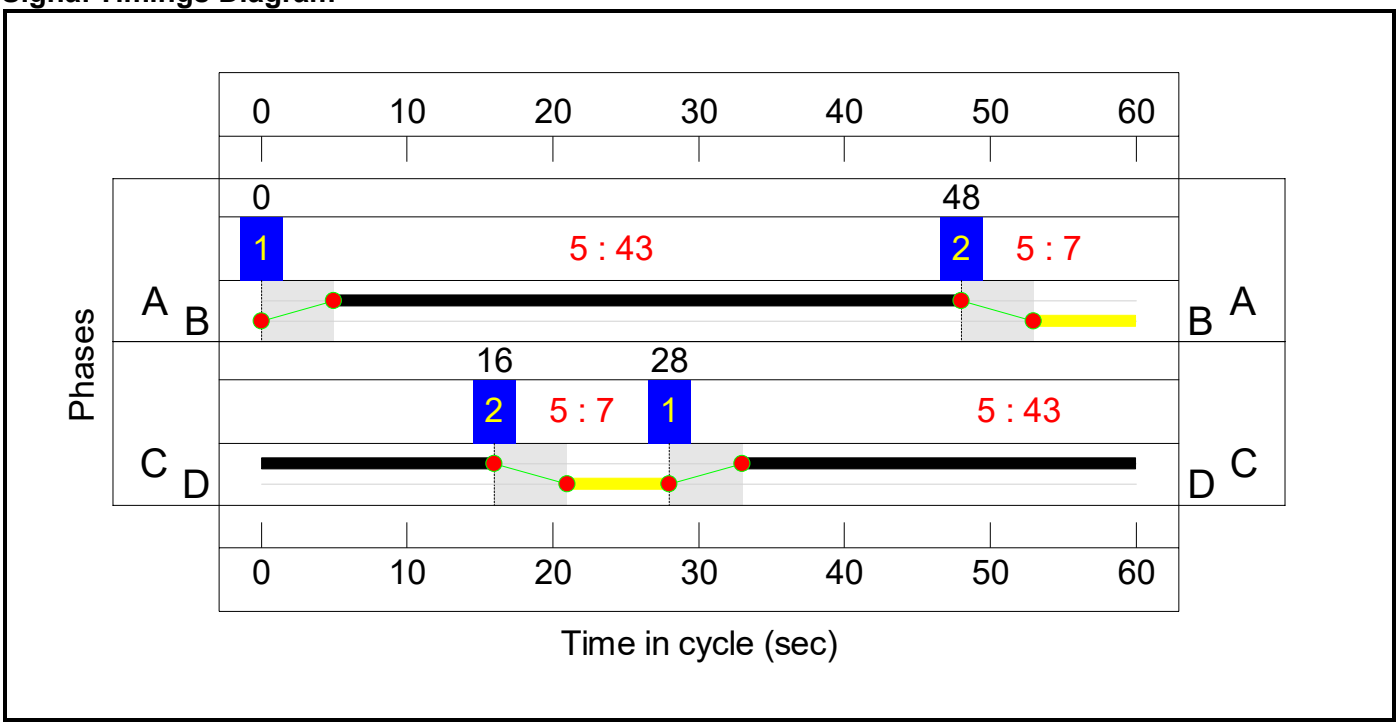
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	28	16

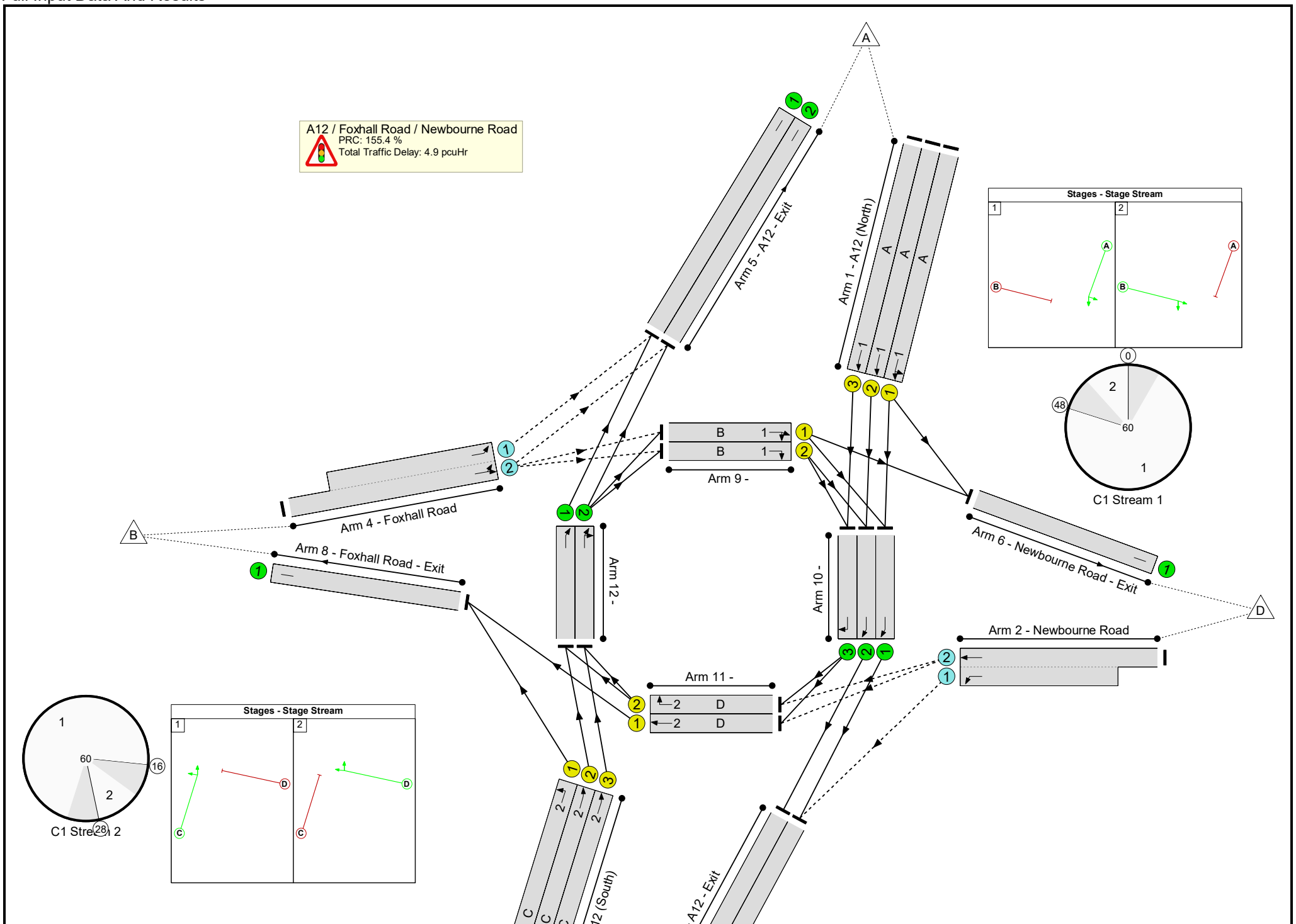
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**35.2%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**35.2%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	430	1854	1360	31.6%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	490	1976	1449	33.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	40	1845	1353	3.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	91	1840:1775	665+665	6.5 : 7.2%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	40	1828	1341	3.0%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	506	1958	1436	35.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	442	1828	1341	33.0%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	231	1828:1828	682+462	22.4 : 16.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	593	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	449	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	69	1791	239	28.9%
9/2	Right	U	1	N/A	B		1	7	-	86	1940	259	33.2%
10/1	Ahead	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	65	1764	235	27.6%
11/2	Right	U	2	N/A	D		1	7	-	18	1764	235	7.7%
12/1	Ahead	U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	451	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**644**	**0**	**0**	**3.0**	**1.9**	**0.0**	**4.9**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**644**	**0**	**0**	**3.0**	**1.9**	**0.0**	**4.9**	**-**	**-**	**-**	**-**
1/1	430	430	-	-	-	0.3	0.2	-	0.6	4.7	2.4	0.2	2.6
1/2	490	490	-	-	-	0.4	0.3	-	0.6	4.7	2.9	0.3	3.1
1/3	40	40	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	91	91	182	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.1
3/1	40	40	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	506	506	-	-	-	0.4	0.3	-	0.7	4.8	3.0	0.3	3.2
3/3	442	442	-	-	-	0.3	0.2	-	0.6	4.8	2.6	0.2	2.8
4/2+4/1	231	231	462	0	0	0.0	0.1	-	0.1	2.1	0.3	0.1	0.4
5/1	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	69	69	-	-	-	0.4	0.2	-	0.6	32.8	1.0	0.2	1.2
9/2	86	86	-	-	-	0.6	0.2	-	0.8	34.0	1.3	0.2	1.5
10/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	65	65	-	-	-	0.4	0.2	-	0.6	32.7	0.9	0.2	1.1
11/2	18	18	-	-	-	0.1	0.0	-	0.2	31.3	0.3	0.0	0.3
12/1	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

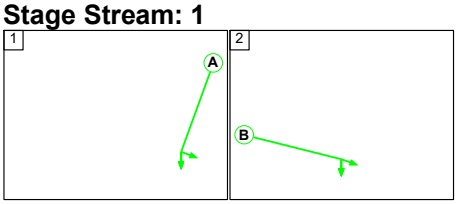
C1	Stream: 1	PRC for Signalled Lanes (%):	166.2	Total Delay for Signalled Lanes (pcuHr):	2.69	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	155.4	Total Delay for Signalled Lanes (pcuHr):	2.06	Cycle Time (s):	60
		PRC Over All Lanes (%):	155.4	Total Delay Over All Lanes(pcuHr):	4.92		

Full Input Data And Results

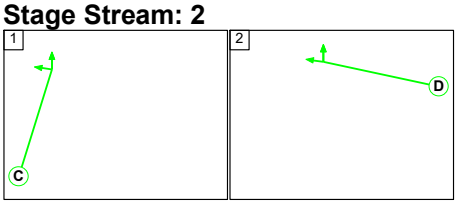
Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

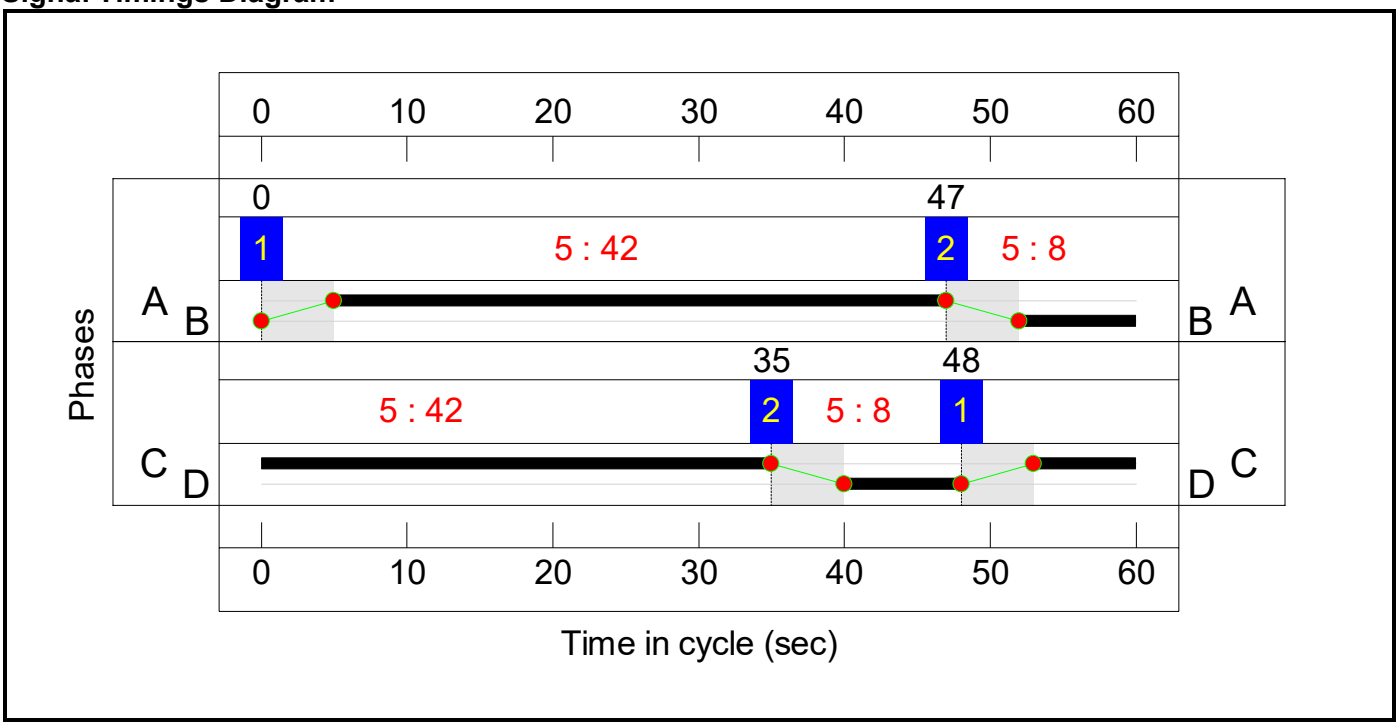
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	48	35

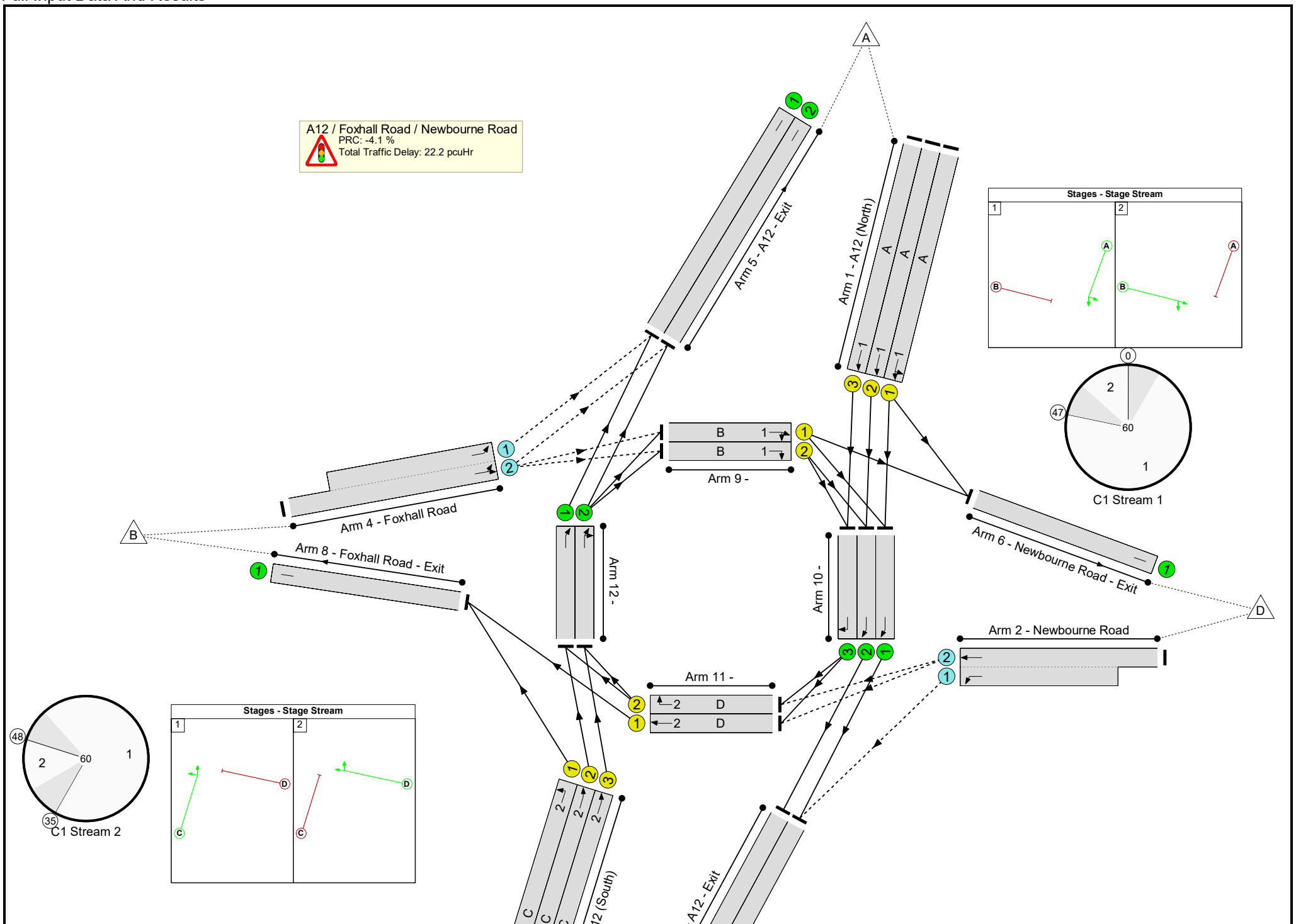
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.7%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.7%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	763	1856	1330	57.4%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	834	1976	1416	58.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	202	1845	1322	15.3%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	302	1840:1775	414+303	50.0 : 31.4%
3/1	A12 (South) Left	U	2	N/A	C		1	42	-	100	1828	1310	7.6%
3/2	A12 (South) Ahead	U	2	N/A	C		1	42	-	964	1958	1403	68.7%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	880	1828	1310	67.2%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	570	1828:1828	380+380	75.0 : 75.0%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1330	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	935	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	797	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	142	1791	269	52.9%
9/2	Right	U	1	N/A	B		1	8	-	168	1940	291	57.7%
10/1	Ahead	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	202	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	8	-	248	1764	265	93.7%
11/2	Right	U	2	N/A	D		1	8	-	161	1764	265	60.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1045	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	960	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1744**	**0**	**0**	**10.0**	**12.2**	**0.0**	**22.2**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1744**	**0**	**0**	**10.0**	**12.2**	**0.0**	**22.2**	**-**	**-**	**-**	**-**
1/1	763	763	-	-	-	0.9	0.7	-	1.5	7.3	5.9	0.7	6.6
1/2	834	834	-	-	-	1.0	0.7	-	1.7	7.3	6.7	0.7	7.4
1/3	202	202	-	-	-	0.2	0.1	-	0.2	4.3	1.1	0.1	1.2
2/2+2/1	302	302	604	0	0	0.2	0.4	-	0.6	7.0	1.5	0.4	1.9
3/1	100	100	-	-	-	0.1	0.0	-	0.1	4.0	0.5	0.0	0.5
3/2	964	964	-	-	-	1.3	1.1	-	2.4	8.8	8.8	1.1	9.9
3/3	880	880	-	-	-	1.1	1.0	-	2.2	8.8	7.8	1.0	8.8
4/2+4/1	570	570	1140	0	0	1.2	1.5	-	2.7	17.0	3.6	1.5	5.1
5/1	1330	1330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	935	935	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	797	797	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	142	142	-	-	-	0.8	0.6	-	1.4	35.3	2.2	0.6	2.8
9/2	168	168	-	-	-	0.8	0.7	-	1.4	30.9	2.5	0.7	3.1
10/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	248	248	-	-	-	1.6	4.8	-	6.3	91.5	4.1	4.8	8.8
11/2	161	161	-	-	-	0.9	0.8	-	1.7	38.3	2.3	0.8	3.1
12/1	1045	1045	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	960	960	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

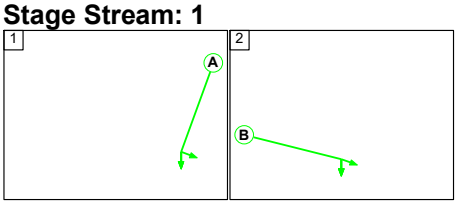
C1	Stream: 1	PRC for Signalled Lanes (%):	52.8	Total Delay for Signalled Lanes (pcuHr):	6.30	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-4.1	Total Delay for Signalled Lanes (pcuHr):	12.64	Cycle Time (s):	60
		PRC Over All Lanes (%):	-4.1	Total Delay Over All Lanes(pcuHr):	22.22		

Full Input Data And Results

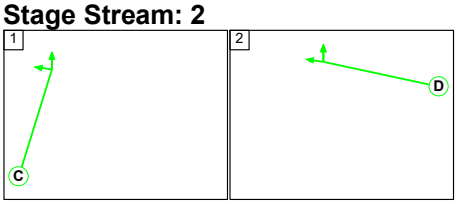
Scenario 8: '28PC 08:00-09:00' (FG8: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

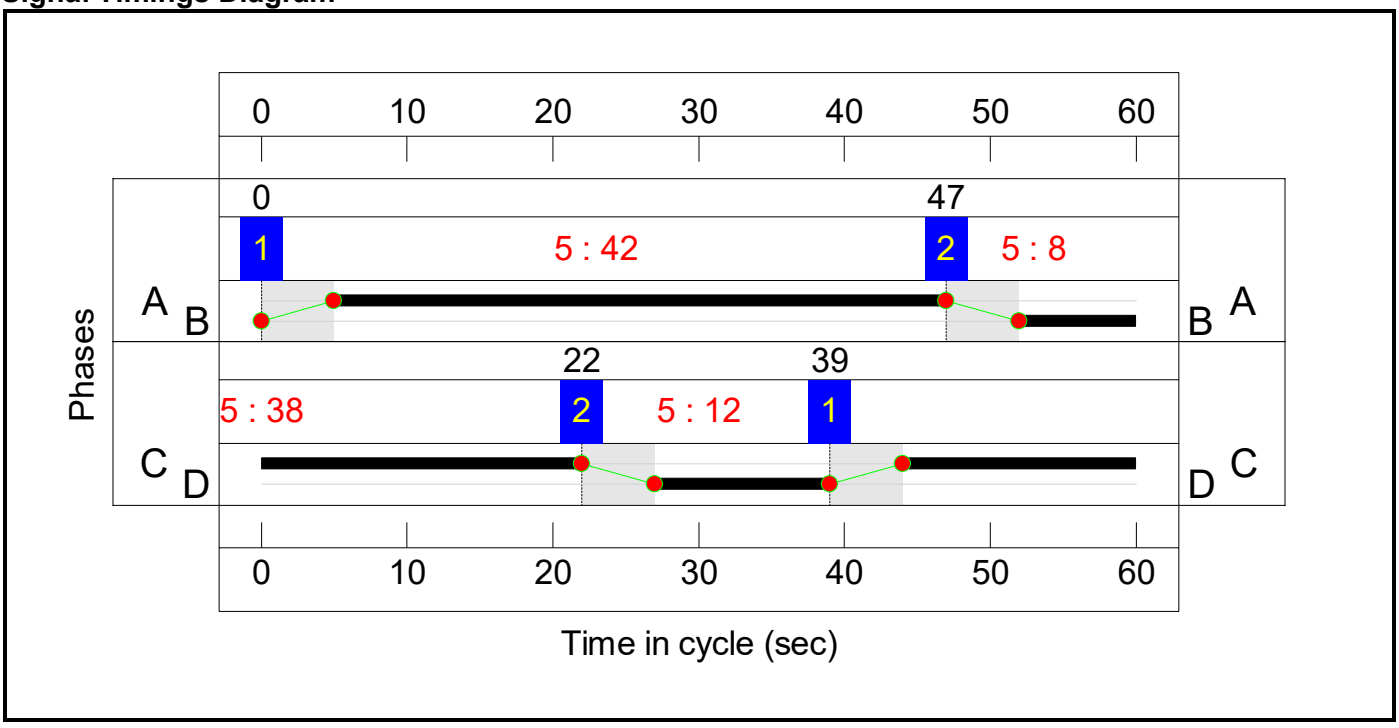
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	38	12
Change Point	39	22

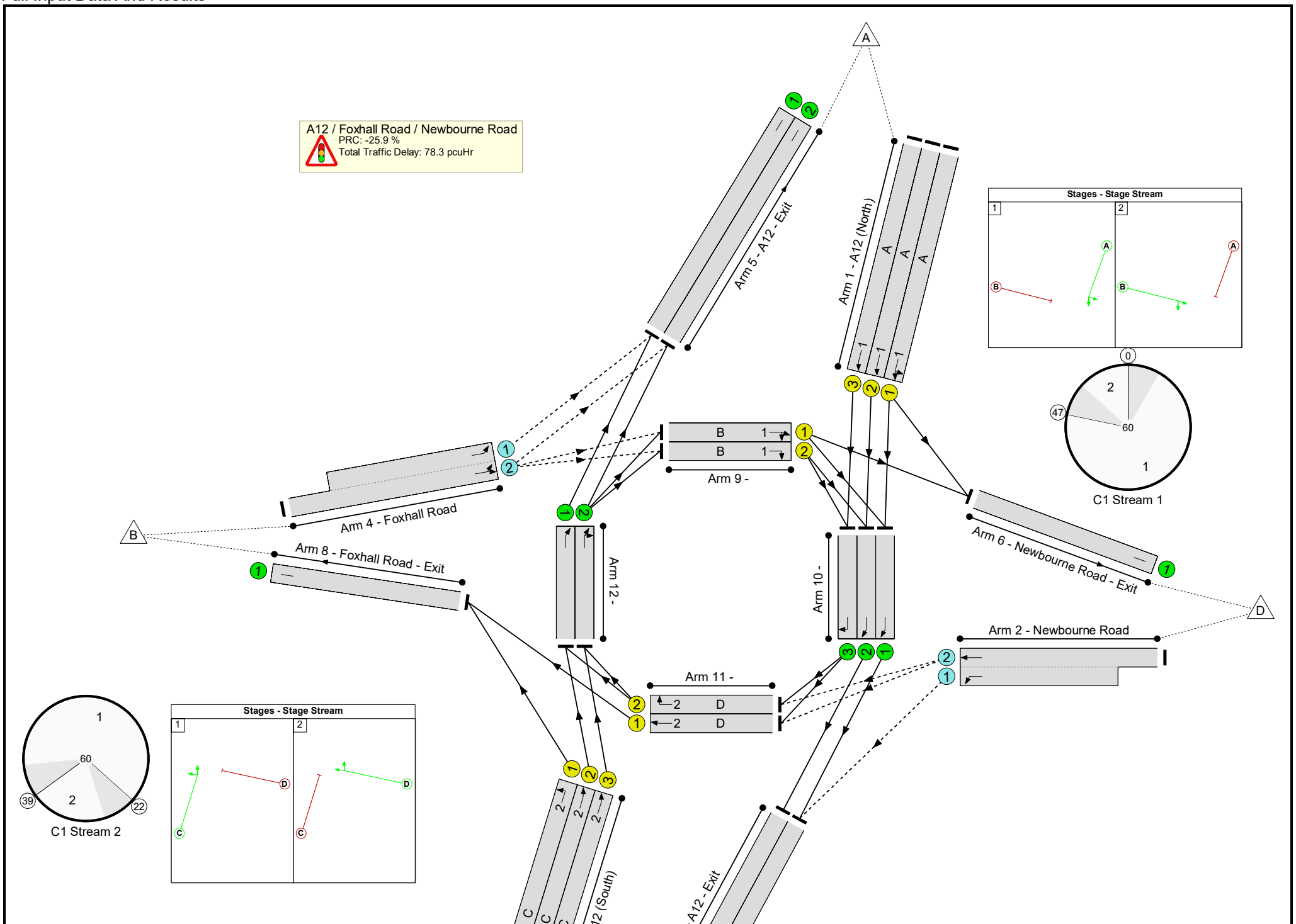
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**113.3%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**113.3%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	933	1864	1336	69.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	1006	1976	1416	71.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	178	1845	1322	13.5%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	482	1840:1775	344+344	95.8 : 44.1%
3/1	A12 (South) Left	U	2	N/A	C		1	38	-	183	1828	1188	15.4%
3/2	A12 (South) Ahead	U	2	N/A	C		1	38	-	1186	1958	1273	93.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	38	-	1101	1828	1188	92.7%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	598	1828:1828	264+264	113.3 : 113.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1622	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1123	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	362	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	927	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1215	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	204	1791	269	72.7%
9/2	Right	U	1	N/A	B		1	8	-	209	1940	291	63.4%
10/1	Ahead	U	N/A	N/A	-		-	-	-	775	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1215	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	178	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	12	-	235	1764	382	61.5%
11/2	Right	U	2	N/A	D		1	12	-	273	1764	382	71.4%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1323	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1237	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2020**	**0**	**0**	**19.9**	**58.4**	**0.0**	**78.3**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2020**	**0**	**0**	**19.9**	**58.4**	**0.0**	**78.3**	**-**	**-**	**-**	**-**
1/1	933	933	-	-	-	1.2	1.2	-	2.4	9.3	8.8	1.2	10.0
1/2	1006	1006	-	-	-	1.4	1.2	-	2.6	9.3	9.5	1.2	10.7
1/3	178	178	-	-	-	0.1	0.1	-	0.2	4.3	0.9	0.1	1.0
2/2+2/1	482	482	964	0	0	1.4	1.2	-	2.5	18.8	5.2	1.2	6.4
3/1	183	183	-	-	-	0.2	0.1	-	0.3	5.9	1.2	0.1	1.3
3/2	1186	1186	-	-	-	3.1	6.0	-	9.1	27.6	17.5	6.0	23.5
3/3	1101	1101	-	-	-	2.8	5.6	-	8.4	27.5	15.9	5.6	21.5
4/2+4/1	598	528	1056	0	0	4.5	38.9	-	43.4	261.3	10.3	38.9	49.2
5/1	1587	1587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1121	1121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	927	927	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1191	1191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	195	195	-	-	-	1.4	1.3	-	2.7	49.1	3.0	1.3	4.3
9/2	185	185	-	-	-	0.4	0.9	-	1.3	25.2	2.4	0.9	3.2
10/1	775	775	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1191	1191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	178	178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	235	235	-	-	-	1.3	0.8	-	2.1	32.7	3.6	0.8	4.4
11/2	273	273	-	-	-	2.1	1.2	-	3.3	43.6	4.4	1.2	5.6
12/1	1323	1323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1237	1237	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

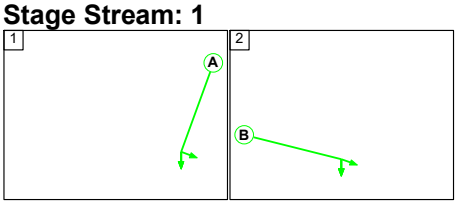
C1	Stream: 1	PRC for Signalled Lanes (%):	23.8	Total Delay for Signalled Lanes (pcuHr):	9.16	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-3.5	Total Delay for Signalled Lanes (pcuHr):	23.24	Cycle Time (s):	60
		PRC Over All Lanes (%):	-25.9	Total Delay Over All Lanes(pcuHr):	78.32		

Full Input Data And Results

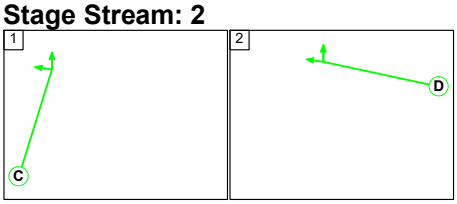
Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

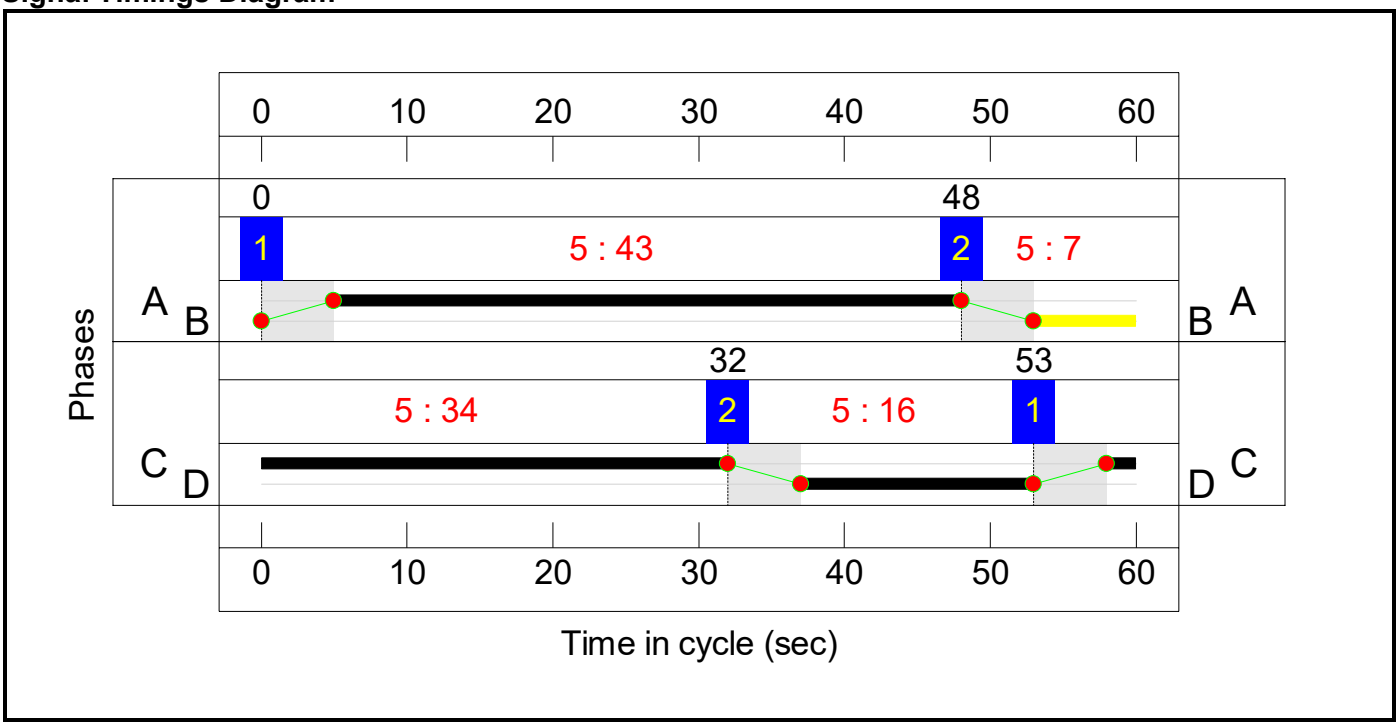
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	34	16
Change Point	53	32

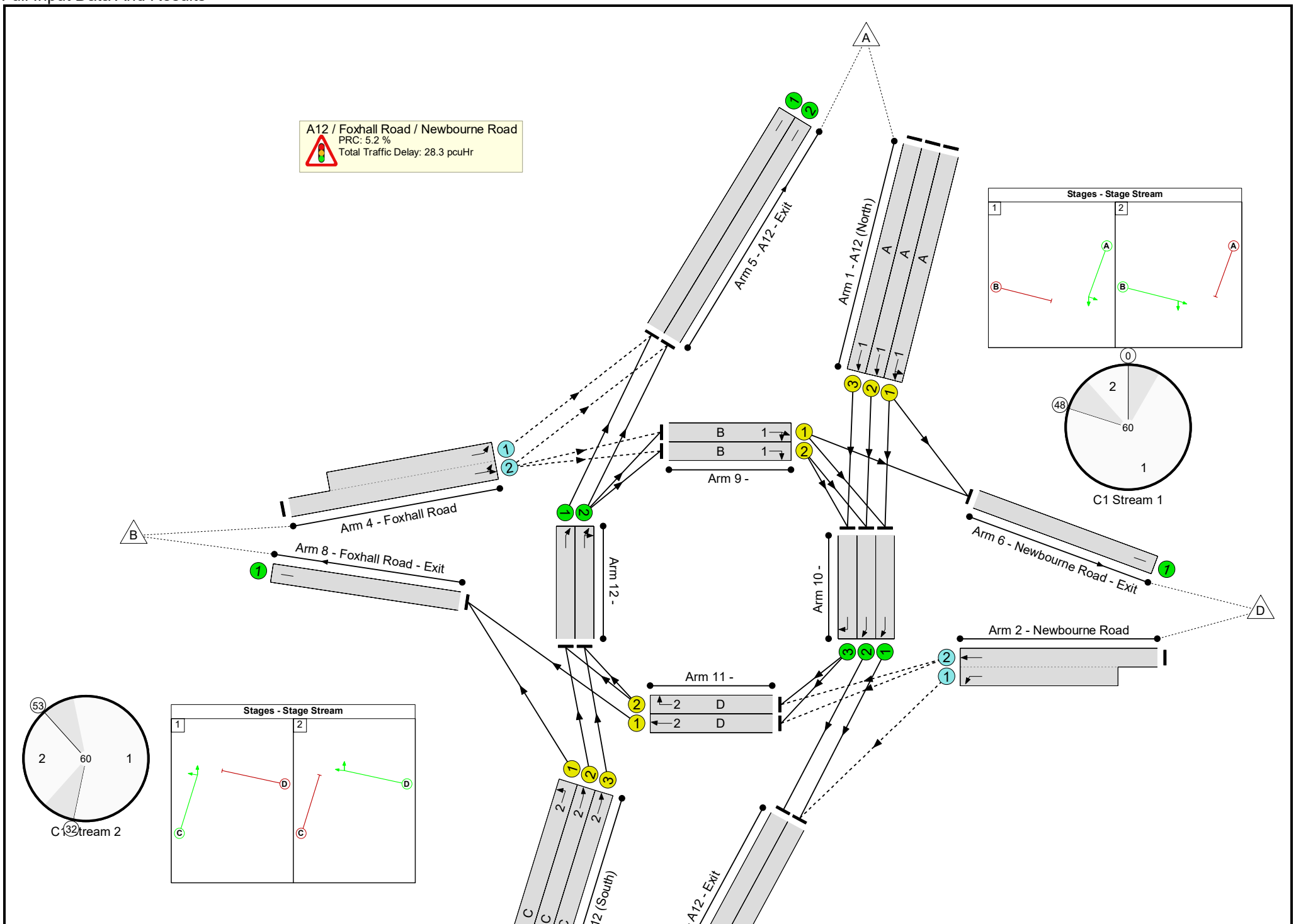
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.5%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.5%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	855	1871	1372	62.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	921	1976	1449	63.6%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	322	1845	1353	23.8%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	389	1840:1775	371+371	67.9 : 36.9%
3/1	A12 (South) Left	U	2	N/A	C		1	34	-	236	1828	1066	22.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	34	-	977	1958	1142	85.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	34	-	903	1828	1066	84.7%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	544	1828:1828	407+407	66.8 : 66.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1323	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	941	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	799	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	147	1791	239	61.6%
9/2	Right	U	1	N/A	B		1	7	-	162	1940	259	62.6%
10/1	Ahead	U	N/A	N/A	-		-	-	-	662	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	16	-	425	1764	500	85.0%
11/2	Right	U	2	N/A	D		1	16	-	149	1764	500	29.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1051	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	978	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1866**	**0**	**0**	**14.8**	**13.6**	**0.0**	**28.3**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1866**	**0**	**0**	**14.8**	**13.6**	**0.0**	**28.3**	**-**	**-**	**-**	**-**
1/1	855	855	-	-	-	0.9	0.8	-	1.8	7.4	6.9	0.8	7.7
1/2	921	921	-	-	-	1.0	0.9	-	1.9	7.4	7.4	0.9	8.3
1/3	322	322	-	-	-	0.2	0.2	-	0.4	4.3	1.7	0.2	1.9
2/2+2/1	389	389	778	0	0	0.6	0.5	-	1.1	10.2	3.1	0.5	3.6
3/1	236	236	-	-	-	0.4	0.1	-	0.5	8.2	1.8	0.1	2.0
3/2	977	977	-	-	-	2.8	2.9	-	5.7	20.9	13.3	2.9	16.2
3/3	903	903	-	-	-	2.6	2.7	-	5.3	21.0	12.3	2.7	15.0
4/2+4/1	544	544	1088	0	0	1.6	1.0	-	2.6	17.5	3.5	1.0	4.5
5/1	1323	1323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	941	941	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1083	1083	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	661	661	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	147	147	-	-	-	0.9	0.8	-	1.7	41.4	2.2	0.8	3.0
9/2	162	162	-	-	-	0.8	0.8	-	1.6	35.6	2.2	0.8	3.0
10/1	662	662	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1083	1083	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	425	425	-	-	-	2.2	2.7	-	4.8	41.0	6.6	2.7	9.2
11/2	149	149	-	-	-	0.7	0.2	-	1.0	23.2	1.6	0.2	1.9
12/1	1051	1051	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	978	978	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

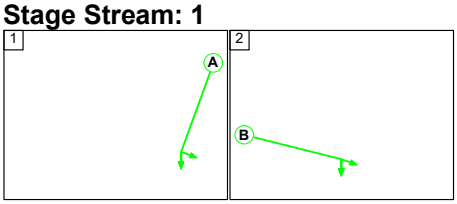
C1	Stream: 1	PRC for Signalled Lanes (%):	41.6	Total Delay for Signalled Lanes (pcuHr):	7.33	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	5.2	Total Delay for Signalled Lanes (pcuHr):	17.27	Cycle Time (s):	60
		PRC Over All Lanes (%):	5.2	Total Delay Over All Lanes(pcuHr):	28.34		

Full Input Data And Results

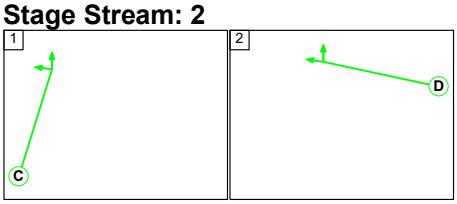
Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

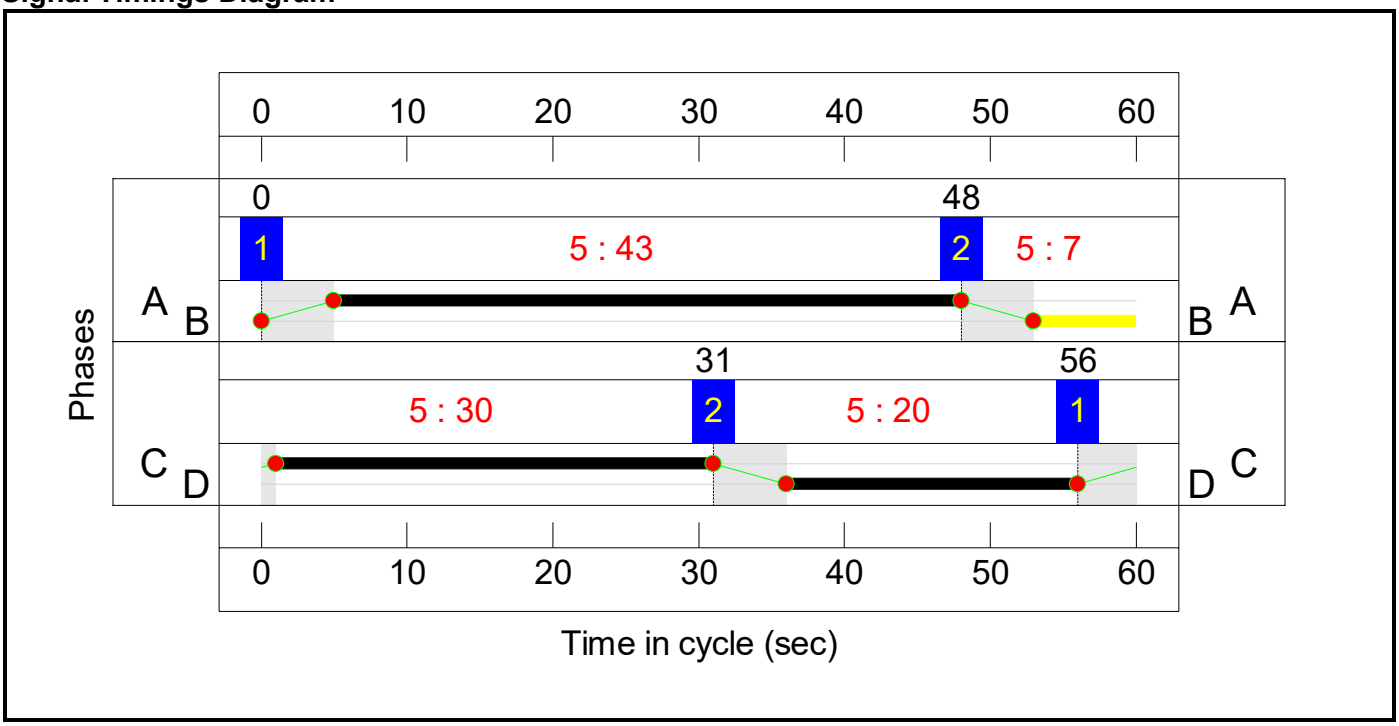
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	30	20
Change Point	56	31

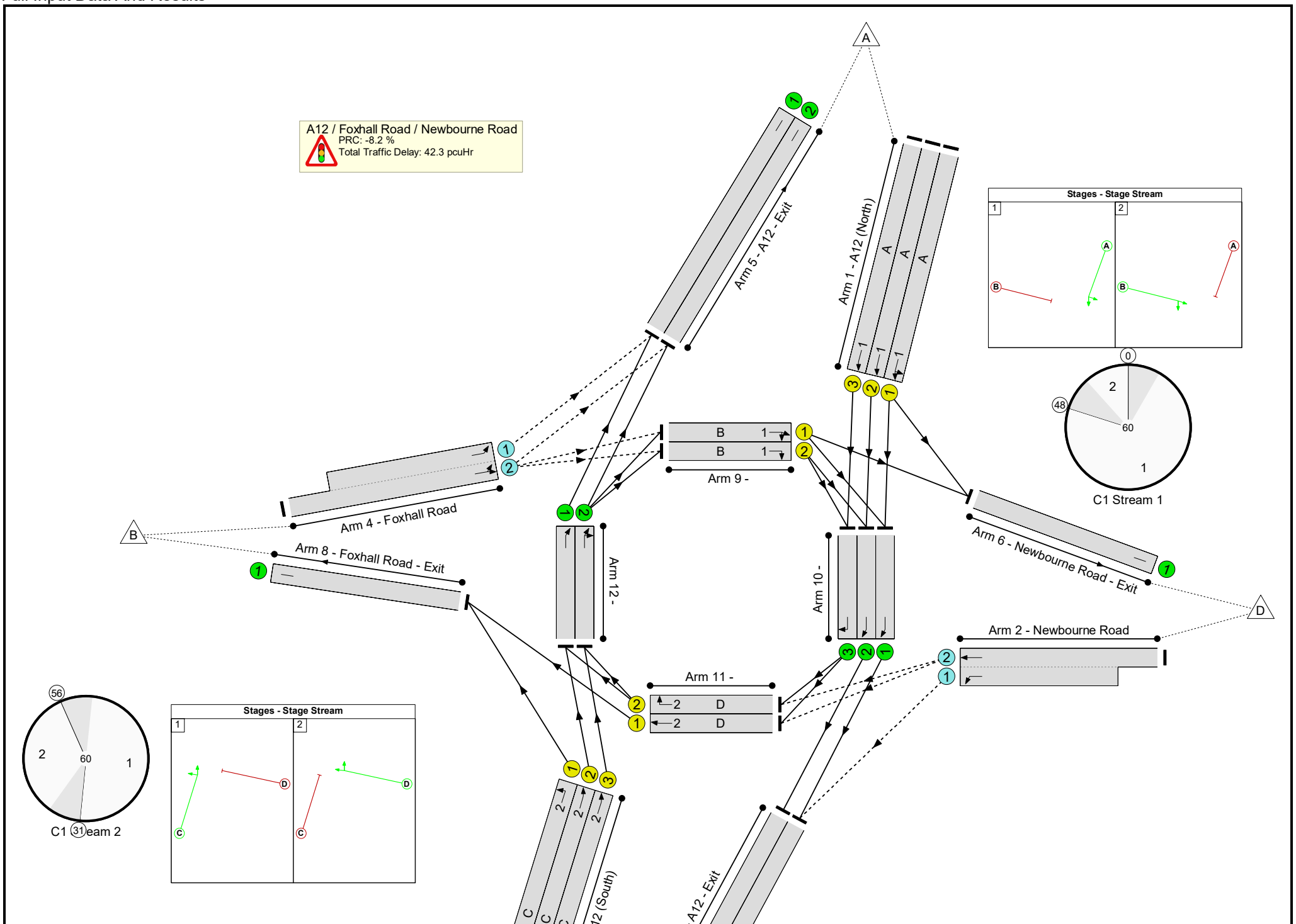
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.4%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.4%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	848	1867	1369	61.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	917	1976	1449	63.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	383	1845	1353	28.3%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	341	1840:1775	366+366	59.3 : 33.9%
3/1	A12 (South) Left	U	2	N/A	C		1	30	-	343	1828	944	36.3%
3/2	A12 (South) Ahead	U	2	N/A	C		1	30	-	985	1958	1012	97.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	30	-	915	1828	944	96.9%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	469	1828:1828	435+435	54.1 : 53.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1272	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	930	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	302	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	804	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1055	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	838	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	134	1791	239	56.1%
9/2	Right	U	1	N/A	B		1	7	-	138	1940	259	53.4%
10/1	Ahead	U	N/A	N/A	-		-	-	-	680	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1055	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	20	-	495	1764	617	80.2%
11/2	Right	U	2	N/A	D		1	20	-	105	1764	617	17.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1038	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	967	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1620**	**0**	**0**	**16.0**	**26.3**	**0.0**	**42.3**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1620**	**0**	**0**	**16.0**	**26.3**	**0.0**	**42.3**	**-**	**-**	**-**	**-**
1/1	848	848	-	-	-	0.9	0.8	-	1.7	7.4	6.8	0.8	7.6
1/2	917	917	-	-	-	1.0	0.9	-	1.9	7.4	7.4	0.9	8.2
1/3	383	383	-	-	-	0.3	0.2	-	0.5	4.6	2.1	0.2	2.3
2/2+2/1	341	341	682	0	0	0.4	0.4	-	0.9	9.2	2.5	0.4	3.0
3/1	343	343	-	-	-	0.8	0.3	-	1.1	11.6	3.3	0.3	3.6
3/2	985	985	-	-	-	3.9	10.4	-	14.2	52.1	15.9	10.4	26.3
3/3	915	915	-	-	-	3.6	9.5	-	13.0	51.2	14.7	9.5	24.2
4/2+4/1	469	469	938	0	0	1.3	0.6	-	1.9	14.7	2.7	0.6	3.3
5/1	1272	1272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	930	930	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1055	1055	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	134	134	-	-	-	0.7	0.6	-	1.4	36.8	2.0	0.6	2.6
9/2	138	138	-	-	-	0.6	0.6	-	1.2	31.7	1.7	0.6	2.3
10/1	680	680	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1055	1055	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	495	495	-	-	-	2.1	2.0	-	4.0	29.2	7.2	2.0	9.1
11/2	105	105	-	-	-	0.4	0.1	-	0.5	16.1	0.9	0.1	1.0
12/1	1038	1038	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	967	967	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

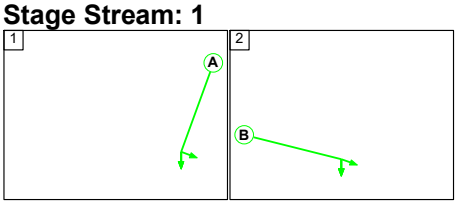
C1	Stream: 1	PRC for Signalled Lanes (%):	42.2	Total Delay for Signalled Lanes (pcuHr):	6.67	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-8.2	Total Delay for Signalled Lanes (pcuHr):	32.87	Cycle Time (s):	60
		PRC Over All Lanes (%):	-8.2	Total Delay Over All Lanes(pcuHr):	42.33		

Full Input Data And Results

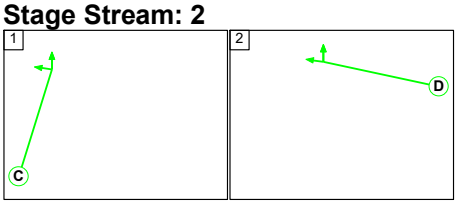
Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

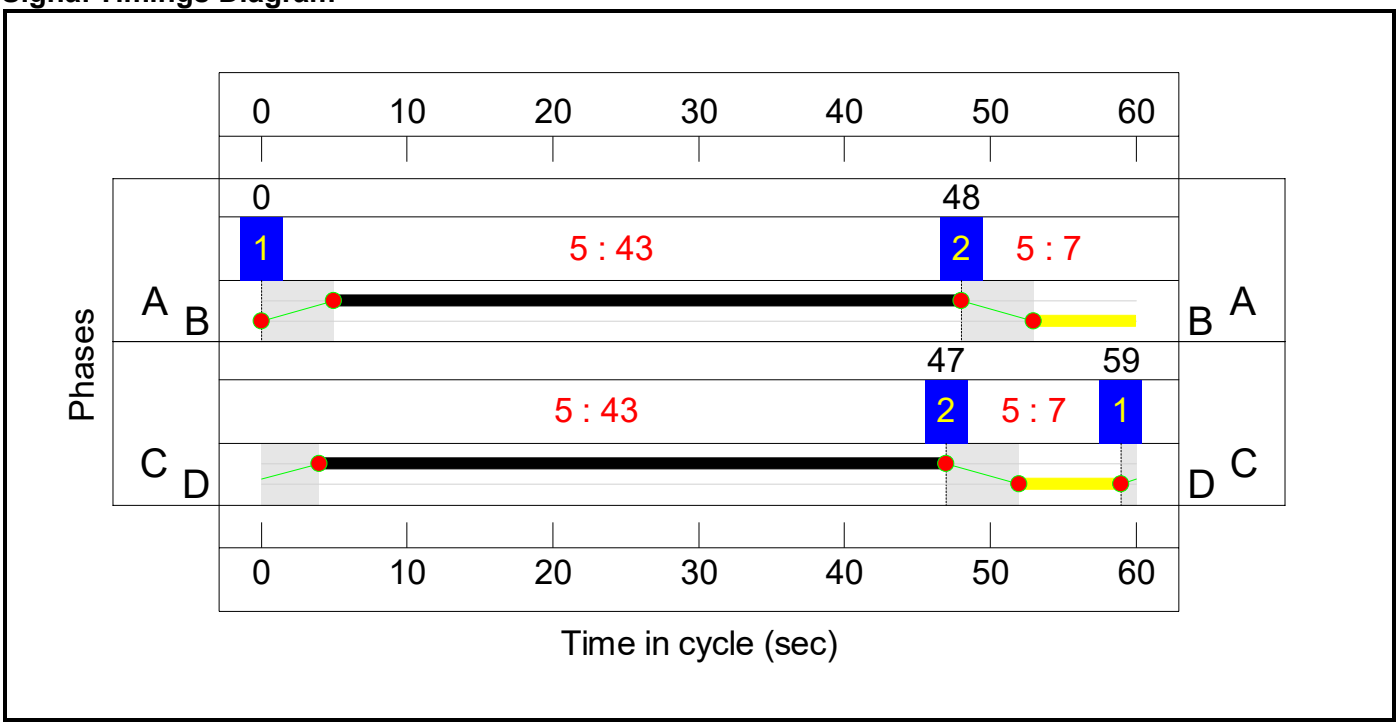
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	59	47

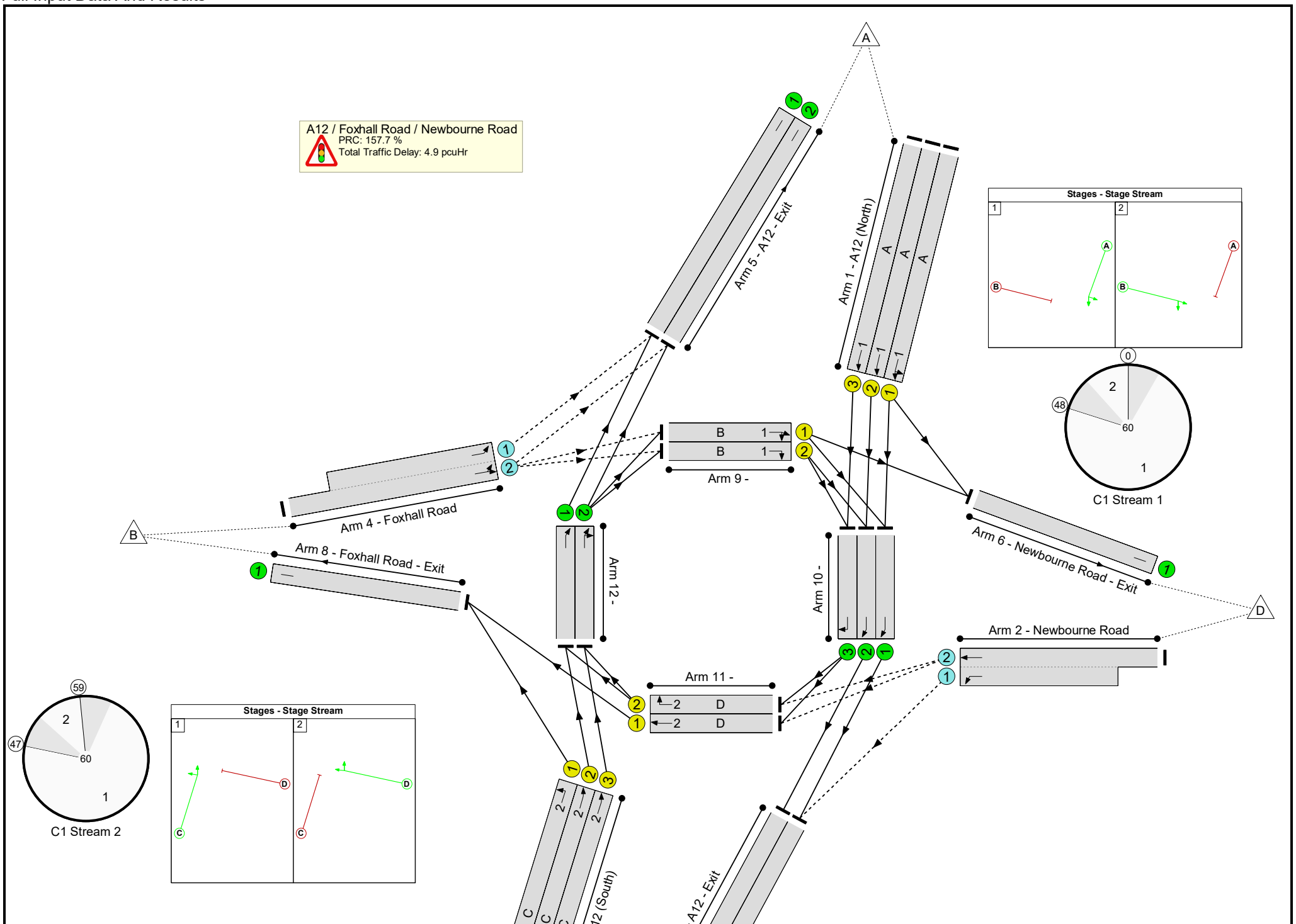
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.9%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.9%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	447	1854	1360	32.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	506	1976	1449	34.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	40	1845	1353	3.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	94	1840:1775	655+655	6.7 : 7.6%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	41	1828	1341	3.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	460	1958	1436	32.0%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	396	1828	1341	29.5%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	276	1828:1828	712+662	24.0 : 15.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	574	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	101	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	468	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	108	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	72	1791	239	30.2%
9/2	Right	U	1	N/A	B		1	7	-	90	1940	259	34.8%
10/1	Ahead	U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	67	1764	235	28.5%
11/2	Right	U	2	N/A	D		1	7	-	17	1764	235	7.2%
12/1	Ahead	U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**740**	**0**	**0**	**3.0**	**1.9**	**0.0**	**4.9**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**740**	**0**	**0**	**3.0**	**1.9**	**0.0**	**4.9**	**-**	**-**	**-**	**-**
1/1	447	447	-	-	-	0.3	0.2	-	0.6	4.8	2.6	0.2	2.9
1/2	506	506	-	-	-	0.4	0.3	-	0.7	4.8	3.0	0.3	3.2
1/3	40	40	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	94	94	188	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.1
3/1	41	41	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	460	460	-	-	-	0.4	0.2	-	0.6	4.6	2.6	0.2	2.8
3/3	396	396	-	-	-	0.3	0.2	-	0.5	4.6	2.2	0.2	2.4
4/2+4/1	276	276	552	0	0	0.0	0.1	-	0.1	1.7	0.2	0.1	0.4
5/1	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	101	101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	108	108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	72	72	-	-	-	0.4	0.2	-	0.7	32.8	1.1	0.2	1.3
9/2	90	90	-	-	-	0.6	0.3	-	0.9	34.2	1.3	0.3	1.6
10/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	67	67	-	-	-	0.4	0.2	-	0.6	32.8	1.0	0.2	1.2
11/2	17	17	-	-	-	0.1	0.0	-	0.1	31.1	0.2	0.0	0.3
12/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

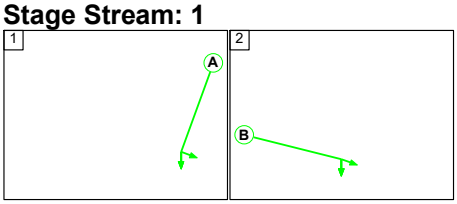
C1	Stream: 1	PRC for Signalled Lanes (%):	157.7	Total Delay for Signalled Lanes (pcuHr):	2.82	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	180.9	Total Delay for Signalled Lanes (pcuHr):	1.90	Cycle Time (s):	60
		PRC Over All Lanes (%):	157.7	Total Delay Over All Lanes(pcuHr):	4.89		

Full Input Data And Results

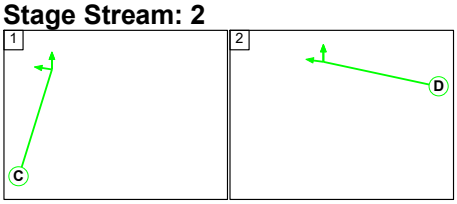
Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

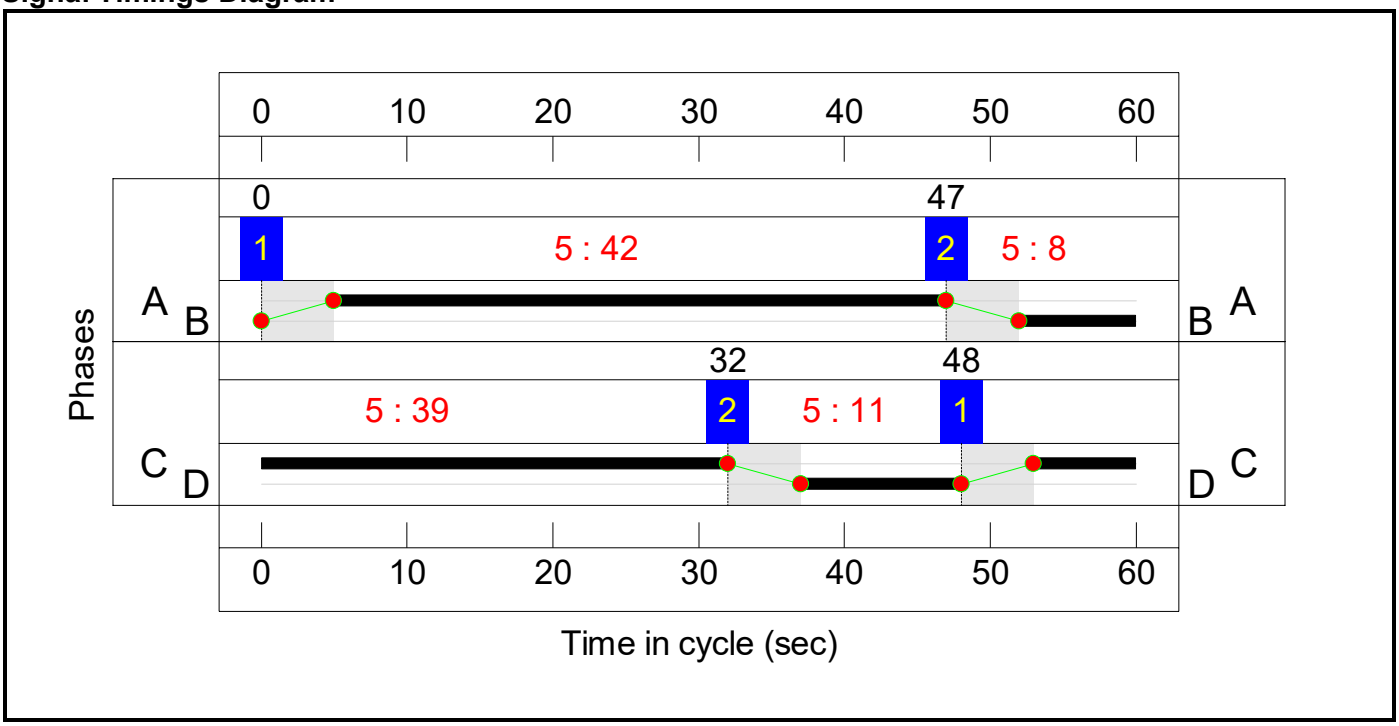
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	39	11
Change Point	48	32

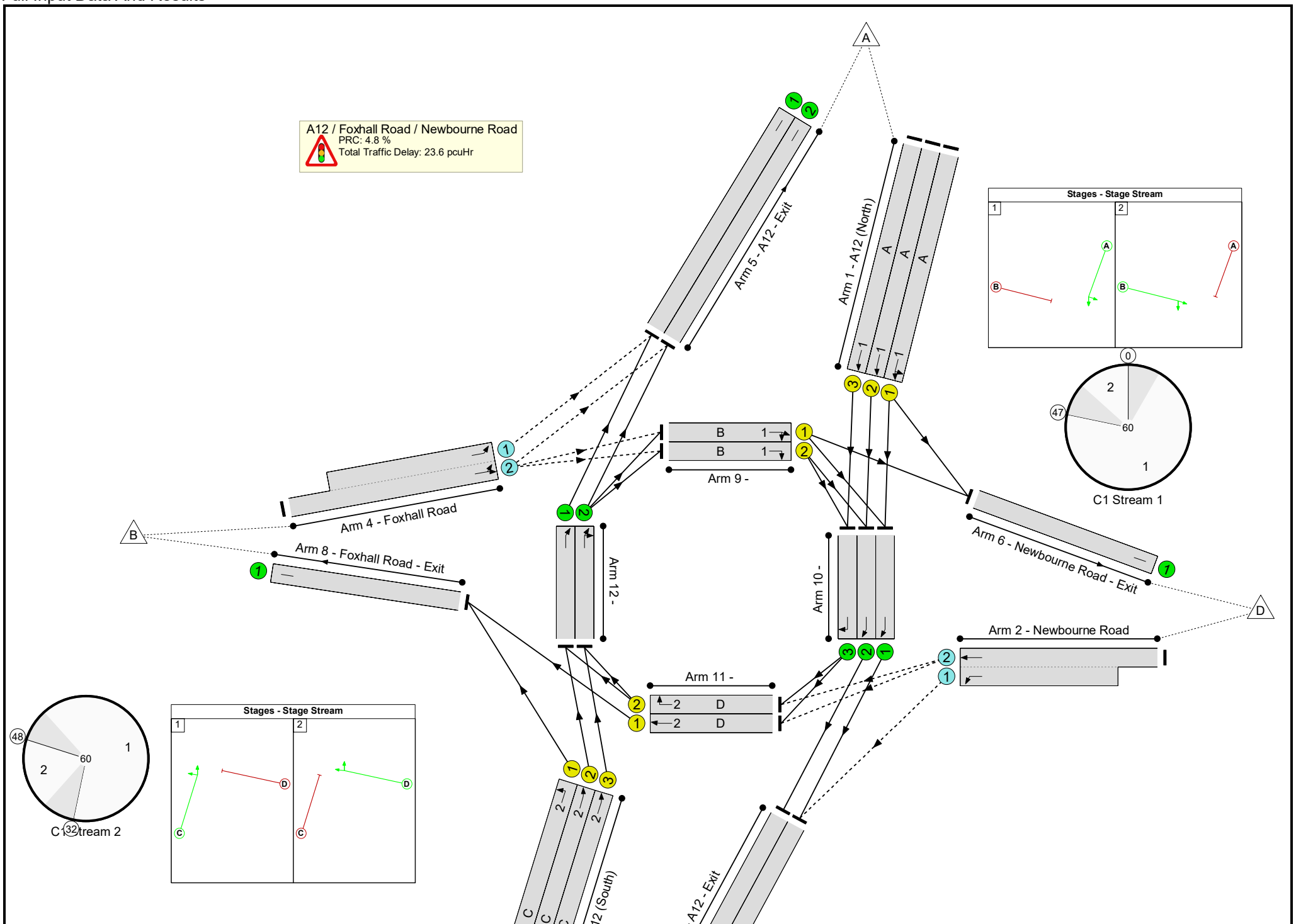
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.9%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.9%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	812	1855	1329	61.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	887	1976	1416	62.6%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	251	1845	1322	19.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	331	1840:1775	379+338	59.8 : 30.8%
3/1	A12 (South) Left	U	2	N/A	C		1	39	-	101	1828	1219	8.3%
3/2	A12 (South) Ahead	U	2	N/A	C		1	39	-	953	1958	1305	73.0%
3/3	A12 (South) Ahead	U	2	N/A	C		1	39	-	872	1828	1219	71.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	625	1828:1828	392+392	79.9 : 79.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1353	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	947	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	220	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	150	1791	269	55.8%
9/2	Right	U	1	N/A	B		1	8	-	175	1940	291	60.1%
10/1	Ahead	U	N/A	N/A	-		-	-	-	742	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	251	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	11	-	303	1764	353	85.9%
11/2	Right	U	2	N/A	D		1	11	-	175	1764	353	49.6%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1041	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	959	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1912**	**0**	**0**	**12.2**	**11.3**	**0.0**	**23.6**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1912**	**0**	**0**	**12.2**	**11.3**	**0.0**	**23.6**	**-**	**-**	**-**	**-**
1/1	812	812	-	-	-	1.0	0.8	-	1.7	7.8	6.8	0.8	7.5
1/2	887	887	-	-	-	1.1	0.8	-	1.9	7.8	7.4	0.8	8.2
1/3	251	251	-	-	-	0.2	0.1	-	0.3	4.5	1.3	0.1	1.4
2/2+2/1	331	331	662	0	0	0.4	0.4	-	0.8	8.9	2.4	0.4	2.8
3/1	101	101	-	-	-	0.1	0.0	-	0.1	5.2	0.6	0.0	0.6
3/2	953	953	-	-	-	1.7	1.3	-	3.1	11.6	10.1	1.3	11.4
3/3	872	872	-	-	-	1.5	1.2	-	2.8	11.5	9.2	1.2	10.5
4/2+4/1	625	625	1250	0	0	1.7	1.9	-	3.6	20.8	4.4	1.9	6.4
5/1	1353	1353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	947	947	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	220	220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	150	150	-	-	-	0.9	0.6	-	1.5	36.5	2.3	0.6	2.9
9/2	175	175	-	-	-	0.8	0.7	-	1.5	31.0	2.4	0.7	3.2
10/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	251	251	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	303	303	-	-	-	1.8	2.7	-	4.5	53.7	4.8	2.7	7.5
11/2	175	175	-	-	-	1.1	0.5	-	1.6	33.0	2.3	0.5	2.8
12/1	1041	1041	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	959	959	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

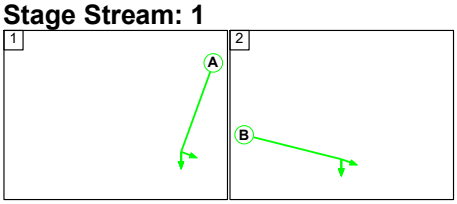
C1	Stream: 1	PRC for Signalled Lanes (%):	43.7	Total Delay for Signalled Lanes (pcuHr):	7.00	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	4.8	Total Delay for Signalled Lanes (pcuHr):	12.12	Cycle Time (s):	60
		PRC Over All Lanes (%):	4.8	Total Delay Over All Lanes(pcuHr):	23.55		

Full Input Data And Results

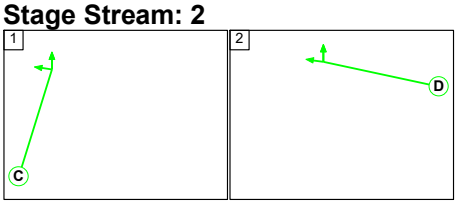
Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

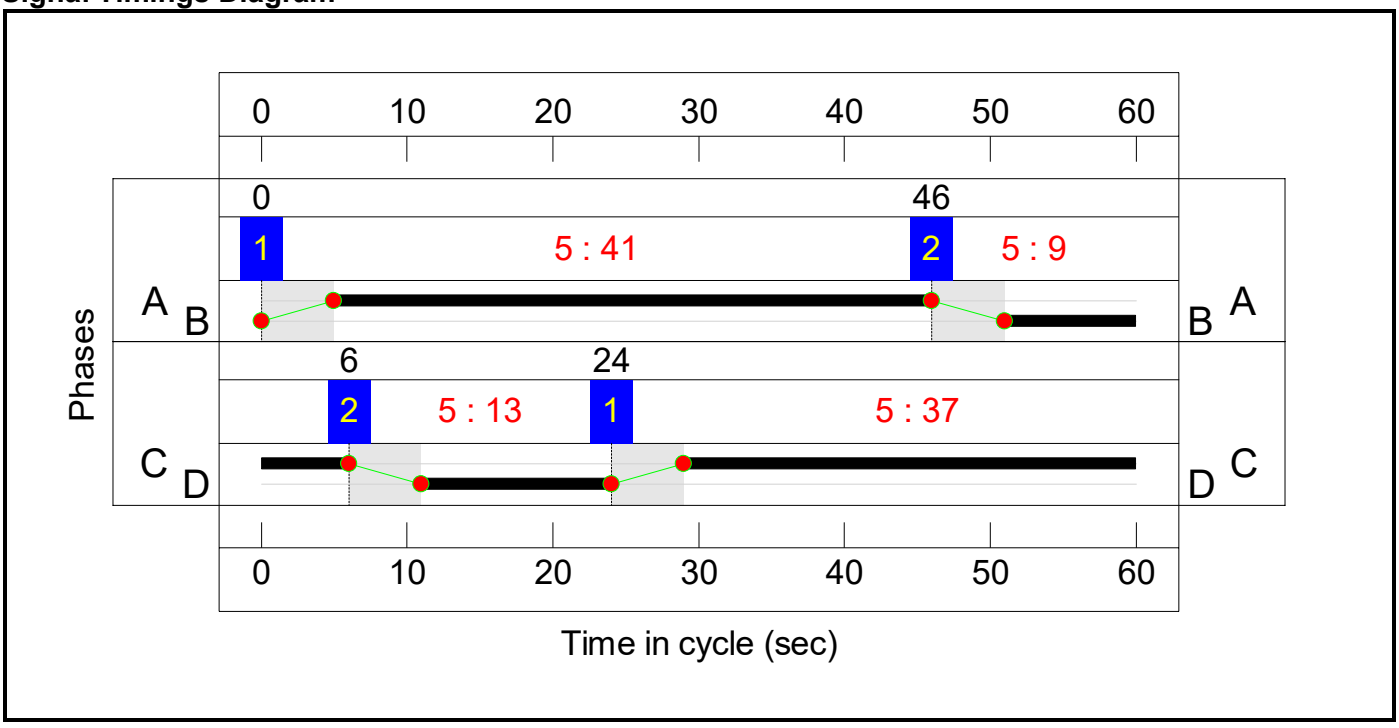
Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

Stage	1	2
Duration	37	13
Change Point	24	6

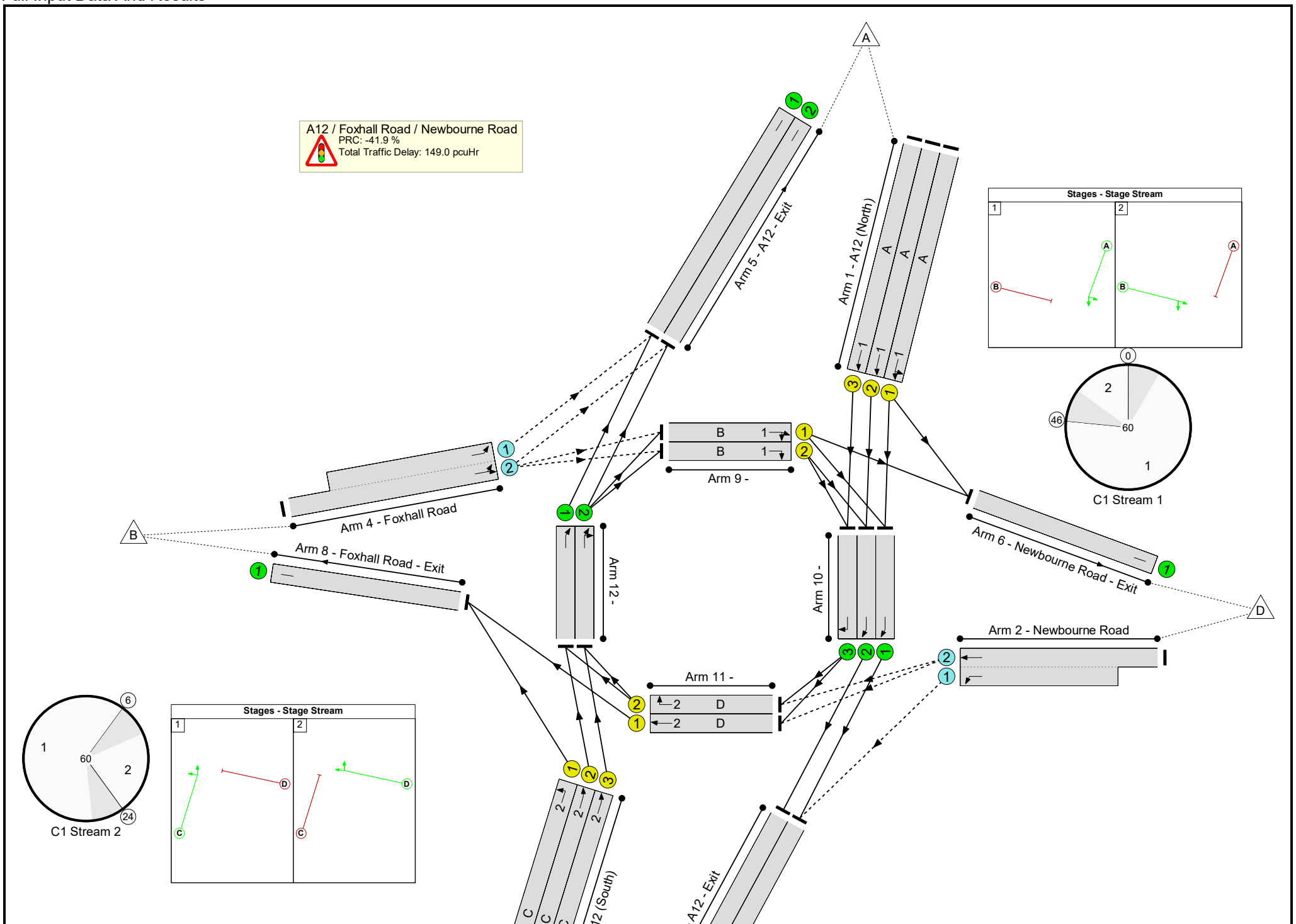
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.7%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.7%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	41	-	997	1863	1304	76.5%
1/2	A12 (North) Ahead	U	1	N/A	A		1	41	-	1072	1976	1383	77.5%
1/3	A12 (North) Ahead	U	1	N/A	A		1	41	-	232	1845	1292	18.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	553	1840:1775	318+318	113.4 : 60.3%
3/1	A12 (South) Left	U	2	N/A	C		1	37	-	184	1828	1158	15.9%
3/2	A12 (South) Ahead	U	2	N/A	C		1	37	-	1188	1958	1240	95.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	37	-	1104	1828	1158	95.4%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	683	1828:1828	268+268	127.7 : 127.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1686	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1162	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1026	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1283	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	9	-	229	1791	299	70.2%
9/2	Right	U	1	N/A	B		1	9	-	211	1940	323	51.2%
10/1	Ahead	U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1283	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	232	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	13	-	280	1764	412	66.6%
11/2	Right	U	2	N/A	D		1	13	-	313	1764	412	67.5%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1345	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1260	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2092**	**0**	**0**	**25.0**	**124.1**	**0.0**	**149.0**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2092**	**0**	**0**	**25.0**	**124.1**	**0.0**	**149.0**	**-**	**-**	**-**	**-**
1/1	997	997	-	-	-	1.6	1.6	-	3.2	11.6	10.5	1.6	12.1
1/2	1072	1072	-	-	-	1.8	1.7	-	3.5	11.6	11.6	1.7	13.3
1/3	232	232	-	-	-	0.2	0.1	-	0.3	4.8	1.3	0.1	1.4
2/2+2/1	553	510	1021	0	0	3.2	24.4	-	27.6	179.7	16.1	24.4	40.6
3/1	184	184	-	-	-	0.2	0.1	-	0.3	6.4	1.2	0.1	1.3
3/2	1188	1188	-	-	-	3.4	8.6	-	12.0	36.3	18.1	8.6	26.7
3/3	1104	1104	-	-	-	3.1	7.9	-	11.1	36.0	16.9	7.9	24.8
4/2+4/1	683	536	1071	0	0	7.2	75.9	-	83.1	438.0	13.3	75.9	89.2
5/1	1595	1595	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1135	1135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1026	1026	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1237	1237	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	209	209	-	-	-	1.3	1.1	-	2.5	42.7	3.2	1.1	4.4
9/2	165	165	-	-	-	0.8	0.5	-	1.3	29.3	2.8	0.5	3.3
10/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1237	1237	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	232	232	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	274	274	-	-	-	1.4	1.0	-	2.3	30.8	3.5	1.0	4.4
11/2	278	278	-	-	-	0.8	1.0	-	1.8	23.6	4.5	1.0	5.5
12/1	1327	1327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1243	1243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

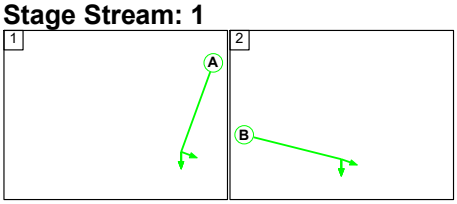
C1	Stream: 1	PRC for Signalled Lanes (%):	16.1	Total Delay for Signalled Lanes (pcuHr):	10.82	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-6.4	Total Delay for Signalled Lanes (pcuHr):	27.52	Cycle Time (s):	60
		PRC Over All Lanes (%):	-41.9	Total Delay Over All Lanes(pcuHr):	149.04		

Full Input Data And Results

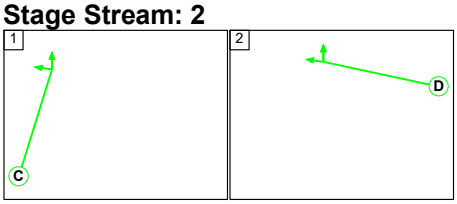
Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

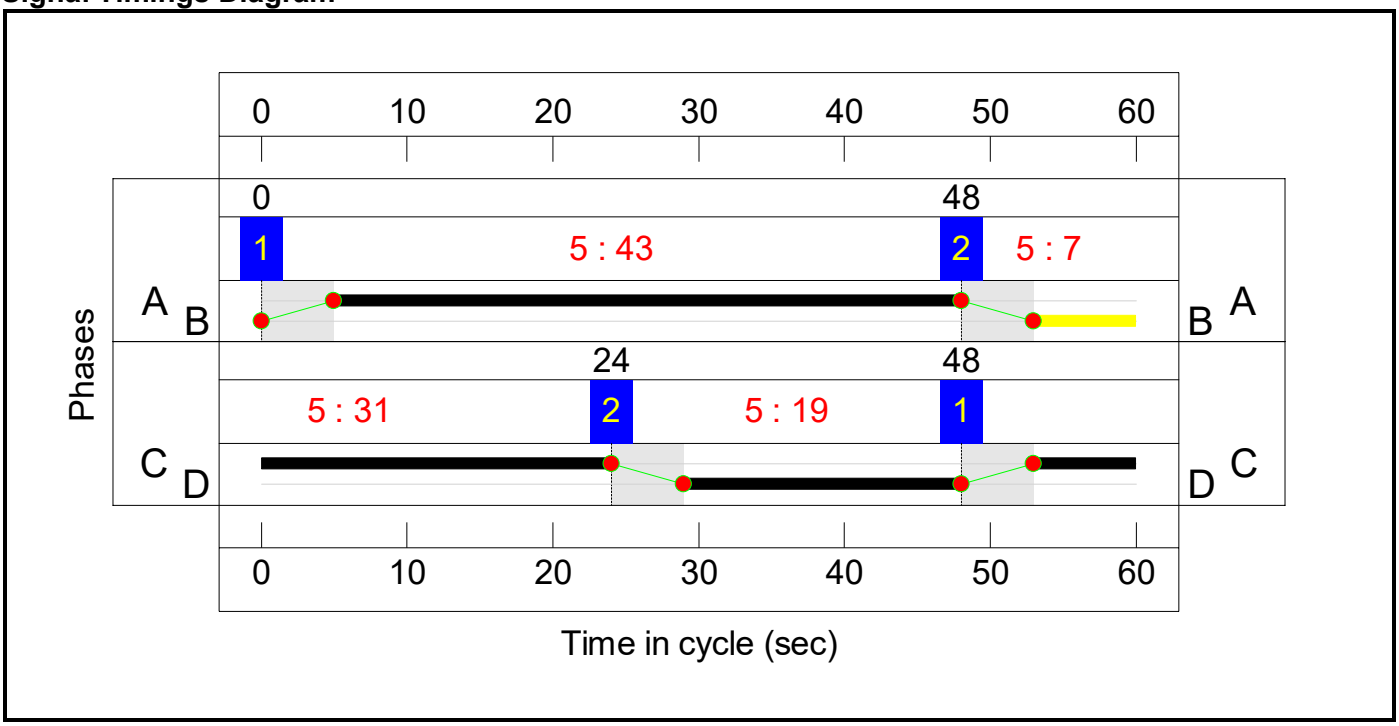
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	31	19
Change Point	48	24

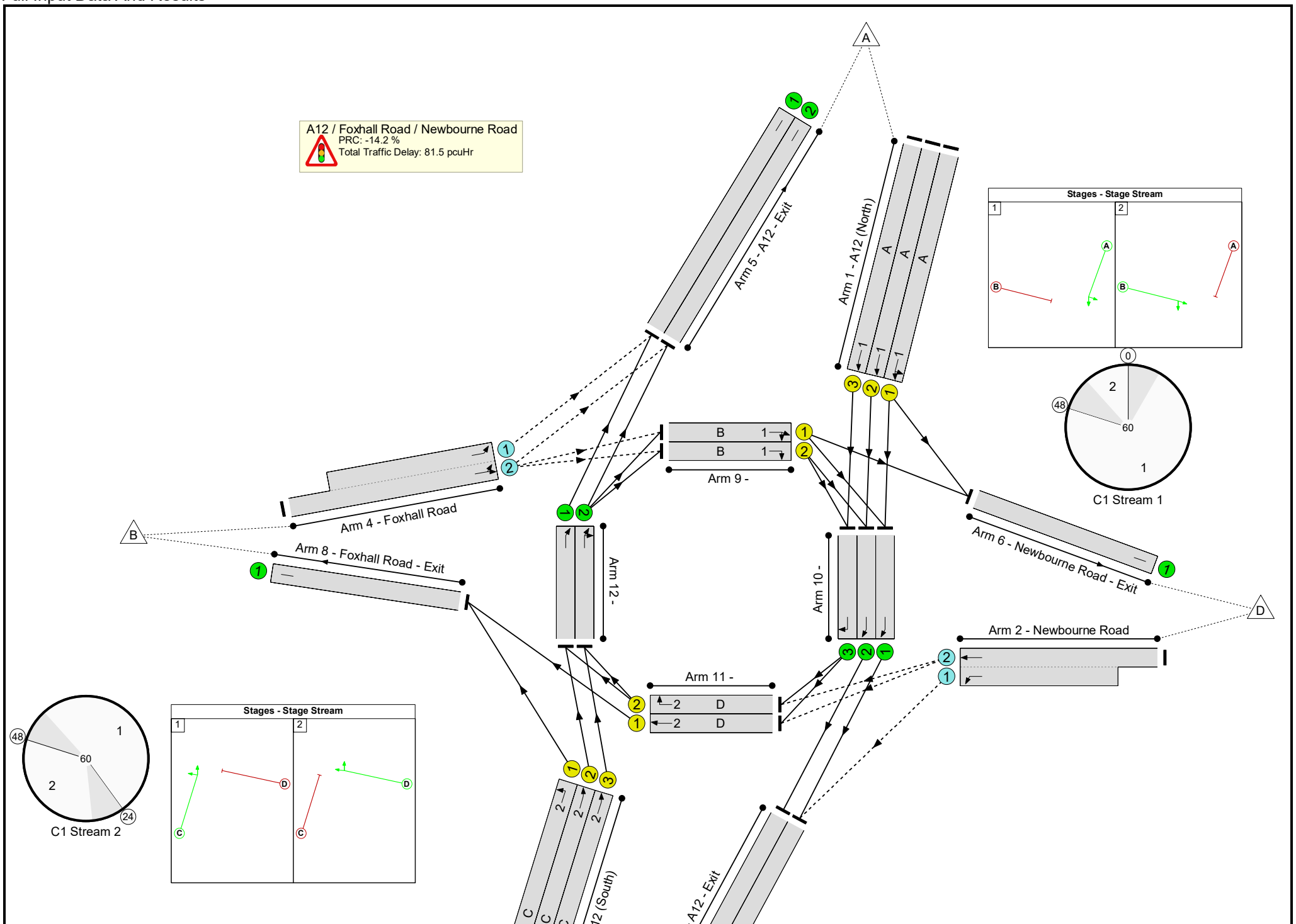
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.8%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.8%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	931	1873	1374	67.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	999	1976	1449	68.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	381	1845	1353	28.2%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	441	1840:1775	329+329	80.5 : 53.5%
3/1	A12 (South) Left	U	2	N/A	C		1	31	-	239	1828	975	24.5%
3/2	A12 (South) Ahead	U	2	N/A	C		1	31	-	1073	1958	1044	102.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	31	-	1000	1828	975	102.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	677	1828:1828	384+384	88.4 : 88.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1497	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1089	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	880	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	712	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	175	1791	239	72.3%
9/2	Right	U	1	N/A	B		1	7	-	162	1940	259	62.6%
10/1	Ahead	U	N/A	N/A	-		-	-	-	704	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	19	-	473	1764	588	80.4%
11/2	Right	U	2	N/A	D		1	19	-	173	1764	588	29.4%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1159	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2236**	**0**	**0**	**21.9**	**59.6**	**0.0**	**81.5**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2236**	**0**	**0**	**21.9**	**59.6**	**0.0**	**81.5**	**-**	**-**	**-**	**-**
1/1	931	931	-	-	-	1.1	1.0	-	2.1	8.3	8.0	1.0	9.1
1/2	999	999	-	-	-	1.2	1.1	-	2.3	8.3	8.9	1.1	10.0
1/3	381	381	-	-	-	0.3	0.2	-	0.5	4.5	2.1	0.2	2.3
2/2+2/1	441	441	882	0	0	1.1	1.0	-	2.1	16.9	3.8	1.0	4.8
3/1	239	239	-	-	-	0.5	0.2	-	0.7	10.0	2.1	0.2	2.3
3/2	1073	1044	-	-	-	5.0	25.1	-	30.1	101.0	18.4	25.1	43.4
3/3	1000	975	-	-	-	4.7	23.3	-	27.9	100.5	17.1	23.3	40.4
4/2+4/1	677	677	1354	0	0	2.8	3.5	-	6.3	33.3	5.2	3.5	8.7
5/1	1468	1468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1066	1066	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1161	1161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	173	173	-	-	-	1.2	1.3	-	2.4	51.0	2.7	1.3	4.0
9/2	162	162	-	-	-	0.8	0.8	-	1.6	35.8	2.2	0.8	3.0
10/1	704	704	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1161	1161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	473	473	-	-	-	2.3	2.0	-	4.3	32.4	7.1	2.0	9.1
11/2	173	173	-	-	-	1.0	0.2	-	1.2	25.0	2.3	0.2	2.5
12/1	1130	1130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

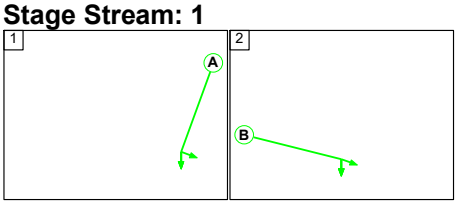
C1	Stream: 1	PRC for Signalled Lanes (%):	24.6	Total Delay for Signalled Lanes (pcuHr):	8.99	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-14.2	Total Delay for Signalled Lanes (pcuHr):	64.16	Cycle Time (s):	60
		PRC Over All Lanes (%):	-14.2	Total Delay Over All Lanes(pcuHr):	81.47		

Full Input Data And Results

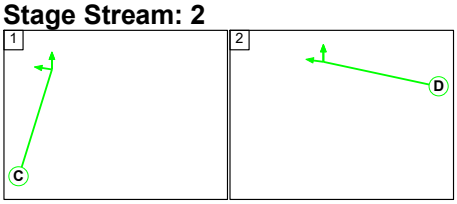
Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

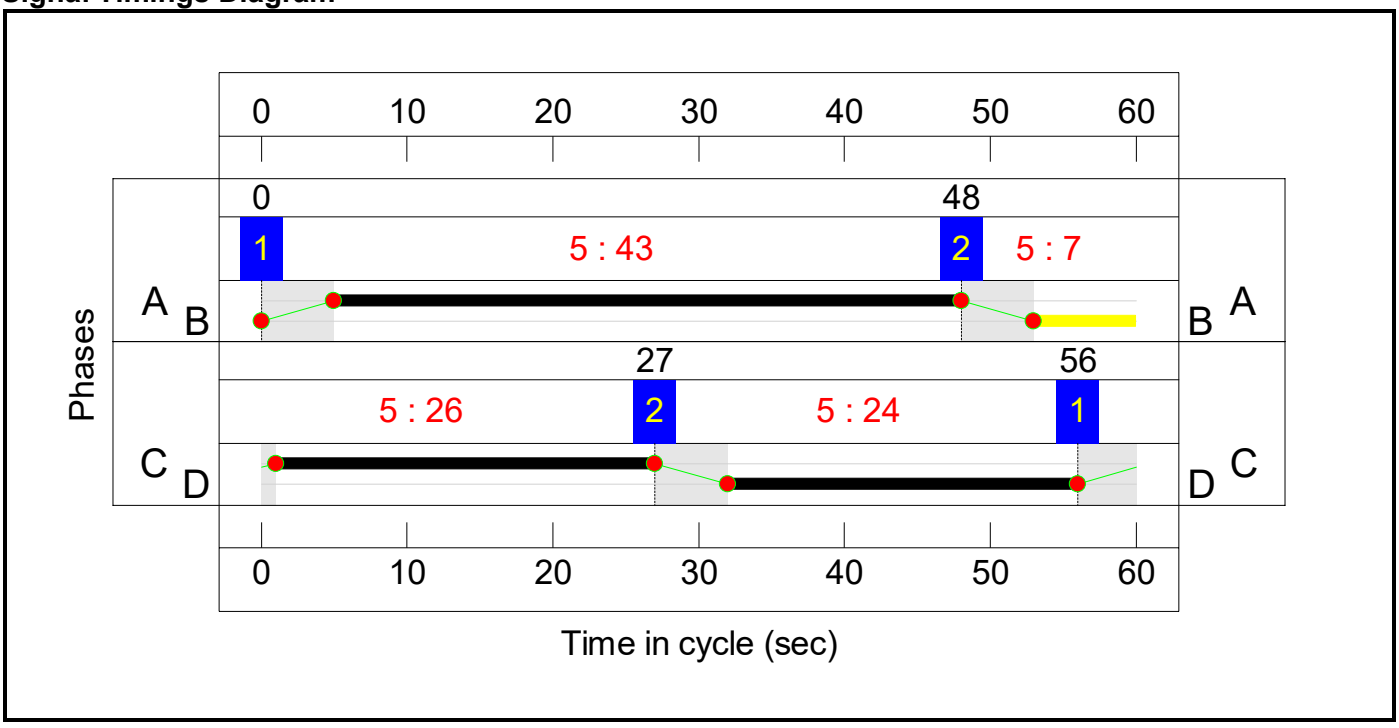
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	26	24
Change Point	56	27

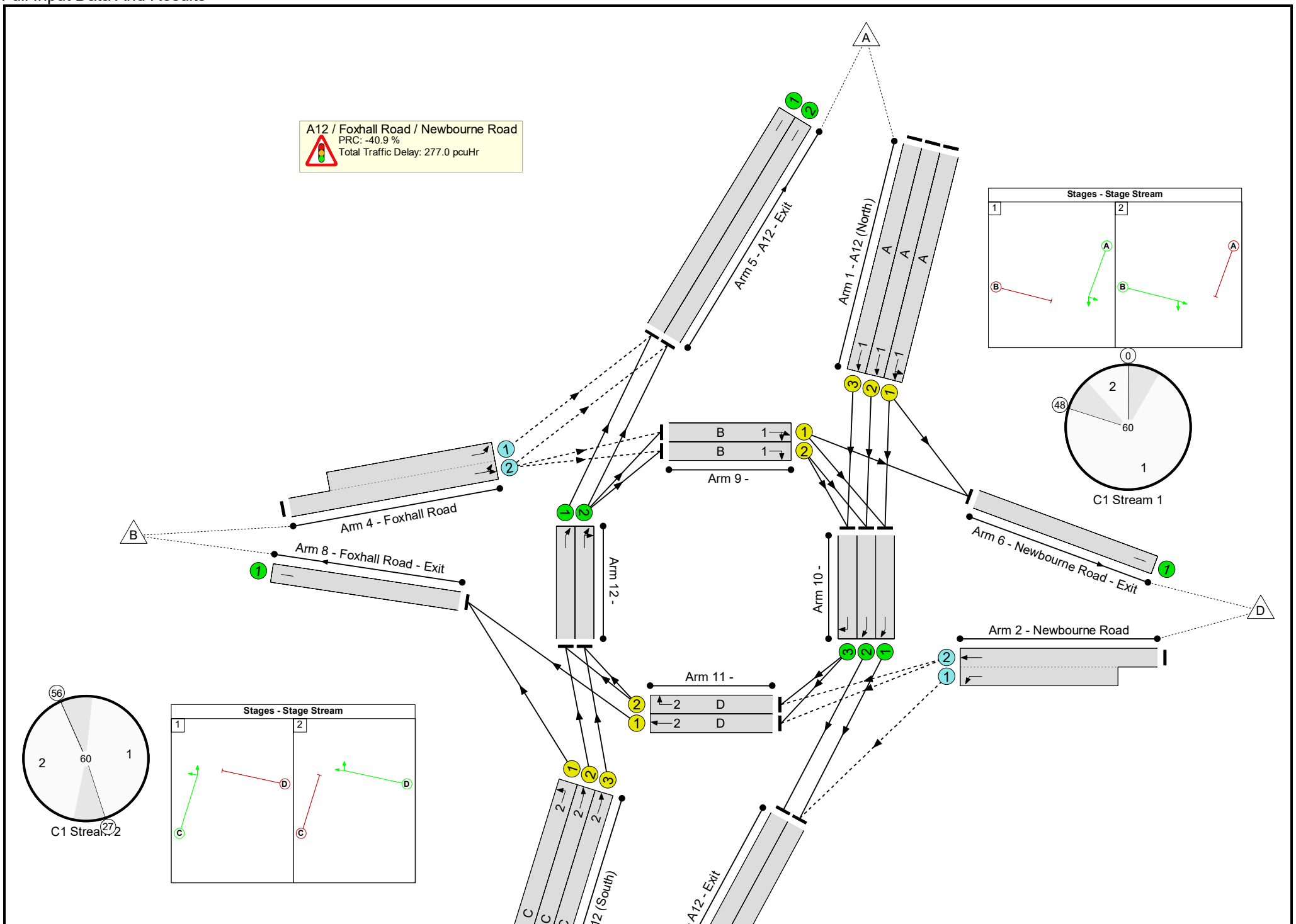
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**126.8%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**126.8%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	985	1867	1369	71.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	1058	1976	1449	73.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	412	1845	1353	30.5%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	392	1840:1775	300+300	86.0 : 44.7%
3/1	A12 (South) Left	U	2	N/A	C		1	26	-	349	1828	823	42.4%
3/2	A12 (South) Ahead	U	2	N/A	C		1	26	-	1117	1958	881	126.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	26	-	1043	1828	823	126.8%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	571	1828:1828	484+484	59.0 : 58.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1462	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1016	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	926	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1197	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	234	1791	239	86.5%
9/2	Right	U	1	N/A	B		1	7	-	139	1940	259	53.7%
10/1	Ahead	U	N/A	N/A	-		-	-	-	792	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1197	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	412	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	24	-	550	1764	735	74.8%
11/2	Right	U	2	N/A	D		1	24	-	120	1764	735	16.3%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1177	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1103	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1926**	**0**	**0**	**34.5**	**242.5**	**0.0**	**277.0**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1926**	**0**	**0**	**34.5**	**242.5**	**0.0**	**277.0**	**-**	**-**	**-**	**-**
1/1	985	985	-	-	-	1.2	1.3	-	2.5	9.2	9.0	1.3	10.3
1/2	1058	1058	-	-	-	1.4	1.3	-	2.7	9.2	10.0	1.3	11.3
1/3	412	412	-	-	-	0.3	0.2	-	0.5	4.7	2.3	0.2	2.5
2/2+2/1	392	392	784	0	0	1.3	0.9	-	2.2	20.1	3.9	0.9	4.9
3/1	349	349	-	-	-	1.1	0.4	-	1.5	15.0	3.9	0.4	4.2
3/2	1117	881	-	-	-	11.9	120.3	-	132.2	426.1	22.5	120.3	142.8
3/3	1043	823	-	-	-	11.1	112.5	-	123.7	426.8	21.1	112.5	133.6
4/2+4/1	571	571	1142	0	0	1.4	0.7	-	2.2	13.6	3.3	0.7	4.0
5/1	1226	1226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	926	926	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1197	1197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	207	207	-	-	-	1.2	2.7	-	4.0	69.5	3.3	2.7	6.1
9/2	139	139	-	-	-	0.6	0.6	-	1.2	31.7	1.8	0.6	2.4
10/1	792	792	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1197	1197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	412	412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	550	550	-	-	-	2.2	1.5	-	3.7	24.2	7.6	1.5	9.1
11/2	120	120	-	-	-	0.6	0.1	-	0.7	20.7	1.5	0.1	1.6
12/1	941	941	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	883	883	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

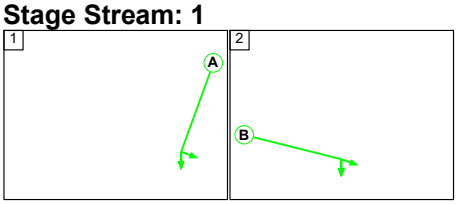
C1	Stream: 1	PRC for Signalled Lanes (%):	4.1	Total Delay for Signalled Lanes (pcuHr):	10.95	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-40.9	Total Delay for Signalled Lanes (pcuHr):	261.72	Cycle Time (s):	60
		PRC Over All Lanes (%):	-40.9	Total Delay Over All Lanes(pcuHr):	277.01		

Full Input Data And Results

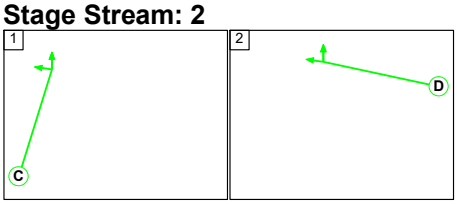
Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

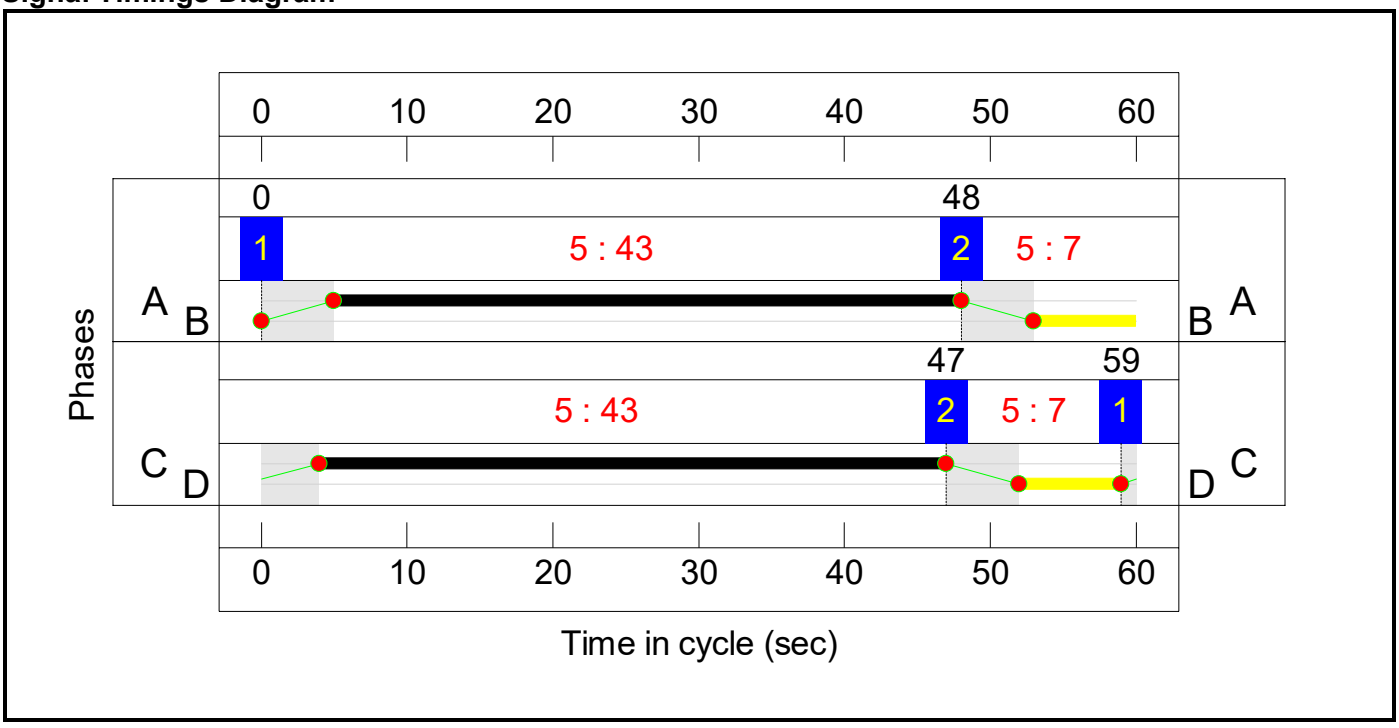
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	59	47

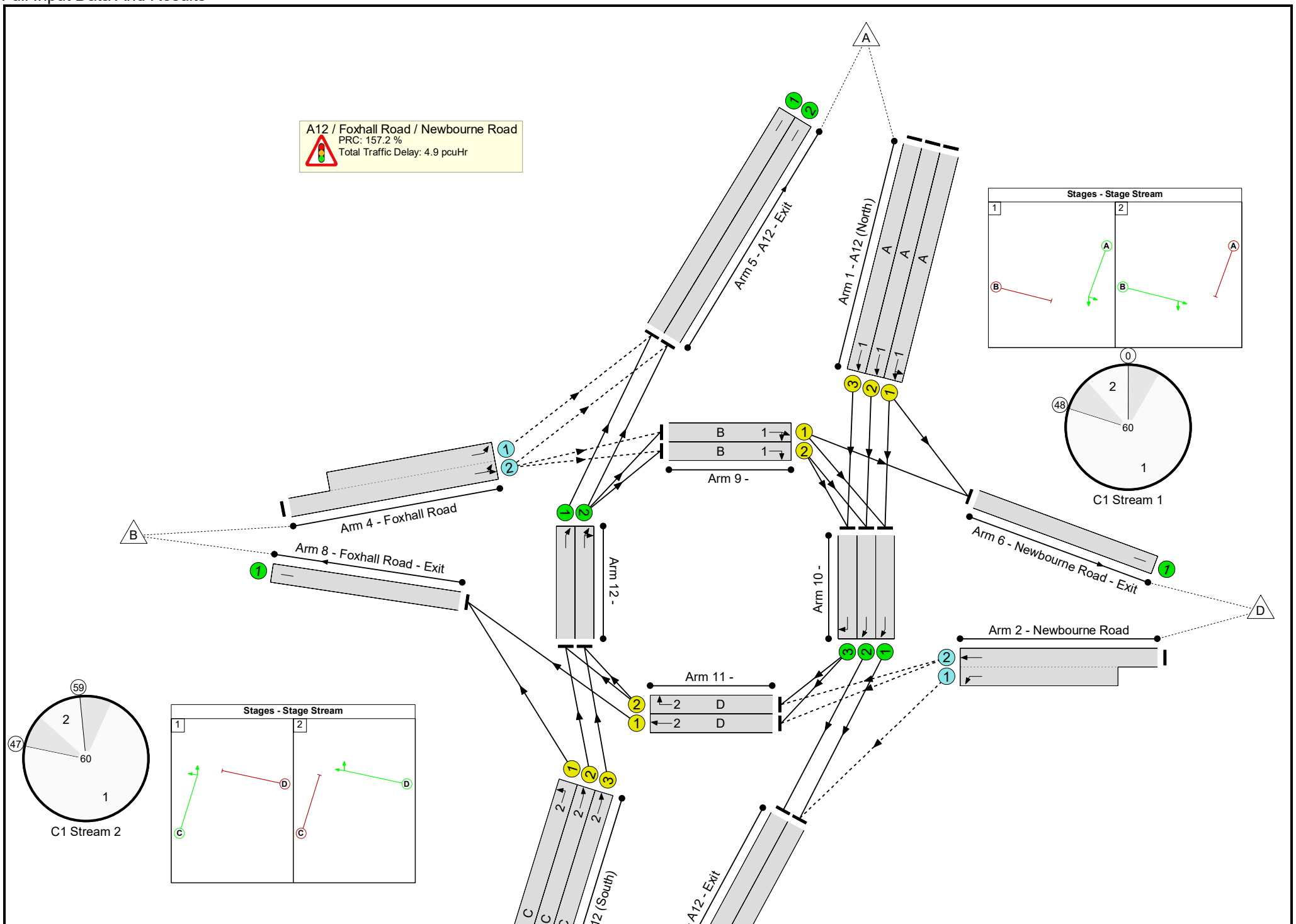
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**35.0%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**35.0%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	447	1854	1360	32.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	507	1976	1449	35.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	40	1845	1353	3.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	94	1840:1775	655+655	6.7 : 7.6%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	41	1828	1341	3.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	461	1958	1436	32.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	396	1828	1341	29.5%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	276	1828:1828	711+662	24.0 : 15.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	102	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	108	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	72	1791	239	30.2%
9/2	Right	U	1	N/A	B		1	7	-	90	1940	259	34.8%
10/1	Ahead	U	N/A	N/A	-		-	-	-	417	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	67	1764	235	28.5%
11/2	Right	U	2	N/A	D		1	7	-	17	1764	235	7.2%
12/1	Ahead	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**740**	**0**	**0**	**3.0**	**1.9**	**0.0**	**4.9**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**740**	**0**	**0**	**3.0**	**1.9**	**0.0**	**4.9**	**-**	**-**	**-**	**-**
1/1	447	447	-	-	-	0.3	0.2	-	0.6	4.8	2.6	0.2	2.9
1/2	507	507	-	-	-	0.4	0.3	-	0.7	4.8	3.0	0.3	3.2
1/3	40	40	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	94	94	188	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.1
3/1	41	41	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	461	461	-	-	-	0.4	0.2	-	0.6	4.6	2.6	0.2	2.8
3/3	396	396	-	-	-	0.3	0.2	-	0.5	4.6	2.2	0.2	2.4
4/2+4/1	276	276	552	0	0	0.0	0.1	-	0.1	1.7	0.2	0.1	0.4
5/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	102	102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	108	108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	72	72	-	-	-	0.4	0.2	-	0.7	32.8	1.1	0.2	1.3
9/2	90	90	-	-	-	0.6	0.3	-	0.9	34.2	1.3	0.3	1.6
10/1	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	67	67	-	-	-	0.4	0.2	-	0.6	32.8	1.0	0.2	1.2
11/2	17	17	-	-	-	0.1	0.0	-	0.1	31.1	0.2	0.0	0.3
12/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

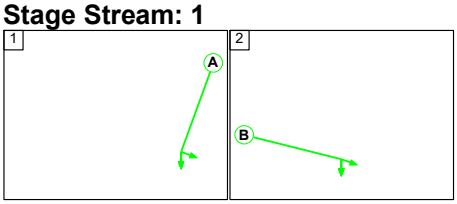
C1	Stream: 1	PRC for Signalled Lanes (%):	157.2	Total Delay for Signalled Lanes (pcuHr):	2.82	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	180.3	Total Delay for Signalled Lanes (pcuHr):	1.90	Cycle Time (s):	60
		PRC Over All Lanes (%):	157.2	Total Delay Over All Lanes(pcuHr):	4.90		

Full Input Data And Results

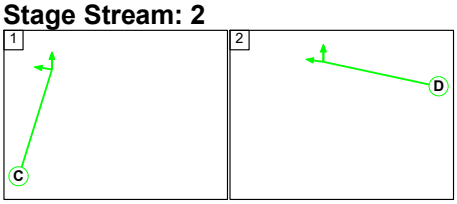
Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

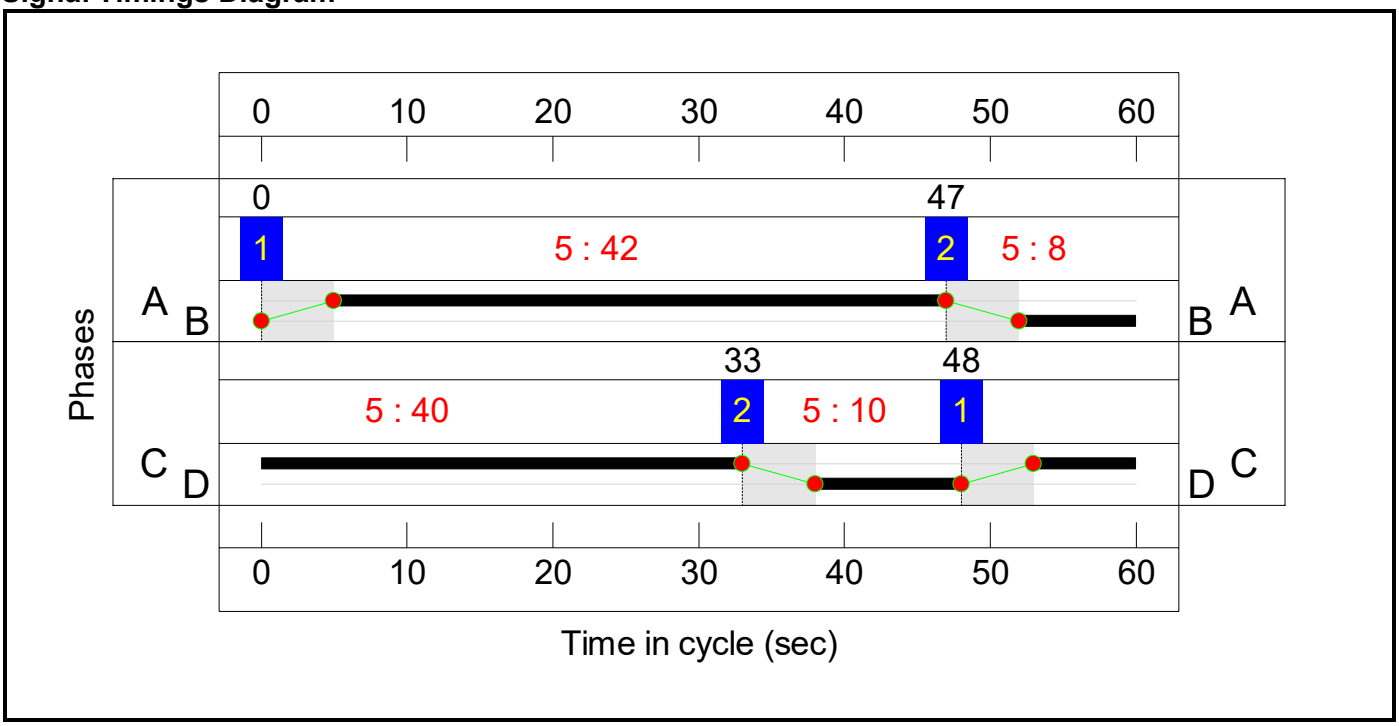
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	40	10
Change Point	48	33

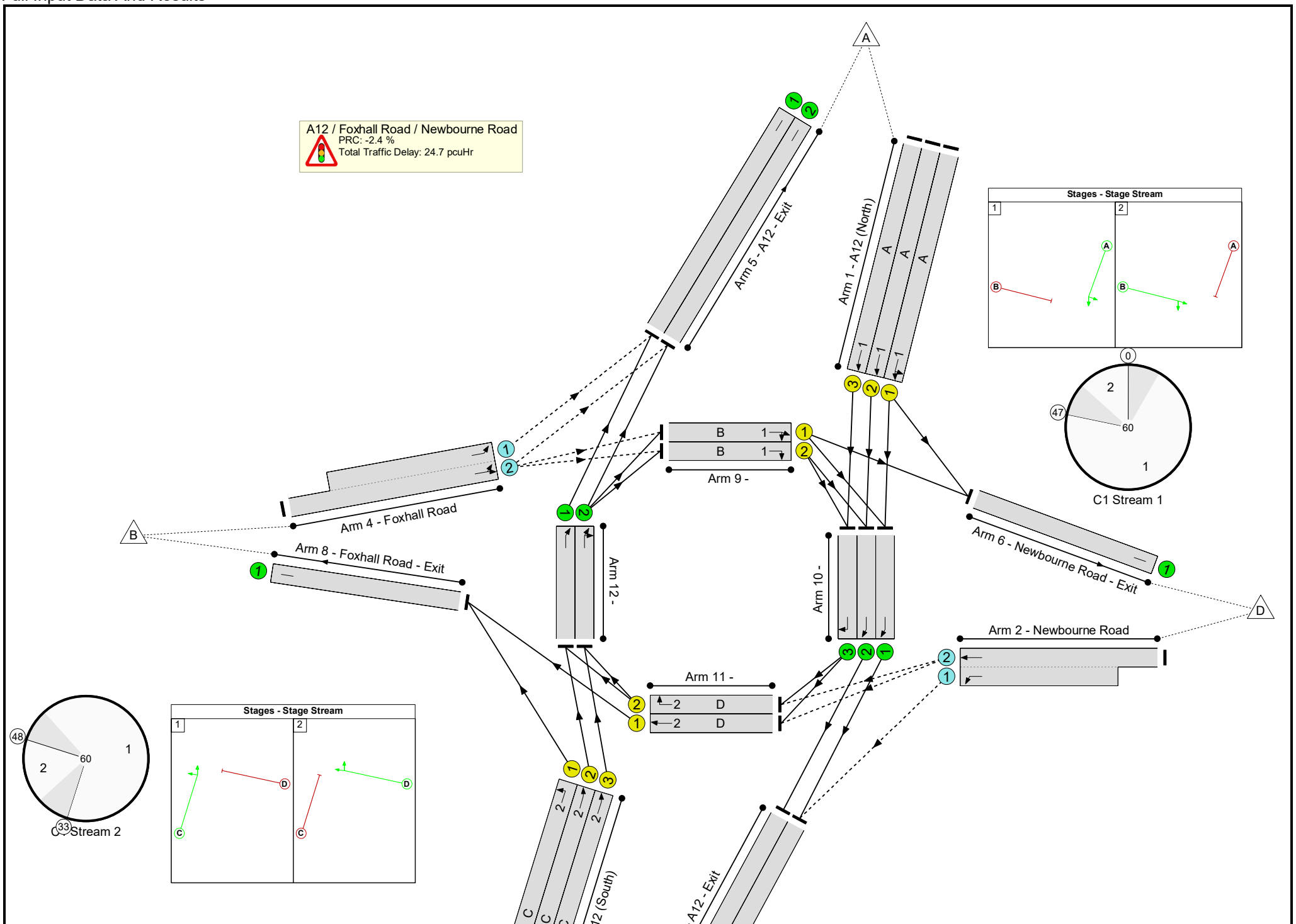
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.1%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.1%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	812	1855	1329	61.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	887	1976	1416	62.6%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	246	1845	1322	18.6%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	331	1840:1775	380+337	59.7 : 30.8%
3/1	A12 (South) Left	U	2	N/A	C		1	40	-	101	1828	1249	8.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	40	-	954	1958	1338	71.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	40	-	874	1828	1249	70.0%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	614	1828:1828	387+387	79.3 : 79.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1349	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	943	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	220	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	150	1791	269	55.8%
9/2	Right	U	1	N/A	B		1	8	-	175	1940	291	60.1%
10/1	Ahead	U	N/A	N/A	-		-	-	-	742	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	10	-	298	1764	323	92.1%
11/2	Right	U	2	N/A	D		1	10	-	175	1764	323	54.1%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1042	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	961	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1890**	**0**	**0**	**11.9**	**12.8**	**0.0**	**24.7**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1890**	**0**	**0**	**11.9**	**12.8**	**0.0**	**24.7**	**-**	**-**	**-**	**-**
1/1	812	812	-	-	-	1.0	0.8	-	1.7	7.8	6.8	0.8	7.5
1/2	887	887	-	-	-	1.1	0.8	-	1.9	7.8	7.4	0.8	8.2
1/3	246	246	-	-	-	0.2	0.1	-	0.3	4.5	1.3	0.1	1.4
2/2+2/1	331	331	662	0	0	0.4	0.4	-	0.8	8.8	2.4	0.4	2.8
3/1	101	101	-	-	-	0.1	0.0	-	0.1	4.8	0.6	0.0	0.6
3/2	954	954	-	-	-	1.6	1.2	-	2.8	10.5	9.8	1.2	11.0
3/3	874	874	-	-	-	1.4	1.2	-	2.6	10.5	8.7	1.2	9.9
4/2+4/1	614	614	1228	0	0	1.6	1.9	-	3.4	20.2	4.3	1.9	6.1
5/1	1349	1349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	943	943	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	220	220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	150	150	-	-	-	0.9	0.6	-	1.5	36.4	2.3	0.6	2.9
9/2	175	175	-	-	-	0.8	0.7	-	1.5	31.2	2.5	0.7	3.2
10/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	298	298	-	-	-	1.8	4.4	-	6.2	74.7	4.8	4.4	9.1
11/2	175	175	-	-	-	1.2	0.6	-	1.7	35.7	2.3	0.6	2.9
12/1	1042	1042	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	961	961	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

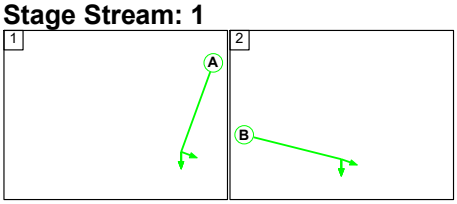
C1	Stream: 1	PRC for Signalled Lanes (%):	43.7	Total Delay for Signalled Lanes (pcuHr):	7.00	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-2.4	Total Delay for Signalled Lanes (pcuHr):	13.40	Cycle Time (s):	60
		PRC Over All Lanes (%):	-2.4	Total Delay Over All Lanes(pcuHr):	24.65		

Full Input Data And Results

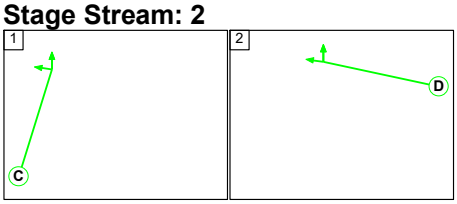
Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

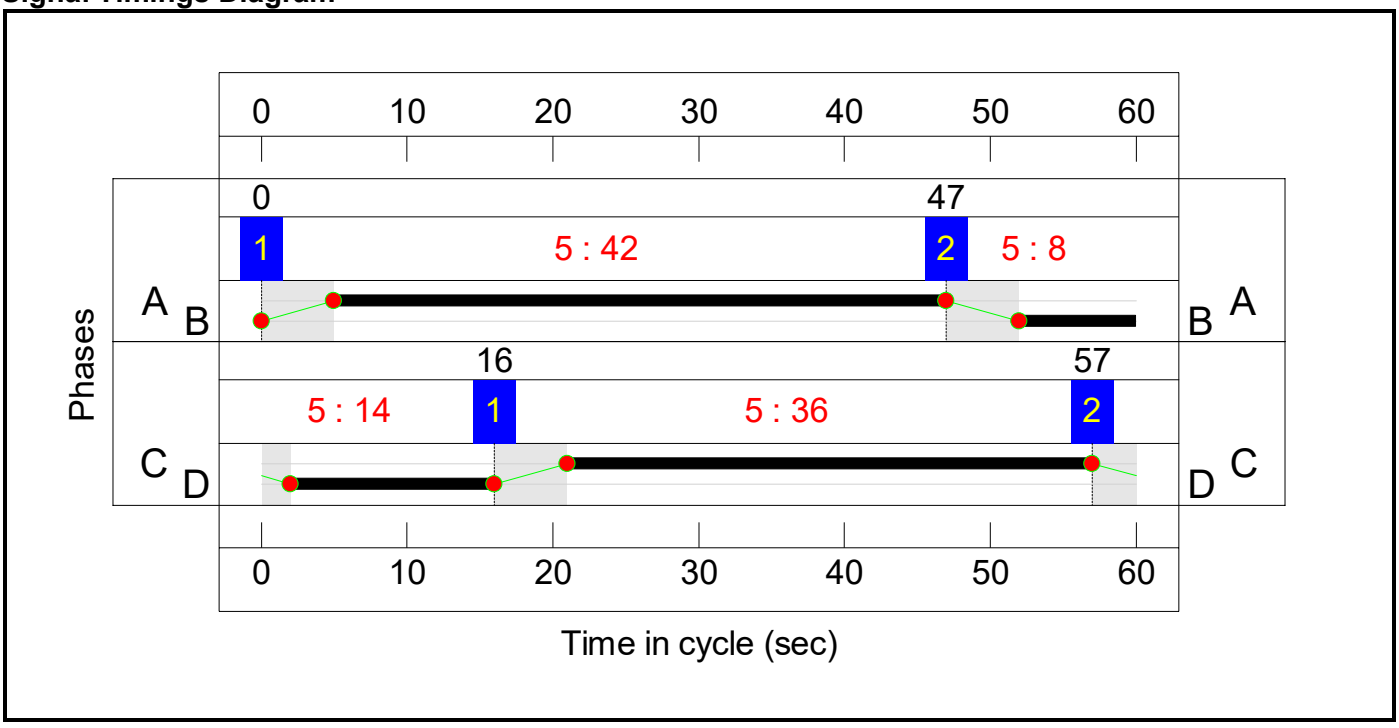
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	36	14
Change Point	16	57

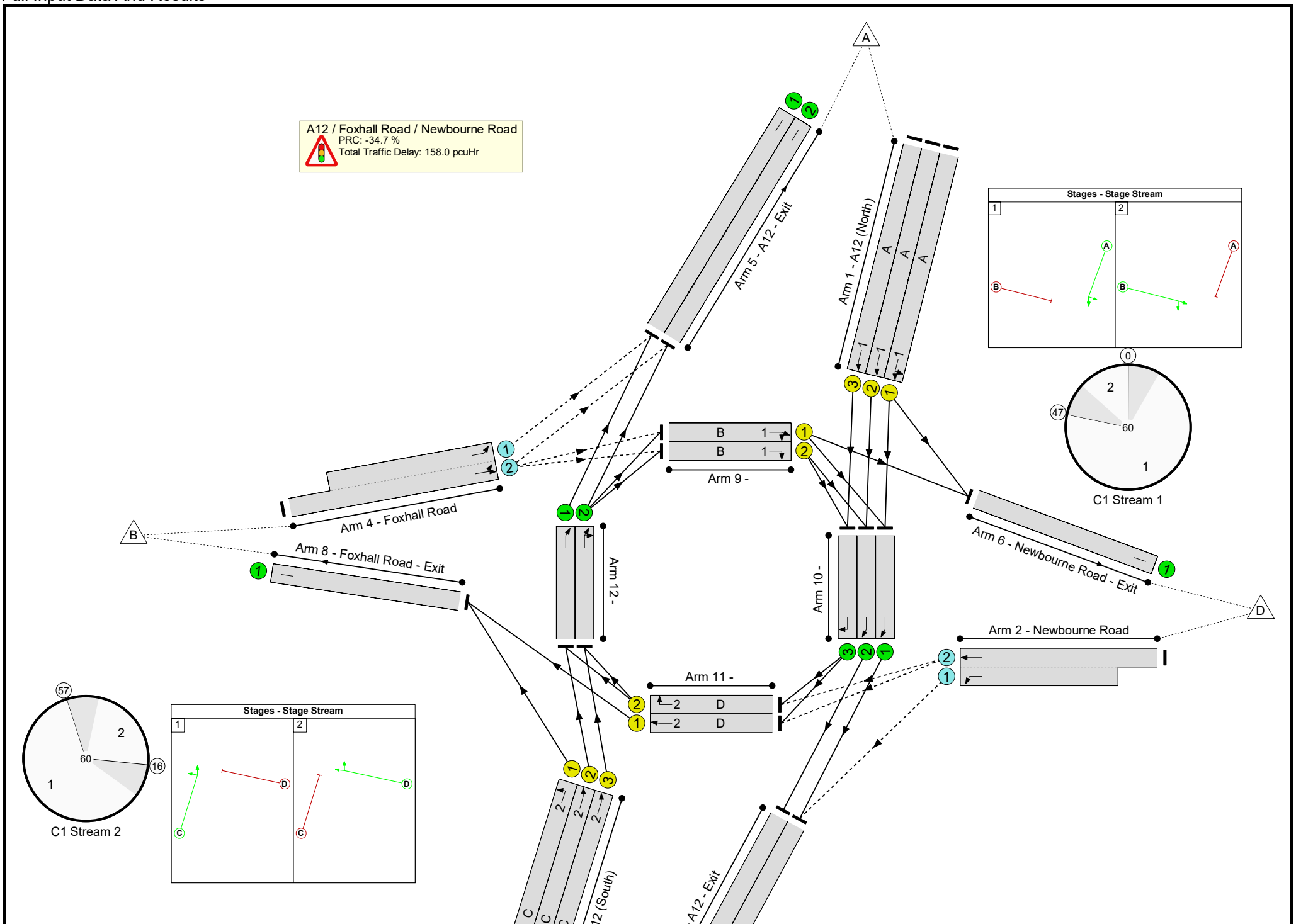
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**121.3%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**121.3%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	1018	1863	1335	76.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	1081	1976	1416	76.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	223	1845	1322	16.9%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	554	1840:1775	304+304	120.8 : 61.5%
3/1	A12 (South) Left	U	2	N/A	C		1	36	-	184	1828	1127	16.3%
3/2	A12 (South) Ahead	U	2	N/A	C		1	36	-	1186	1958	1207	98.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	36	-	1106	1828	1127	98.1%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	678	1828:1828	280+280	121.3 : 121.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1682	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1071	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1263	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	258	1791	269	88.3%
9/2	Right	U	1	N/A	B		1	8	-	182	1940	291	51.6%
10/1	Ahead	U	N/A	N/A	-		-	-	-	884	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1263	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	14	-	277	1764	441	60.7%
11/2	Right	U	2	N/A	D		1	14	-	313	1764	441	59.4%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1343	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1262	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2100**	**0**	**0**	**26.4**	**131.6**	**0.0**	**158.0**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2100**	**0**	**0**	**26.4**	**131.6**	**0.0**	**158.0**	**-**	**-**	**-**	**-**
1/1	1018	1018	-	-	-	1.5	1.6	-	3.1	10.9	10.5	1.6	12.1
1/2	1081	1081	-	-	-	1.6	1.6	-	3.2	10.6	11.1	1.6	12.7
1/3	223	223	-	-	-	0.2	0.1	-	0.3	4.4	1.2	0.1	1.3
2/2+2/1	554	491	982	0	0	3.8	36.0	-	39.8	258.9	16.4	36.0	52.4
3/1	184	184	-	-	-	0.3	0.1	-	0.3	6.8	1.3	0.1	1.4
3/2	1186	1186	-	-	-	3.7	12.7	-	16.4	49.7	19.1	12.7	31.8
3/3	1106	1106	-	-	-	3.4	12.1	-	15.6	50.7	17.8	12.1	30.0
4/2+4/1	678	559	1118	0	0	6.7	62.2	-	68.9	365.6	13.9	62.2	76.1
5/1	1597	1597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1129	1129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1066	1066	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1231	1231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	237	237	-	-	-	1.6	3.1	-	4.7	71.9	3.8	3.1	7.0
9/2	150	150	-	-	-	1.1	0.5	-	1.7	39.6	2.5	0.5	3.0
10/1	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1231	1231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	268	268	-	-	-	1.9	0.8	-	2.7	36.0	4.0	0.8	4.8
11/2	262	262	-	-	-	0.7	0.7	-	1.4	18.9	2.6	0.7	3.4
12/1	1317	1317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1237	1237	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

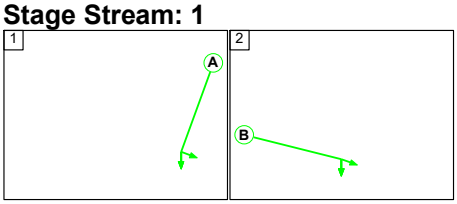
C1	Stream: 1	PRC for Signalled Lanes (%):	2.0	Total Delay for Signalled Lanes (pcuHr):	12.95	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-9.1	Total Delay for Signalled Lanes (pcuHr):	36.33	Cycle Time (s):	60
		PRC Over All Lanes (%):	-34.7	Total Delay Over All Lanes(pcuHr):	157.97		

Full Input Data And Results

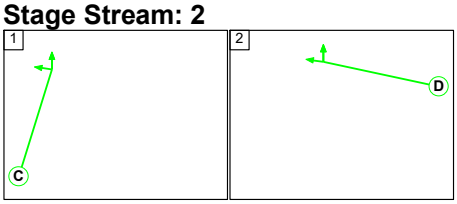
Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

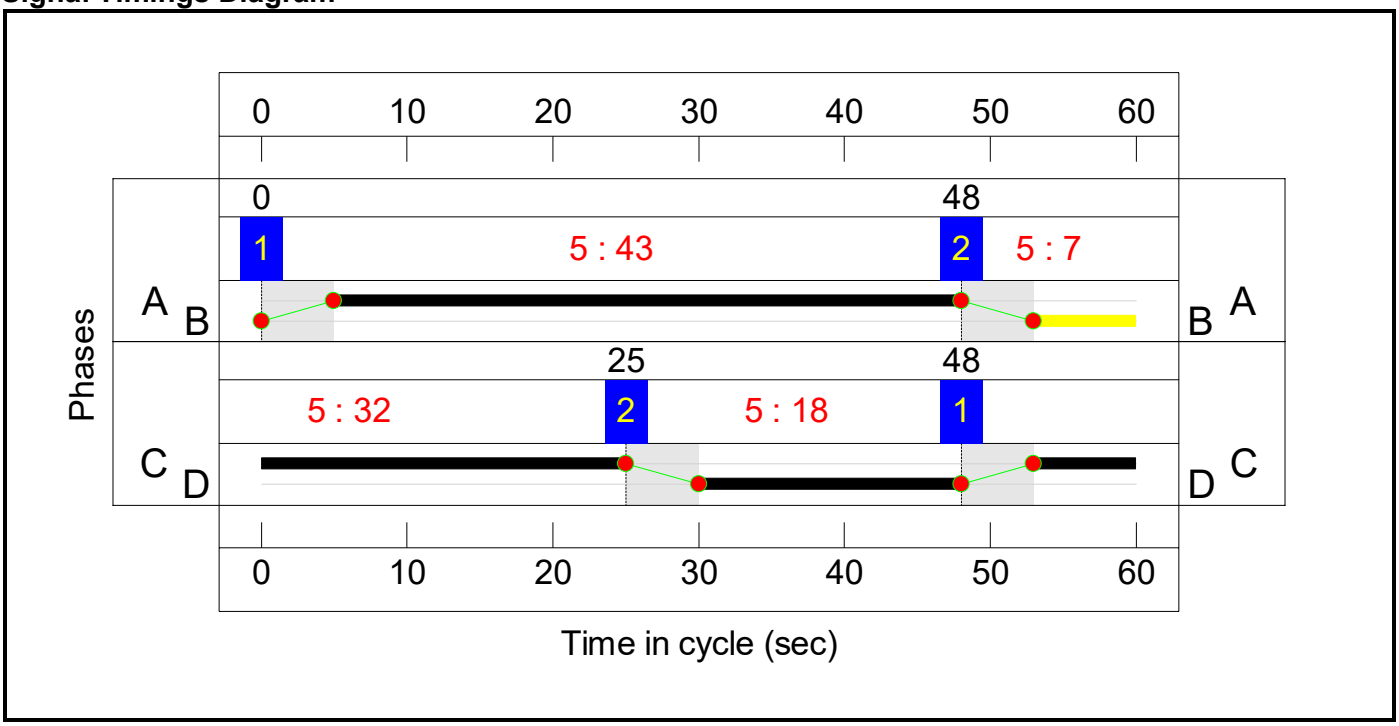
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	32	18
Change Point	48	25

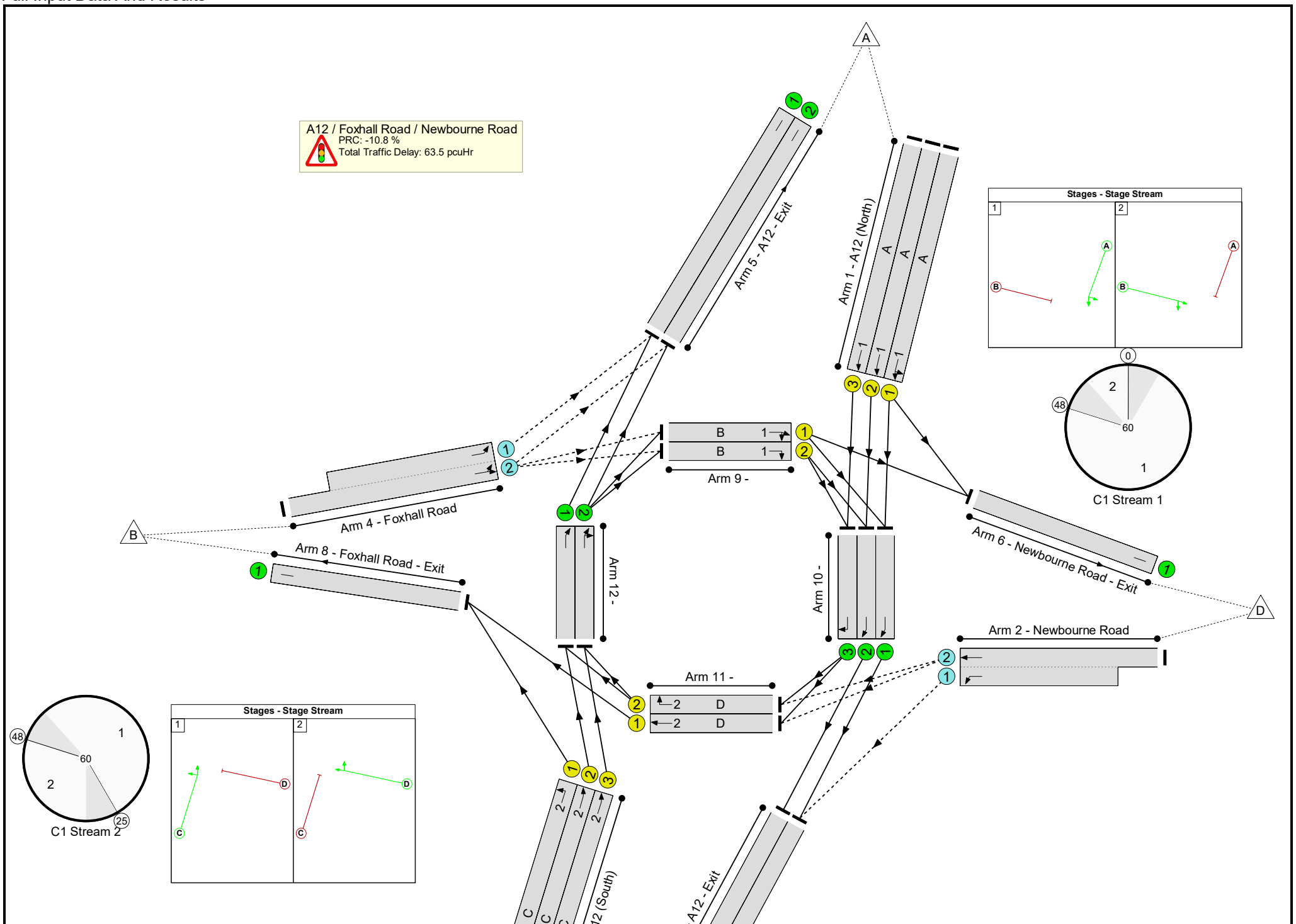
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.7%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.7%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	931	1873	1374	67.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	999	1976	1449	68.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	372	1845	1353	27.5%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	440	1840:1775	330+330	82.0 : 51.1%
3/1	A12 (South) Left	U	2	N/A	C		1	32	-	239	1828	1005	23.8%
3/2	A12 (South) Ahead	U	2	N/A	C		1	32	-	1074	1958	1077	99.7%
3/3	A12 (South) Ahead	U	2	N/A	C		1	32	-	1001	1828	1005	99.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	671	1828:1828	369+369	91.1 : 90.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1495	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	873	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	175	1791	239	73.3%
9/2	Right	U	1	N/A	B		1	7	-	162	1940	259	62.6%
10/1	Ahead	U	N/A	N/A	-		-	-	-	704	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	18	-	470	1764	559	84.1%
11/2	Right	U	2	N/A	D		1	18	-	173	1764	559	31.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1160	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1088	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2222**	**0**	**0**	**20.2**	**43.3**	**0.0**	**63.5**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2222**	**0**	**0**	**20.2**	**43.3**	**0.0**	**63.5**	**-**	**-**	**-**	**-**
1/1	931	931	-	-	-	1.1	1.0	-	2.1	8.3	8.0	1.0	9.1
1/2	999	999	-	-	-	1.2	1.1	-	2.3	8.3	8.9	1.1	10.0
1/3	372	372	-	-	-	0.3	0.2	-	0.5	4.5	2.1	0.2	2.3
2/2+2/1	440	440	880	0	0	1.1	1.0	-	2.1	16.8	4.0	1.0	5.0
3/1	239	239	-	-	-	0.5	0.2	-	0.6	9.3	2.1	0.2	2.2
3/2	1074	1074	-	-	-	4.0	15.7	-	19.7	66.0	17.6	15.7	33.3
3/3	1001	1001	-	-	-	3.7	14.8	-	18.5	66.5	16.4	14.8	31.2
4/2+4/1	671	671	1342	0	0	2.9	4.5	-	7.4	39.4	5.2	4.5	9.7
5/1	1495	1495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1087	1087	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	873	873	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1161	1161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	175	175	-	-	-	1.2	1.3	-	2.6	52.5	2.7	1.3	4.1
9/2	162	162	-	-	-	0.9	0.8	-	1.7	37.3	2.2	0.8	3.0
10/1	704	704	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1161	1161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	470	470	-	-	-	2.4	2.5	-	4.9	37.5	7.2	2.5	9.7
11/2	173	173	-	-	-	1.0	0.2	-	1.3	26.0	2.3	0.2	2.5
12/1	1160	1160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1088	1088	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

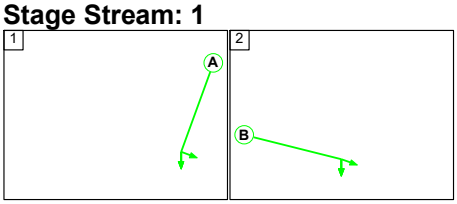
C1	Stream: 1	PRC for Signalled Lanes (%):	22.8	Total Delay for Signalled Lanes (pcuHr):	9.14	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-10.8	Total Delay for Signalled Lanes (pcuHr):	44.95	Cycle Time (s):	60
		PRC Over All Lanes (%):	-10.8	Total Delay Over All Lanes(pcuHr):	63.49		

Full Input Data And Results

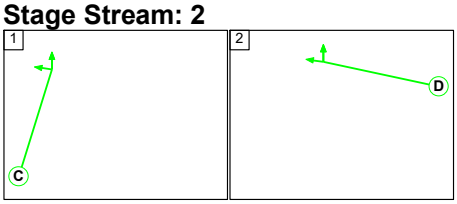
Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

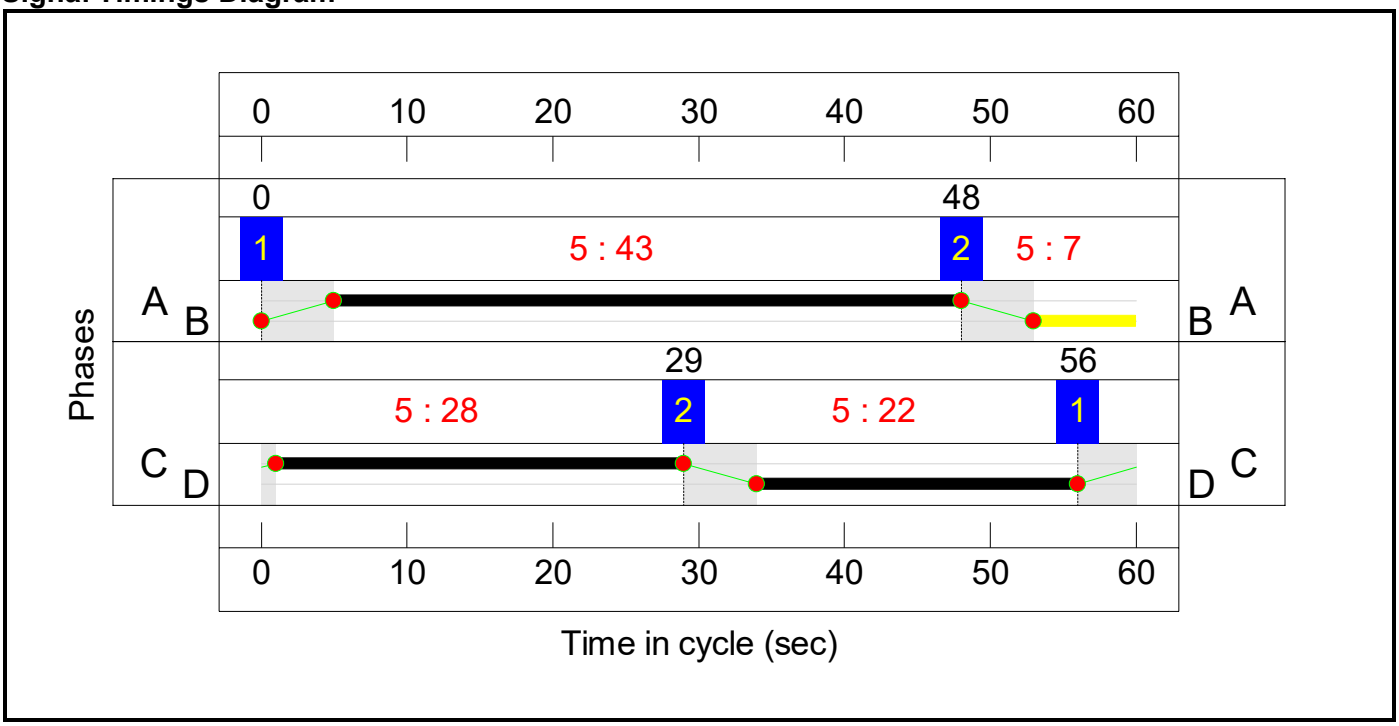
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	28	22
Change Point	56	29

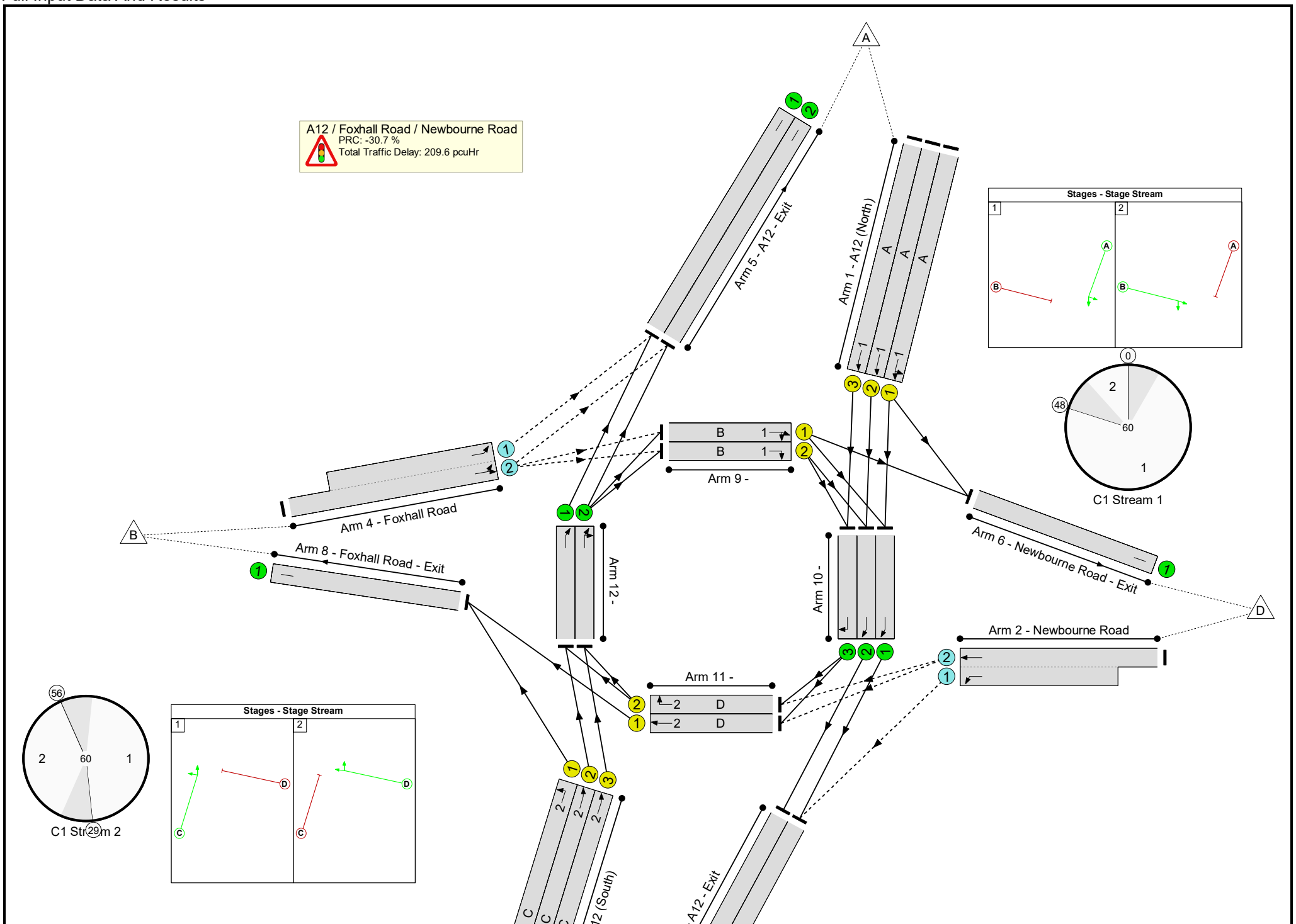
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.6%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.6%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	997	1867	1369	72.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	1071	1976	1449	73.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	391	1845	1353	28.9%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	391	1840:1775	298+298	92.7 : 38.6%
3/1	A12 (South) Left	U	2	N/A	C		1	28	-	349	1828	884	39.5%
3/2	A12 (South) Ahead	U	2	N/A	C		1	28	-	1113	1958	946	117.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	28	-	1039	1828	884	117.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	575	1828:1828	451+451	63.8 : 63.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1460	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1013	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	919	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1210	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	235	1791	239	90.3%
9/2	Right	U	1	N/A	B		1	7	-	139	1940	259	53.7%
10/1	Ahead	U	N/A	N/A	-		-	-	-	804	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1210	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	391	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	22	-	547	1764	676	80.9%
11/2	Right	U	2	N/A	D		1	22	-	120	1764	676	17.7%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1173	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1099	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1932**	**0**	**0**	**30.7**	**178.9**	**0.0**	**209.6**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1932**	**0**	**0**	**30.7**	**178.9**	**0.0**	**209.6**	**-**	**-**	**-**	**-**
1/1	997	997	-	-	-	1.3	1.3	-	2.6	9.4	9.4	1.3	10.7
1/2	1071	1071	-	-	-	1.4	1.4	-	2.8	9.4	10.1	1.4	11.5
1/3	391	391	-	-	-	0.3	0.2	-	0.5	4.6	2.2	0.2	2.4
2/2+2/1	391	391	782	0	0	1.3	0.9	-	2.3	21.1	4.4	0.9	5.3
3/1	349	349	-	-	-	1.0	0.3	-	1.3	13.3	3.7	0.3	4.0
3/2	1113	946	-	-	-	9.6	86.5	-	96.1	310.8	21.3	86.5	107.9
3/3	1039	884	-	-	-	8.9	80.9	-	89.9	311.4	19.9	80.9	100.9
4/2+4/1	575	575	1150	0	0	1.7	0.9	-	2.6	16.1	3.5	0.9	4.4
5/1	1293	1293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	877	877	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	919	919	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1210	1210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	896	896	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	216	216	-	-	-	1.3	3.6	-	4.9	82.1	3.5	3.6	7.1
9/2	139	139	-	-	-	0.7	0.6	-	1.3	33.9	1.7	0.6	2.3
10/1	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1210	1210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	547	547	-	-	-	2.6	2.1	-	4.6	30.4	8.1	2.1	10.1
11/2	120	120	-	-	-	0.6	0.1	-	0.8	22.6	1.5	0.1	1.6
12/1	1006	1006	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	944	944	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

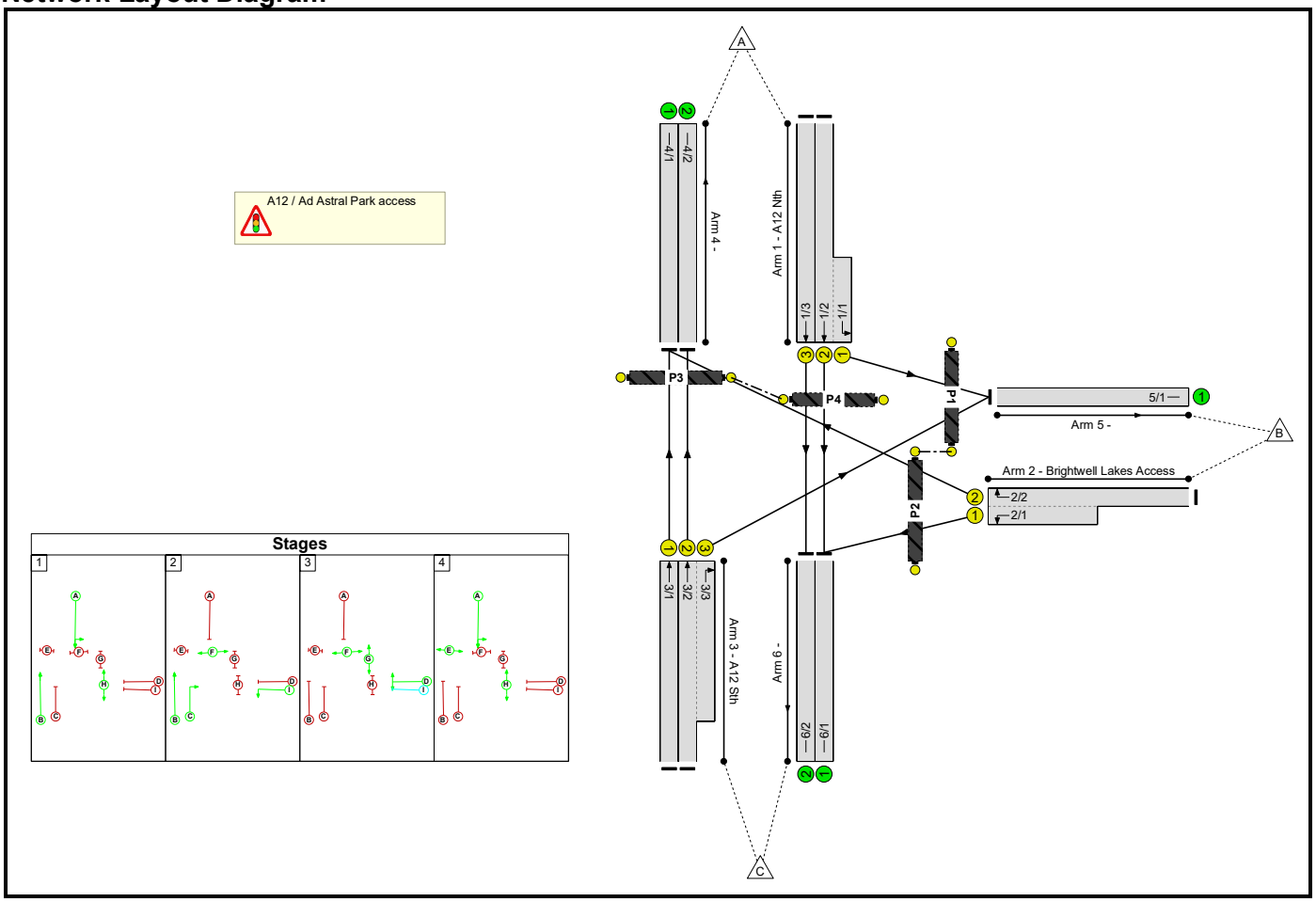
C1	Stream: 1	PRC for Signalled Lanes (%):	-0.4	Total Delay for Signalled Lanes (pcuHr):	12.11	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-30.7	Total Delay for Signalled Lanes (pcuHr):	192.61	Cycle Time (s):	60
		PRC Over All Lanes (%):	-30.7	Total Delay Over All Lanes(pcuHr):	209.58		

Full Input Data And Results

User and Project Details

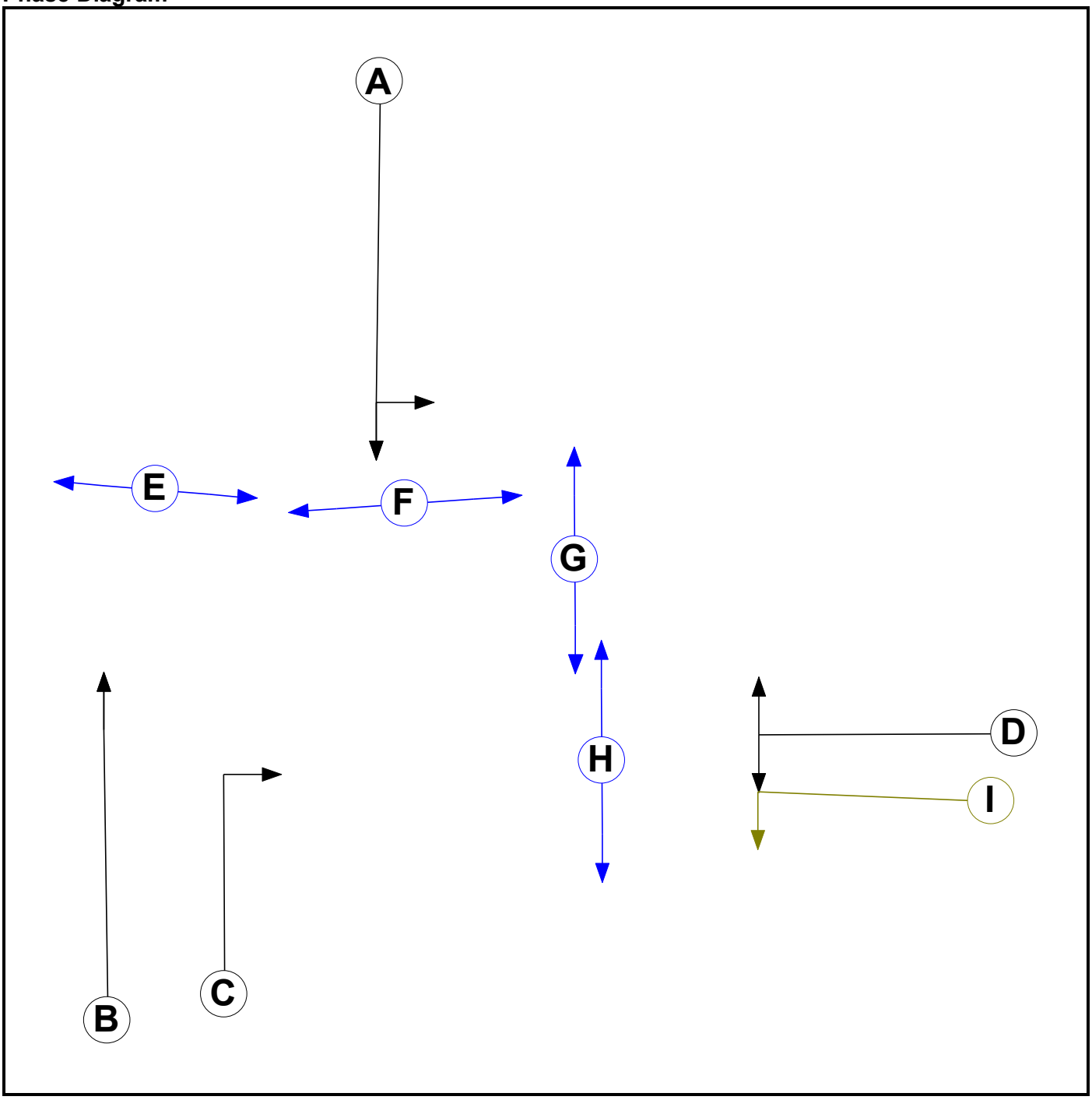
Project:	
Title:	
Location:	
Additional detail:	
File name:	Brightwell Lakes Access LinSig Model May20.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Filter	D	4	0

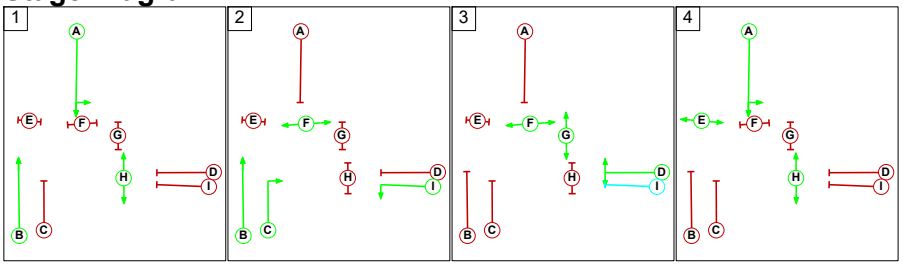
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		-	5	5	-	5	8	-	5
B	-		-	5	9	-	-	-	-
C	6	-		5	-	-	10	-	-
D	5	7	7		11	-	-	5	-
E	-	8	-	8		-	-	-	8
F	11	-	-	-	-		-	-	-
G	7	-	7	-	-	-		-	-
H	-	-	-	8	-	-	-		8
I	5	-	-	-	11	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B H
2	B C F I
3	D F G
4	A E H

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	B	Losing	3	3

Full Input Data And Results

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		8	8	9
	2	X		10	X
	3	11	7		11
	4	8	8	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A12 / Ad Astral Park access
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: A12 / Ad Astral Park access

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A12 Nth)	U	A	2	3	7.0	Geom	-	3.65	0.00	Y	Arm 5 Left	17.00
1/2 (A12 Nth)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 6 Ahead	Inf
1/3 (A12 Nth)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Ahead	Inf
2/1 (Brightwell Lakes Access)	U	D I	2	3	9.0	Geom	-	3.50	0.00	Y	Arm 6 Left	13.00
2/2 (Brightwell Lakes Access)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Right	15.00
3/1 (A12 Sth)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
3/2 (A12 Sth)	U	B	2	3	60.0	Geom	-	3.65	0.00	N	Arm 4 Ahead	Inf
3/3 (A12 Sth)	U	C	2	3	26.1	Geom	-	4.50	0.00	Y	Arm 5 Right	18.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '23RC 06:00-07:00'	06:00	07:00	01:00	
2: '23RC 07:00-08:00'	07:00	08:00	01:00	
3: '23RC 08:00-09:00'	08:00	09:00	01:00	
4: '23RC 15:00-16:00'	15:00	16:00	01:00	
5: '23RC 17:00-18:00'	17:00	18:00	01:00	
6: '23EY 06:00-07:00'	06:00	07:00	01:00	
7: '23EY 07:00-08:00'	07:00	08:00	01:00	
8: '23EY 08:00-09:00'	08:00	09:00	01:00	
9: '23EY 15:00-16:00'	15:00	16:00	01:00	
10: '23EY 17:00-18:00'	17:00	18:00	01:00	
11: '28RC 06:00-07:00'	06:00	07:00	01:00	
12: '28RC 07:00-08:00'	07:00	08:00	01:00	
13: '28RC 08:00-09:00'	08:00	09:00	01:00	
14: '28RC 15:00-16:00'	15:00	16:00	01:00	
15: '28RC 17:00-18:00'	17:00	18:00	01:00	
16: '28PC 06:00-07:00'	06:00	07:00	01:00	
17: '28PC 07:00-08:00'	07:00	08:00	01:00	
18: '28PC 08:00-09:00'	08:00	09:00	01:00	
19: '28PC 15:00-16:00'	15:00	16:00	01:00	
20: '28PC 17:00-18:00'	17:00	18:00	01:00	
21: '34RC 06:00-07:00'	06:00	07:00	01:00	
22: '34RC 07:00-08:00'	07:00	08:00	01:00	
23: '34RC 08:00-09:00'	08:00	09:00	01:00	
24: '34RC 15:00-16:00'	15:00	16:00	01:00	
25: '34RC 17:00-18:00'	17:00	18:00	01:00	
26: '34OP 06:00-07:00'	06:00	07:00	01:00	
27: '34OP 07:00-08:00'	07:00	08:00	01:00	
28: '34OP 08:00-09:00'	08:00	09:00	01:00	
29: '34OP 15:00-16:00'	15:00	16:00	01:00	
30: '34OP 17:00-18:00'	17:00	18:00	01:00	

Scenario 1: '23RC 06:00-07:00' (FG1: '23RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1	955	956
	B	4	0	0	4
	C	860	0	0	860
	Tot.	864	1	955	1820

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 23RC 06:00-07:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	1
1/2 (with short)	502(In) 501(Out)
1/3	454
2/1 (short)	0
2/2 (with short)	4(In) 4(Out)
3/1	406
3/2 (with short)	454(In) 454(Out)
3/3 (short)	0
4/1	410
4/2	454
5/1	1
6/1	501
6/2	454

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	0.0 %	2065	2065
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '23RC 07:00-08:00' (FG2: '23RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	3	1714	1717
	B	26	0	19	45
	C	2005	2	0	2007
	Tot.	2031	5	1733	3769

Traffic Lane Flows

Lane	Scenario 2: 23RC 07:00-08:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	3
1/2 (with short)	893(In) 890(Out)
1/3	824
2/1 (short)	19
2/2 (with short)	45(In) 26(Out)
3/1	962
3/2 (with short)	1045(In) 1043(Out)
3/3 (short)	2
4/1	988
4/2	1043
5/1	5
6/1	909
6/2	824

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 3: '23RC 08:00-09:00' (FG3: '23RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	4	1892	1896
	B	61	0	23	84
	C	2613	5	0	2618
	Tot.	2674	9	1915	4598

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 23RC 08:00-09:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	4
1/2 (with short)	983(In) 979(Out)
1/3	913
2/1 (short)	23
2/2 (with short)	84(In) 61(Out)
3/1	1261
3/2 (with short)	1357(In) 1352(Out)
3/3 (short)	5
4/1	1322
4/2	1352
5/1	9
6/1	1002
6/2	913

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '23RC 15:00-16:00' (FG3: '23RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	4	1892	1896
	B	61	0	23	84
	C	2613	5	0	2618
	Tot.	2674	9	1915	4598

Traffic Lane Flows

Lane	Scenario 4: 23RC 15:00-16:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	4
1/2 (with short)	983(In) 979(Out)
1/3	913
2/1 (short)	23
2/2 (with short)	84(In) 61(Out)
3/1	1261
3/2 (with short)	1357(In) 1352(Out)
3/3 (short)	5
4/1	1322
4/2	1352
5/1	9
6/1	1002
6/2	913

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 5: '23RC 17:00-18:00' (FG5: '23RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	35	1910	1945
	B	25	0	19	44
	C	1890	48	0	1938
	Tot.	1915	83	1929	3927

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 23RC 17:00-18:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	35
1/2 (with short)	1013(In) 978(Out)
1/3	932
2/1 (short)	19
2/2 (with short)	44(In) 25(Out)
3/1	904
3/2 (with short)	1034(In) 986(Out)
3/3 (short)	48
4/1	929
4/2	986
5/1	83
6/1	997
6/2	932

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '23EY 06:00-07:00' (FG6: '23EY 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1	967	968
	B	4	0	0	4
	C	932	0	0	932
	Tot.	936	1	967	1904

Traffic Lane Flows

Lane	Scenario 6: 23EY 06:00-07:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	1
1/2 (with short)	508(In) 507(Out)
1/3	460
2/1 (short)	0
2/2 (with short)	4(In) 4(Out)
3/1	441
3/2 (with short)	491(In) 491(Out)
3/3 (short)	0
4/1	445
4/2	491
5/1	1
6/1	507
6/2	460

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	0.0 %	2065	2065
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 7: '23EY 07:00-08:00' (FG7: '23EY 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	3	1742	1745
	B	26	0	19	45
	C	2130	2	0	2132
	Tot.	2156	5	1761	3922

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 23EY 07:00-08:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	3
1/2 (with short)	907(In) 904(Out)
1/3	838
2/1 (short)	19
2/2 (with short)	45(In) 26(Out)
3/1	1023
3/2 (with short)	1109(In) 1107(Out)
3/3 (short)	2
4/1	1049
4/2	1107
5/1	5
6/1	923
6/2	838

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '23EY 08:00-09:00' (FG8: '23EY 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	4	1916	1920
	B	61	0	23	84
	C	2657	5	0	2662
	Tot.	2718	9	1939	4666

Traffic Lane Flows

Lane	Scenario 8: 23EY 08:00-09:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	4
1/2 (with short)	995(In) 991(Out)
1/3	925
2/1 (short)	23
2/2 (with short)	84(In) 61(Out)
3/1	1282
3/2 (with short)	1380(In) 1375(Out)
3/3 (short)	5
4/1	1343
4/2	1375
5/1	9
6/1	1014
6/2	925

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 9: '23EY 15:00-16:00' (FG9: '23EY 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	39	1934	1973
	B	24	0	16	40
	C	1995	30	0	2025
	Tot.	2019	69	1950	4038

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 23EY 15:00-16:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	39
1/2 (with short)	1028(In) 989(Out)
1/3	945
2/1 (short)	16
2/2 (with short)	40(In) 24(Out)
3/1	956
3/2 (with short)	1069(In) 1039(Out)
3/3 (short)	30
4/1	980
4/2	1039
5/1	69
6/1	1005
6/2	945

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '23EY 17:00-18:00' (FG10: '23EY 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	35	1892	1927
	B	25	0	19	44
	C	1922	48	0	1970
	Tot.	1947	83	1911	3941

Traffic Lane Flows

Lane	Scenario 10: 23EY 17:00-18:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	35
1/2 (with short)	1004(In) 969(Out)
1/3	923
2/1 (short)	19
2/2 (with short)	44(In) 25(Out)
3/1	920
3/2 (with short)	1050(In) 1002(Out)
3/3 (short)	48
4/1	945
4/2	1002
5/1	83
6/1	988
6/2	923

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 11: '28RC 06:00-07:00' (FG11: '28RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	979	979
	B	2	0	0	2
	C	887	0	0	887
	Tot.	889	0	979	1868

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 28RC 06:00-07:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	0
1/2 (with short)	514(In) 514(Out)
1/3	465
2/1 (short)	0
2/2 (with short)	2(In) 2(Out)
3/1	419
3/2 (with short)	468(In) 468(Out)
3/3 (short)	0
4/1	421
4/2	468
5/1	0
6/1	514
6/2	465

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	0.0 %	2065	2065
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '28RC 07:00-08:00' (FG12: '28RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	10	1742	1752
	B	44	0	83	127
	C	2128	26	0	2154
	Tot.	2172	36	1825	4033

Traffic Lane Flows

Lane	Scenario 12: 28RC 07:00-08:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	10
1/2 (with short)	912(In) 902(Out)
1/3	840
2/1 (short)	83
2/2 (with short)	127(In) 44(Out)
3/1	1021
3/2 (with short)	1133(In) 1107(Out)
3/3 (short)	26
4/1	1065
4/2	1107
5/1	36
6/1	985
6/2	840

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 13: '28RC 08:00-09:00' (FG13: '28RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	21	2000	2021
	B	114	0	74	188
	C	2704	68	0	2772
	Tot.	2818	89	2074	4981

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 28RC 08:00-09:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	21
1/2 (with short)	1049(In) 1028(Out)
1/3	972
2/1 (short)	74
2/2 (with short)	188(In) 114(Out)
3/1	1310
3/2 (with short)	1462(In) 1394(Out)
3/3 (short)	68
4/1	1424
4/2	1394
5/1	89
6/1	1102
6/2	972

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '28RC 15:00-16:00' (FG14: '28RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	68	2020	2088
	B	45	0	69	114
	C	2122	130	0	2252
	Tot.	2167	198	2089	4454

Traffic Lane Flows

Lane	Scenario 14: 28RC 15:00-16:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	68
1/2 (with short)	1088(In) 1020(Out)
1/3	1000
2/1 (short)	69
2/2 (with short)	114(In) 45(Out)
3/1	1020
3/2 (with short)	1232(In) 1102(Out)
3/3 (short)	130
4/1	1065
4/2	1102
5/1	198
6/1	1089
6/2	1000

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 15: '28RC 17:00-18:00' (FG15: '28RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	55	1996	2051
	B	54	0	109	163
	C	2010	200	0	2210
	Tot.	2064	255	2105	4424

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 15: 28RC 17:00-18:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	55
1/2 (with short)	1068(In) 1013(Out)
1/3	983
2/1 (short)	109
2/2 (with short)	163(In) 54(Out)
3/1	991
3/2 (with short)	1219(In) 1019(Out)
3/3 (short)	200
4/1	1045
4/2	1019
5/1	255
6/1	1122
6/2	983

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 16: '28PC 06:00-07:00' (FG16: '28PC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	980	980
	B	0	0	0	0
	C	1035	0	0	1035
	Tot.	1035	0	980	2015

Traffic Lane Flows

Lane	Scenario 16: 28PC 06:00-07:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	0
1/2 (with short)	514(In) 514(Out)
1/3	466
2/1 (short)	0
2/2 (with short)	0(In) 0(Out)
3/1	491
3/2 (with short)	544(In) 544(Out)
3/3 (short)	0
4/1	491
4/2	544
5/1	0
6/1	514
6/2	466

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	0.0 %	1965	1965
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	0.0 %	2065	2065
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 17: '28PC 07:00-08:00' (FG17: '28PC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	10	1748	1758
	B	44	0	83	127
	C	2238	26	0	2264
	Tot.	2282	36	1831	4149

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 17: 28PC 07:00-08:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	10
1/2 (with short)	915(In) 905(Out)
1/3	843
2/1 (short)	83
2/2 (with short)	127(In) 44(Out)
3/1	1075
3/2 (with short)	1189(In) 1163(Out)
3/3 (short)	26
4/1	1119
4/2	1163
5/1	36
6/1	988
6/2	843

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 18: '28PC 08:00-09:00' (FG18: '28PC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	21	2000	2021
	B	114	0	88	202
	C	2677	68	0	2745
	Tot.	2791	89	2088	4968

Traffic Lane Flows

Lane	Scenario 18: 28PC 08:00-09:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	21
1/2 (with short)	1049(In) 1028(Out)
1/3	972
2/1 (short)	88
2/2 (with short)	202(In) 114(Out)
3/1	1297
3/2 (with short)	1448(In) 1380(Out)
3/3 (short)	68
4/1	1411
4/2	1380
5/1	89
6/1	1116
6/2	972

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 19: '28PC 15:00-16:00' (FG19: '28PC 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	68	2055	2123
	B	45	0	69	114
	C	2133	130	0	2263
	Tot.	2178	198	2124	4500

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 19: 28PC 15:00-16:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	68
1/2 (with short)	1105(In) 1037(Out)
1/3	1018
2/1 (short)	69
2/2 (with short)	114(In) 45(Out)
3/1	1026
3/2 (with short)	1237(In) 1107(Out)
3/3 (short)	130
4/1	1071
4/2	1107
5/1	198
6/1	1106
6/2	1018

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 20: '28PC 17:00-18:00' (FG20: '28PC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	55	2017	2072
	B	54	0	109	163
	C	2010	200	0	2210
	Tot.	2064	255	2126	4445

Traffic Lane Flows

Lane	Scenario 20: 28PC 17:00-18:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	55
1/2 (with short)	1079(In) 1024(Out)
1/3	993
2/1 (short)	109
2/2 (with short)	163(In) 54(Out)
3/1	991
3/2 (with short)	1219(In) 1019(Out)
3/3 (short)	200
4/1	1045
4/2	1019
5/1	255
6/1	1133
6/2	993

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 21: '34RC 06:00-07:00' (FG21: '34RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	1013	1013
	B	0	0	0	0
	C	978	0	0	978
	Tot.	978	0	1013	1991

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 21: 34RC 06:00-07:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	0
1/2 (with short)	531(In) 531(Out)
1/3	482
2/1 (short)	0
2/2 (with short)	0(In) 0(Out)
3/1	463
3/2 (with short)	515(In) 515(Out)
3/3 (short)	0
4/1	463
4/2	515
5/1	0
6/1	531
6/2	482

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	0.0 %	1965	1965
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	0.0 %	2065	2065
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 22: '34RC 07:00-08:00' (FG22: '34RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	11	1844	1855
	B	68	0	132	200
	C	2263	33	0	2296
	Tot.	2331	44	1976	4351

Traffic Lane Flows

Lane	Scenario 22: 34RC 07:00-08:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	11
1/2 (with short)	965(In) 954(Out)
1/3	890
2/1 (short)	132
2/2 (with short)	200(In) 68(Out)
3/1	1088
3/2 (with short)	1208(In) 1175(Out)
3/3 (short)	33
4/1	1156
4/2	1175
5/1	44
6/1	1086
6/2	890

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 23: '34RC 08:00-09:00' (FG23: '34RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	25	2120	2145
	B	176	0	156	332
	C	2756	85	0	2841
	Tot.	2932	110	2276	5318

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 23: 34RC 08:00-09:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	25
1/2 (with short)	1111(In) 1086(Out)
1/3	1034
2/1 (short)	156
2/2 (with short)	332(In) 176(Out)
3/1	1337
3/2 (with short)	1504(In) 1419(Out)
3/3 (short)	85
4/1	1513
4/2	1419
5/1	110
6/1	1242
6/2	1034

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 24: '34RC 15:00-16:00' (FG24: '34RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	104	2224	2328
	B	68	0	120	188
	C	2345	220	0	2565
	Tot.	2413	324	2344	5081

Traffic Lane Flows

Lane	Scenario 24: 34RC 15:00-16:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	104
1/2 (with short)	1211(In) 1107(Out)
1/3	1117
2/1 (short)	120
2/2 (with short)	188(In) 68(Out)
3/1	1169
3/2 (with short)	1396(In) 1176(Out)
3/3 (short)	220
4/1	1237
4/2	1176
5/1	324
6/1	1227
6/2	1117

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 25: '34RC 17:00-18:00' (FG25: '34RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	89	2259	2348
	B	76	0	168	244
	C	2167	281	0	2448
	Tot.	2243	370	2427	5040

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 25: 34RC 17:00-18:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	89
1/2 (with short)	1219(In) 1130(Out)
1/3	1129
2/1 (short)	168
2/2 (with short)	244(In) 76(Out)
3/1	1874
3/2 (with short)	574(In) 293(Out)
3/3 (short)	281
4/1	1950
4/2	293
5/1	370
6/1	1298
6/2	1129

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 26: '34OP 06:00-07:00' (FG26: '34OP 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	1014	1014
	B	0	0	0	0
	C	979	0	0	979
	Tot.	979	0	1014	1993

Traffic Lane Flows

Lane	Scenario 26: 34OP 06:00-07:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	0
1/2 (with short)	532(In) 532(Out)
1/3	482
2/1 (short)	0
2/2 (with short)	0(In) 0(Out)
3/1	464
3/2 (with short)	515(In) 515(Out)
3/3 (short)	0
4/1	464
4/2	515
5/1	0
6/1	532
6/2	482

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	0.0 %	1965	1965
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	0.0 %	2065	2065
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 27: '34OP 07:00-08:00' (FG27: '34OP 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	11	1844	1855
	B	68	0	127	195
	C	2255	33	0	2288
	Tot.	2323	44	1971	4338

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 27: 34OP 07:00-08:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	11
1/2 (with short)	965(In) 954(Out)
1/3	890
2/1 (short)	127
2/2 (with short)	195(In) 68(Out)
3/1	1084
3/2 (with short)	1204(In) 1171(Out)
3/3 (short)	33
4/1	1152
4/2	1171
5/1	44
6/1	1081
6/2	890

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 28: '34OP 08:00-09:00' (FG28: '34OP 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	2116	2116
	B	0	0	111	111
	C	2653	54	0	2707
	Tot.	2653	54	2227	4934

Traffic Lane Flows

Lane	Scenario 28: 34OP 08:00-09:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	0
1/2 (with short)	1096(In) 1096(Out)
1/3	1020
2/1 (short)	111
2/2 (with short)	111(In) 0(Out)
3/1	1284
3/2 (with short)	1423(In) 1369(Out)
3/3 (short)	54
4/1	1284
4/2	1369
5/1	54
6/1	1207
6/2	1020

Lane Saturation Flows

Junction: A12 / Ad Astral Park access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	0.0 %	1965	1965
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 29: '34OP 15:00-16:00' (FG29: '34OP 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	104	2215	2319
	B	68	0	120	188
	C	2342	220	0	2562
	Tot.	2410	324	2335	5069

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 29: 34OP 15:00-16:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	104
1/2 (with short)	1206(In) 1102(Out)
1/3	1113
2/1 (short)	120
2/2 (with short)	188(In) 68(Out)
3/1	1168
3/2 (with short)	1394(In) 1174(Out)
3/3 (short)	220
4/1	1236
4/2	1174
5/1	324
6/1	1222
6/2	1113

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 30: '34OP 17:00-18:00' (FG30: '34OP 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	89	2263	2352
	B	76	0	168	244
	C	2163	281	0	2444
	Tot.	2239	370	2431	5040

Traffic Lane Flows

Lane	Scenario 30: 34OP 17:00-18:00
Junction: A12 / Ad Astral Park access	
1/1 (short)	89
1/2 (with short)	1221(In) 1132(Out)
1/3	1131
2/1 (short)	168
2/2 (with short)	244(In) 76(Out)
3/1	1874
3/2 (with short)	570(In) 289(Out)
3/3 (short)	281
4/1	1950
4/2	289
5/1	370
6/1	1300
6/2	1131

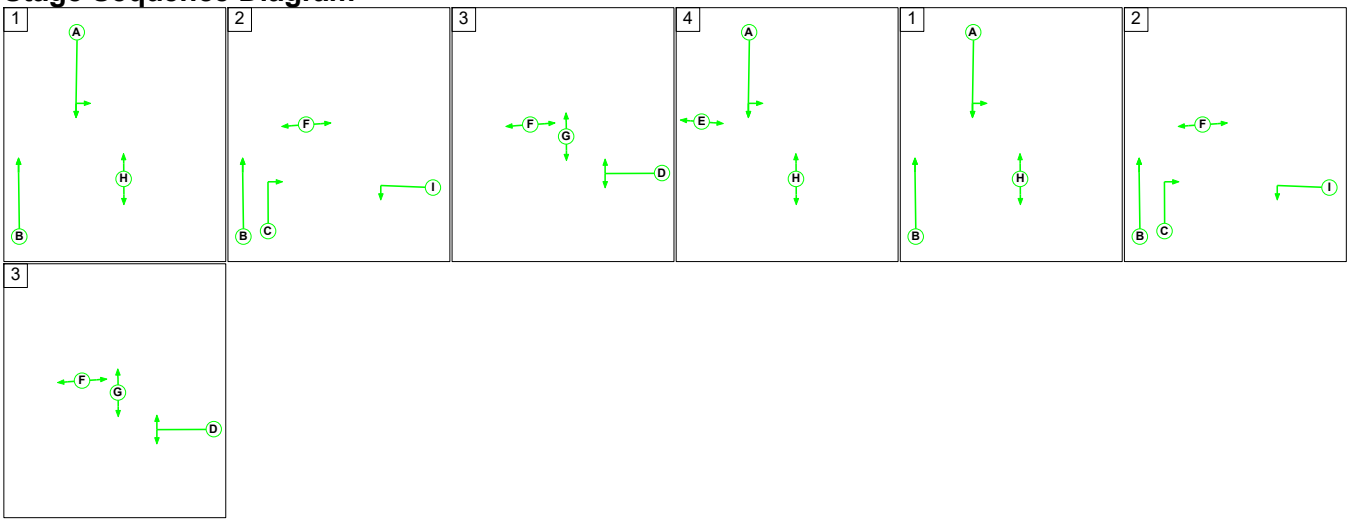
Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Ad Astral Park access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 1: '23RC 06:00-07:00' (FG1: '23RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

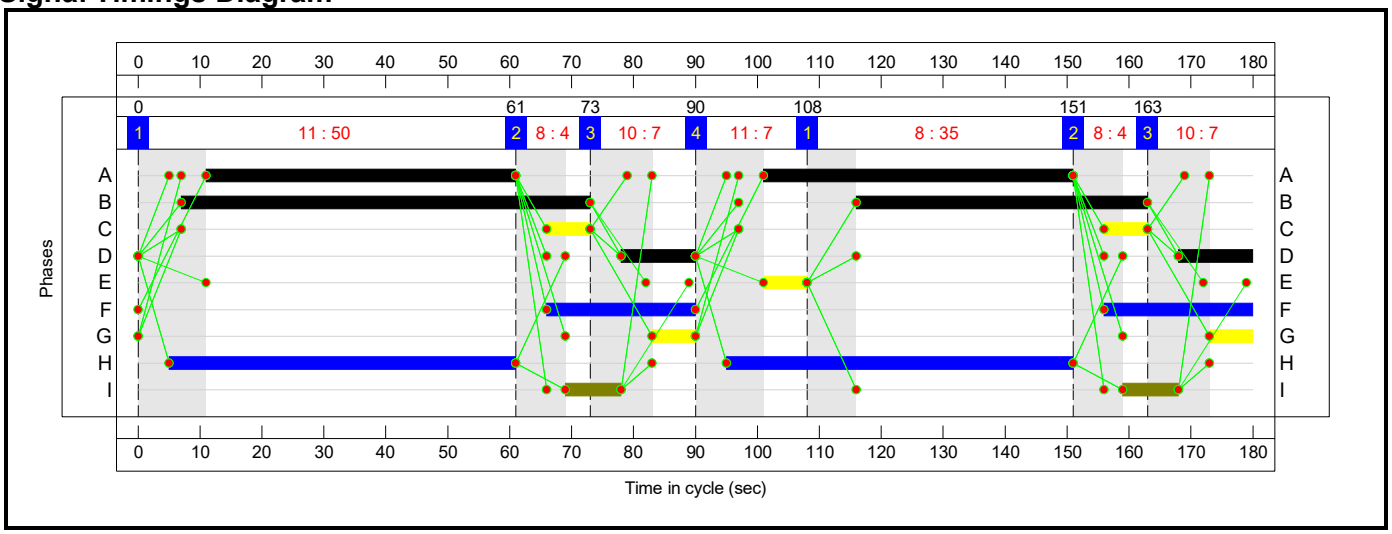


Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Full Input Data And Results

Signal Timings Diagram

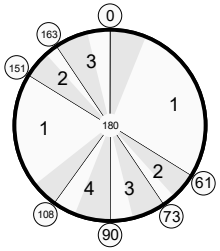


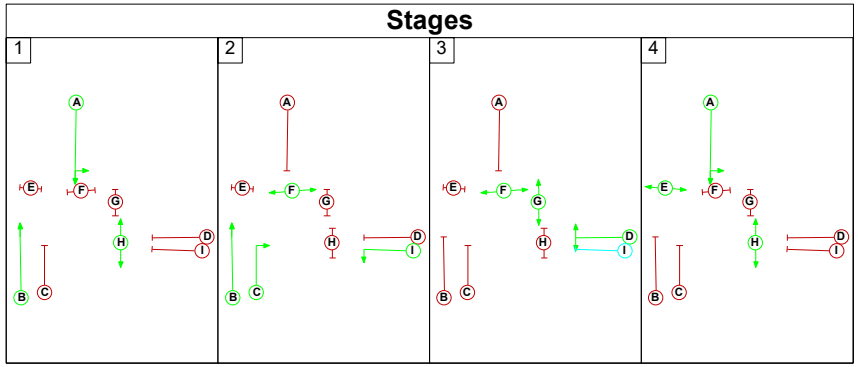
Full Input Data And Results

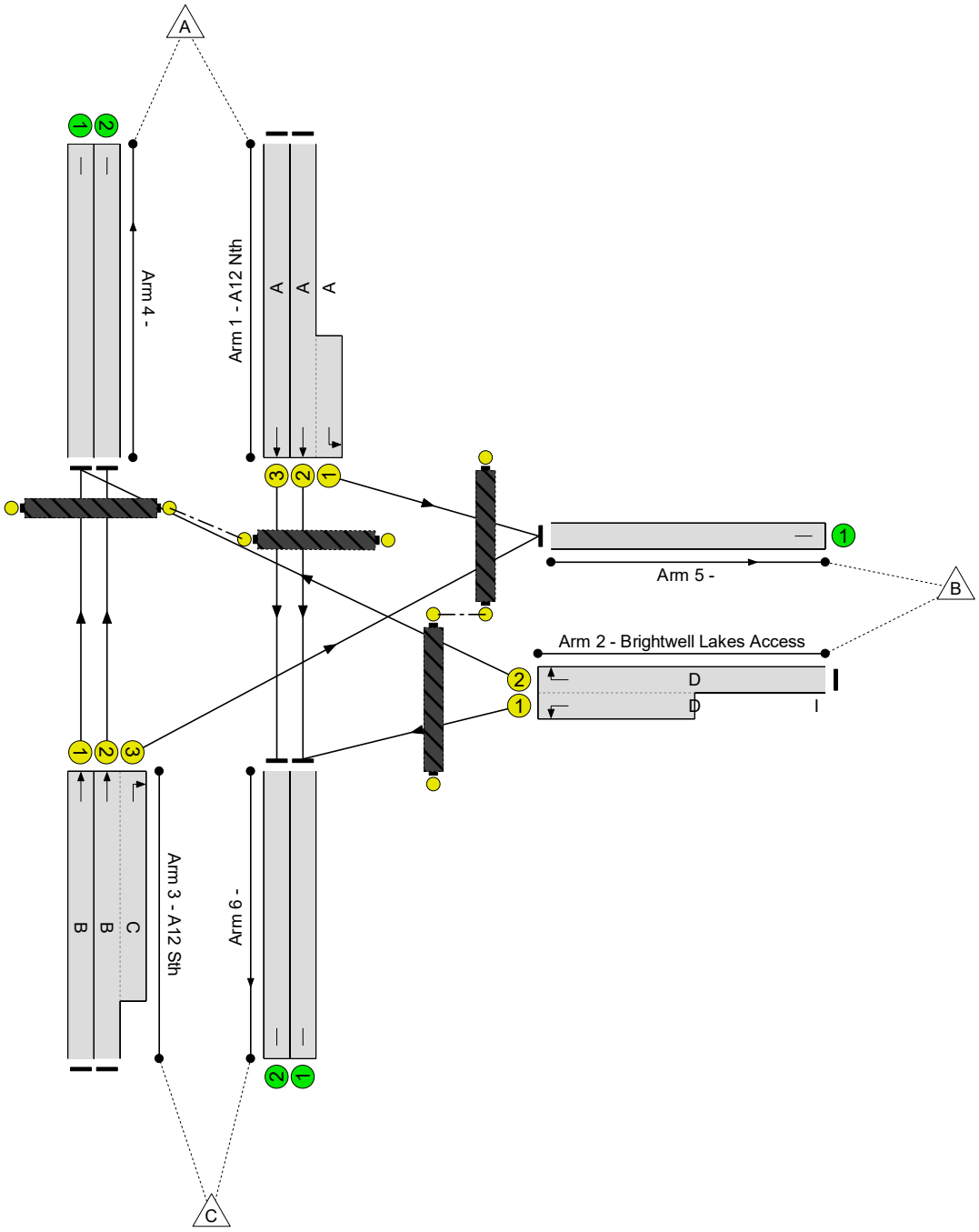
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 114.9 %
Total Traffic Delay: 6.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**41.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**41.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	502	2120:1819	1197+2	41.9 : 41.9%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	454	1980	1122	40.5%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	4	1786:1965	258+0	1.6 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	406	1980	1265	32.1%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	454	2120:2065	1354+0	33.5 : 0.0%
4/1		U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

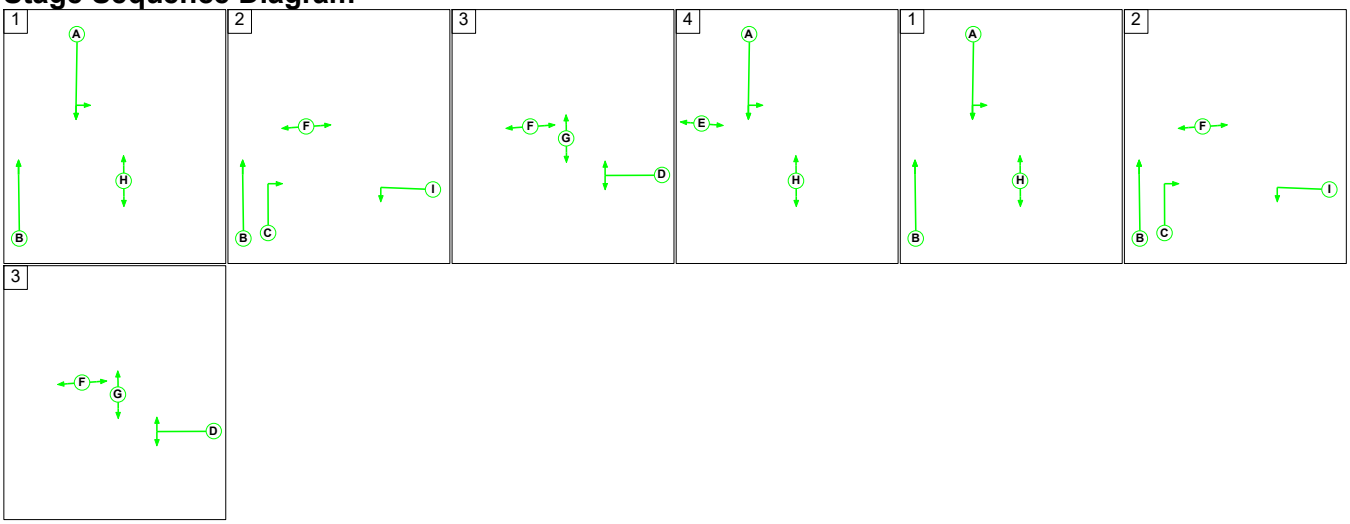
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.9**	**1.2**	**0.0**	**6.1**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**4.9**	**1.2**	**0.0**	**6.1**	**-**	**-**	**-**	**-**
1/2+1/1	502	502	-	-	-	1.5	0.4	-	1.9	13.6	7.1	0.4	7.5
1/3	454	454	-	-	-	1.4	0.3	-	1.7	13.7	6.3	0.3	6.6
2/2+2/1	4	4	-	-	-	0.0	0.0	-	0.0	40.4	0.1	0.0	0.1
3/1	406	406	-	-	-	0.9	0.2	-	1.1	10.1	5.9	0.2	6.1
3/2+3/3	454	454	-	-	-	1.0	0.3	-	1.3	10.1	6.7	0.3	6.9
4/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	501	501	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 114.9 Total Delay for Signalled Lanes (pcuHr): 6.09 Cycle Time (s): 180
PRC Over All Lanes (%): 114.9 Total Delay Over All Lanes(pcuHr): 6.09

Full Input Data And Results

Scenario 2: '23RC 07:00-08:00' (FG2: '23RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

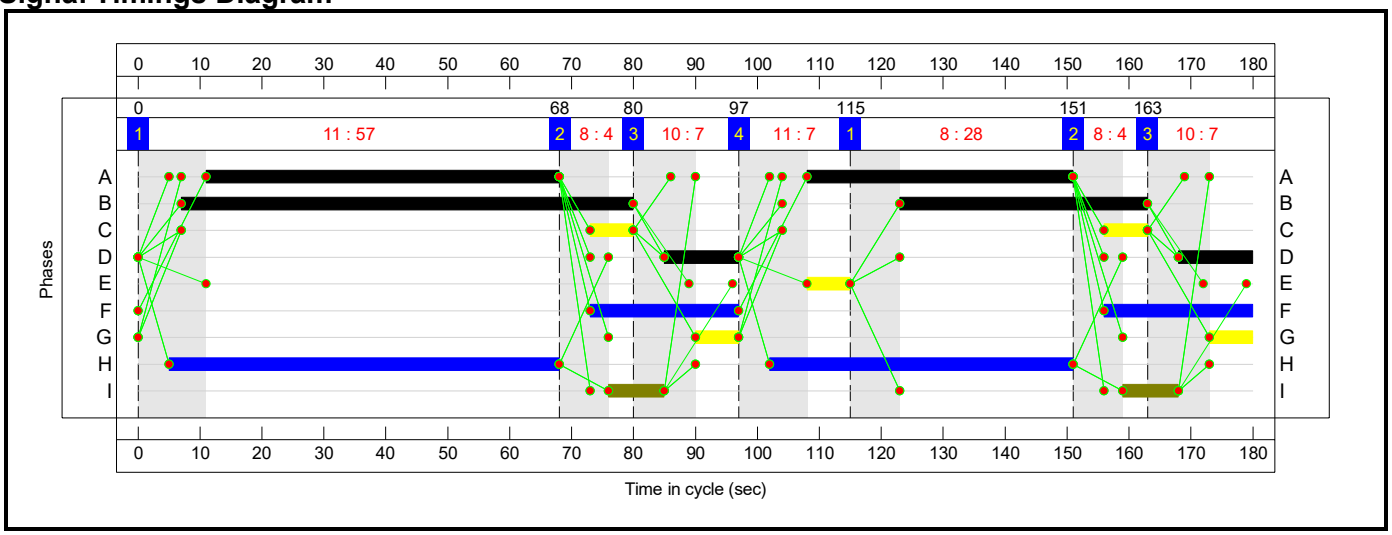
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	57	4	7	7	28	4	7
Change Point	0	68	80	97	115	151	163

Signal Timings Diagram

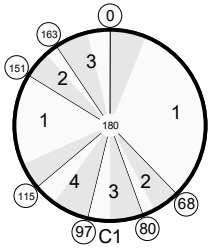


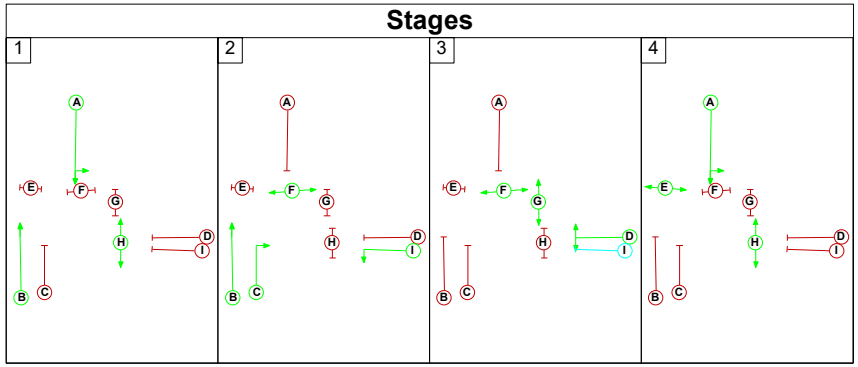
Full Input Data And Results

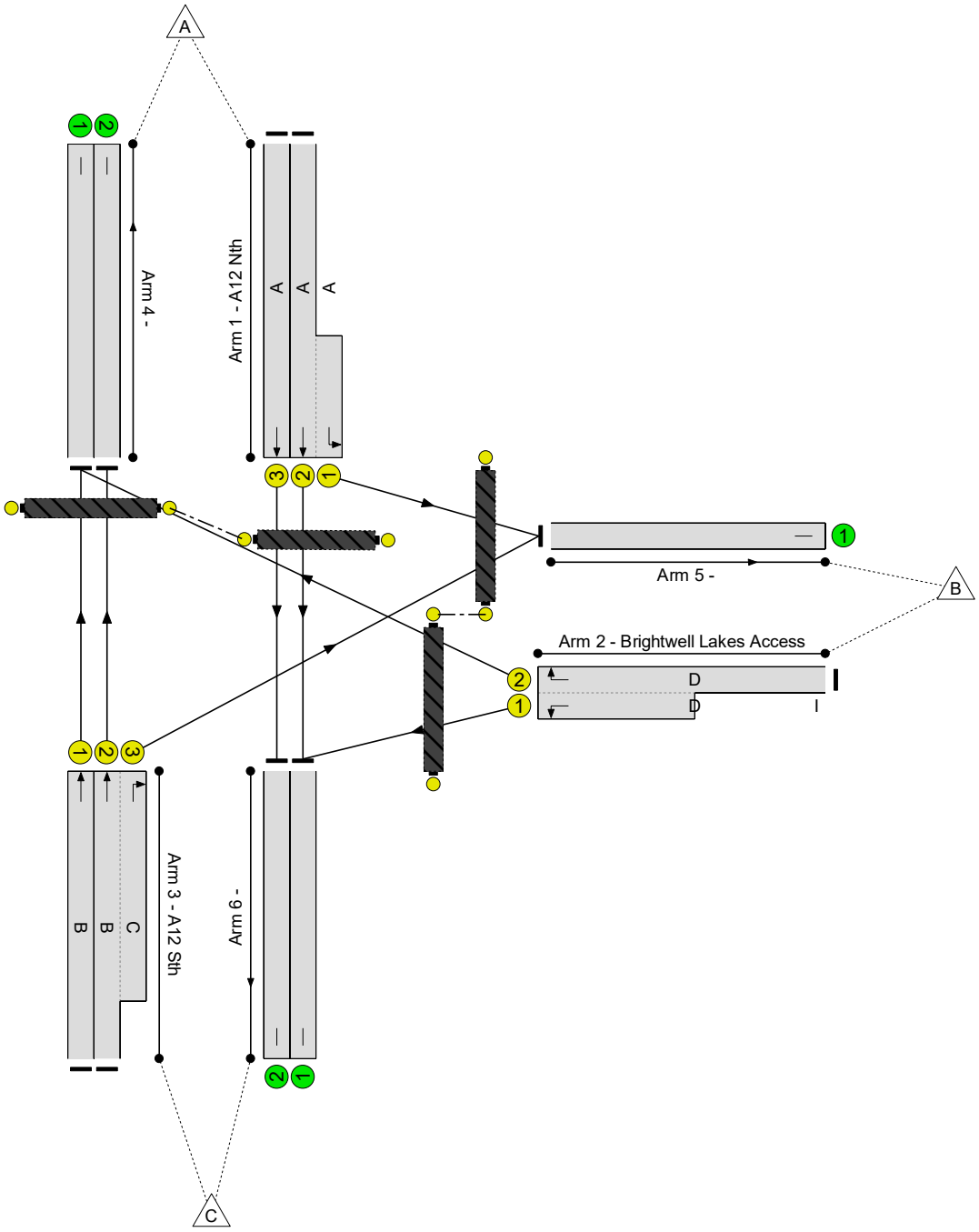
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 16.9 %
Total Traffic Delay: 20.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	893	2120:1819	1195+4	74.5 : 74.5%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	824	1980	1122	73.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	45	1786:1762	258+189	10.1 : 10.1%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	962	1980	1265	76.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1045	2120:1906	1354+3	77.0 : 77.0%
4/1		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1043	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	909	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	824	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

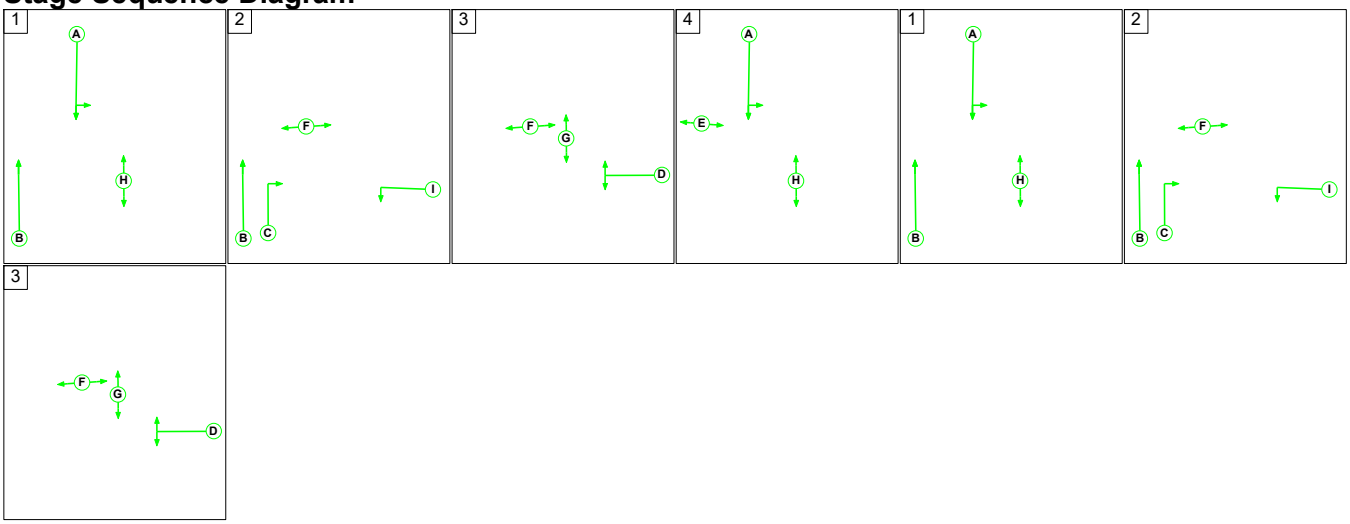
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.3**	**6.1**	**0.0**	**20.4**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**14.3**	**6.1**	**0.0**	**20.4**	**-**	**-**	**-**	**-**
1/2+1/1	893	893	-	-	-	3.6	1.4	-	5.1	20.5	16.6	1.4	18.0
1/3	824	824	-	-	-	3.3	1.4	-	4.7	20.5	15.1	1.4	16.5
2/2+2/1	45	45	-	-	-	0.4	0.1	-	0.4	35.1	0.6	0.1	0.7
3/1	962	962	-	-	-	3.3	1.6	-	4.9	18.3	21.6	1.6	23.2
3/2+3/3	1045	1045	-	-	-	3.7	1.7	-	5.3	18.3	23.8	1.7	25.4
4/1	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1043	1043	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	909	909	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 16.9 Total Delay for Signalled Lanes (pcuHr): 20.39 Cycle Time (s): 180
PRC Over All Lanes (%): 16.9 Total Delay Over All Lanes(pcuHr): 20.39

Full Input Data And Results

Scenario 3: '23RC 08:00-09:00' (FG3: '23RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

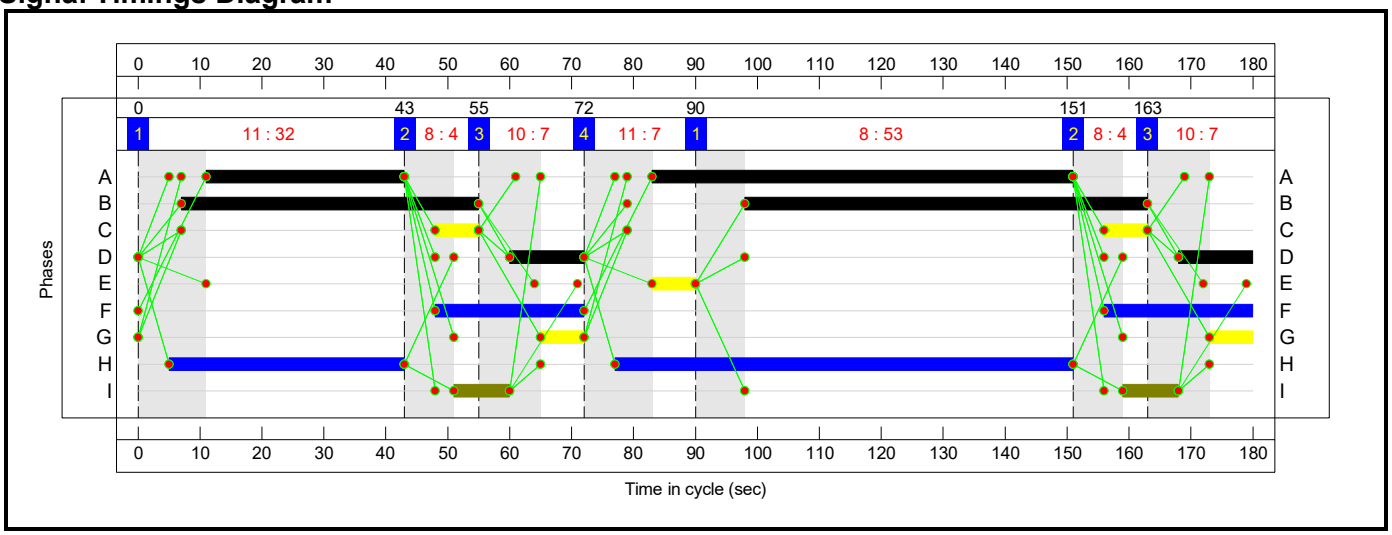
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	32	4	7	7	53	4	7
Change Point	0	43	55	72	90	151	163

Signal Timings Diagram

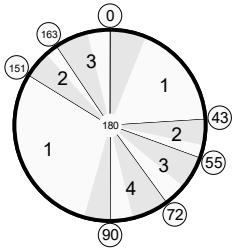


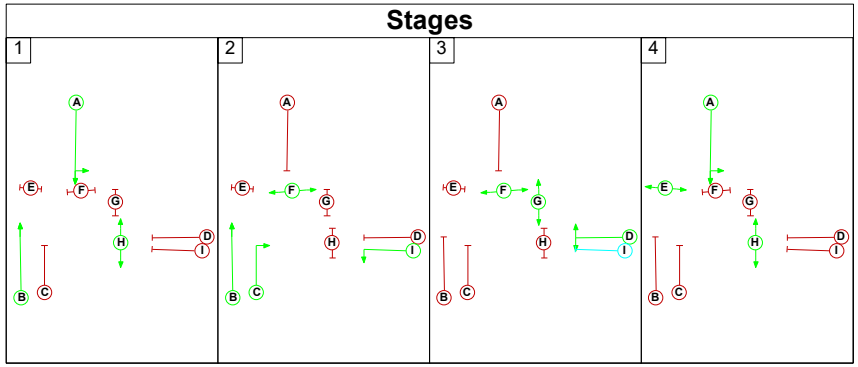
Full Input Data And Results

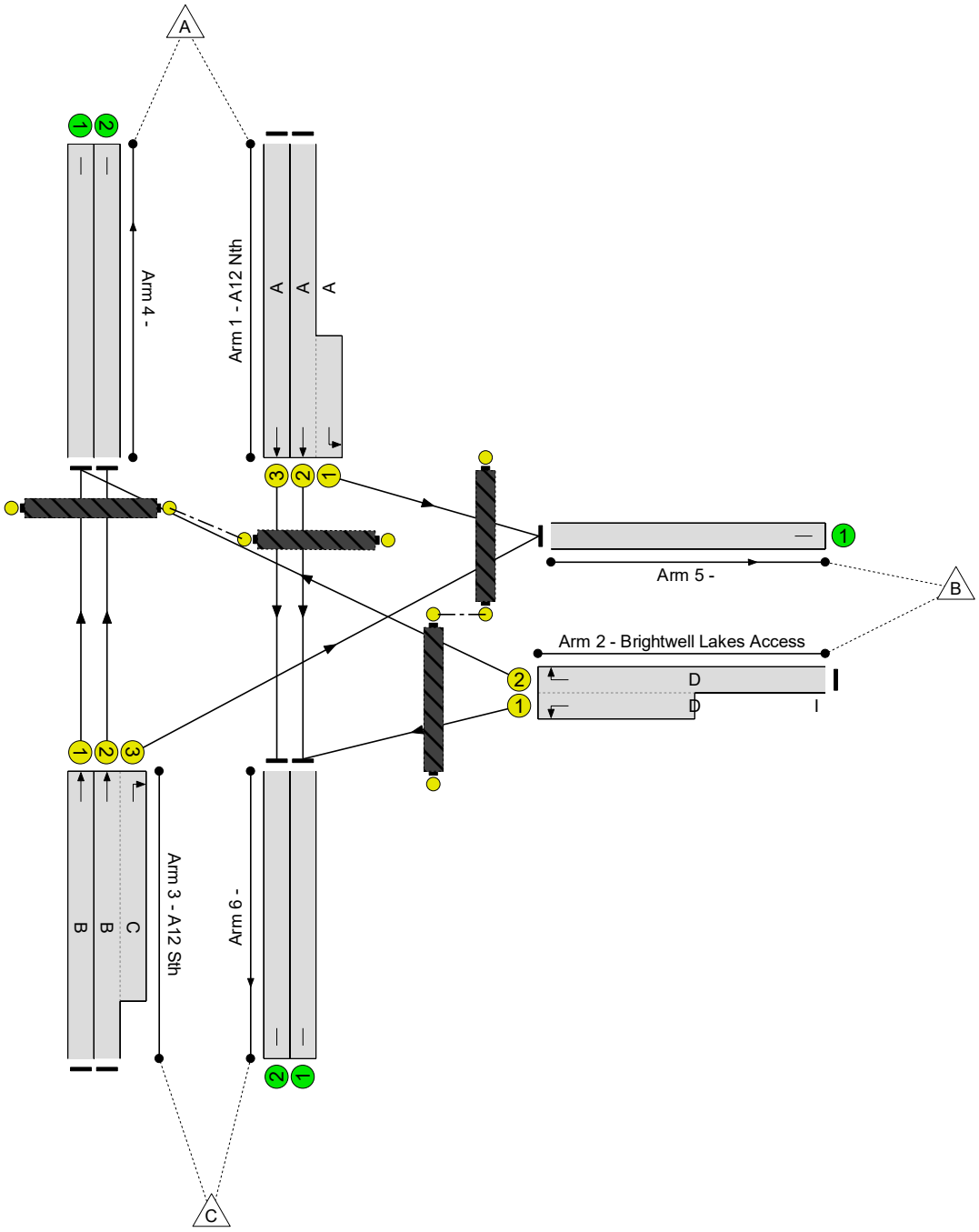
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -10.9 %
Total Traffic Delay: 62.3 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.8%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.8%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	983	2120:1819	1194+5	82.0 : 82.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	913	1980	1122	81.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	84	1786:1762	258+97	23.6 : 23.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1261	1980	1265	99.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1357	2120:1906	1354+5	99.8 : 99.8%
4/1		U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1352	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

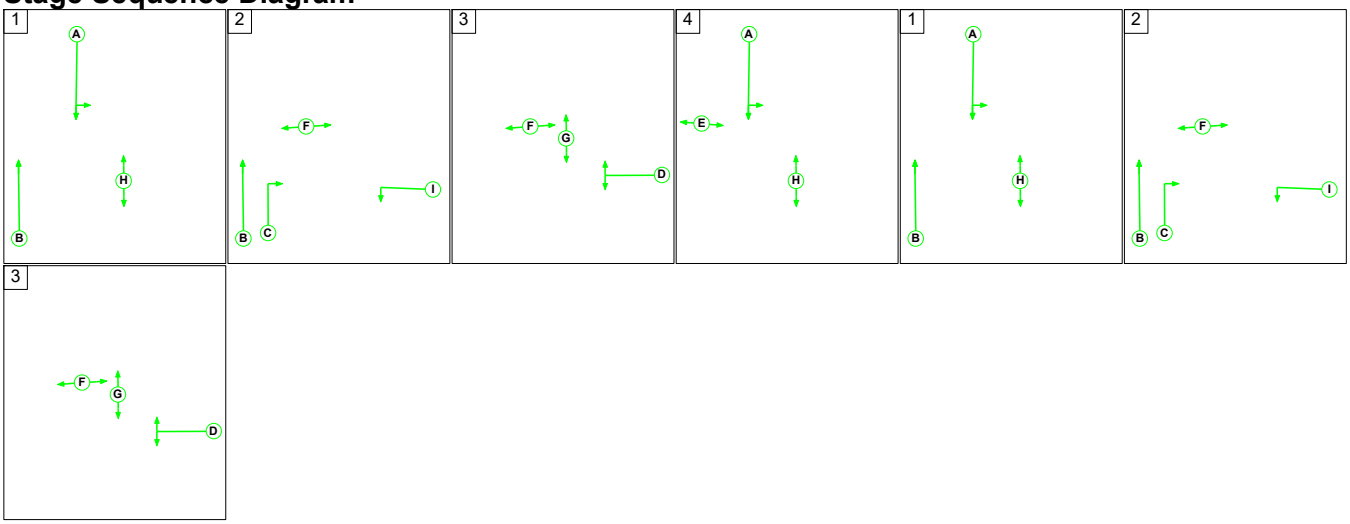
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**23.2**	**39.1**	**0.0**	**62.3**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**23.2**	**39.1**	**0.0**	**62.3**	**-**	**-**	**-**	**-**
1/2+1/1	983	983	-	-	-	4.4	2.2	-	6.6	24.3	20.2	2.2	22.4
1/3	913	913	-	-	-	4.0	2.1	-	6.2	24.3	18.4	2.1	20.5
2/2+2/1	84	84	-	-	-	0.8	0.2	-	0.9	40.4	1.7	0.2	1.8
3/1	1261	1261	-	-	-	6.7	16.8	-	23.5	67.0	37.8	16.8	54.6
3/2+3/3	1357	1357	-	-	-	7.3	17.8	-	25.1	66.5	43.4	17.8	61.3
4/1	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1352	1352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -10.9 PRC Over All Lanes (%): -10.9 Total Delay for Signalled Lanes (pcuHr): 62.30 Total Delay Over All Lanes(pcuHr): 62.30 Cycle Time (s): 180

Full Input Data And Results

Scenario 4: '23RC 15:00-16:00' (FG3: '23RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

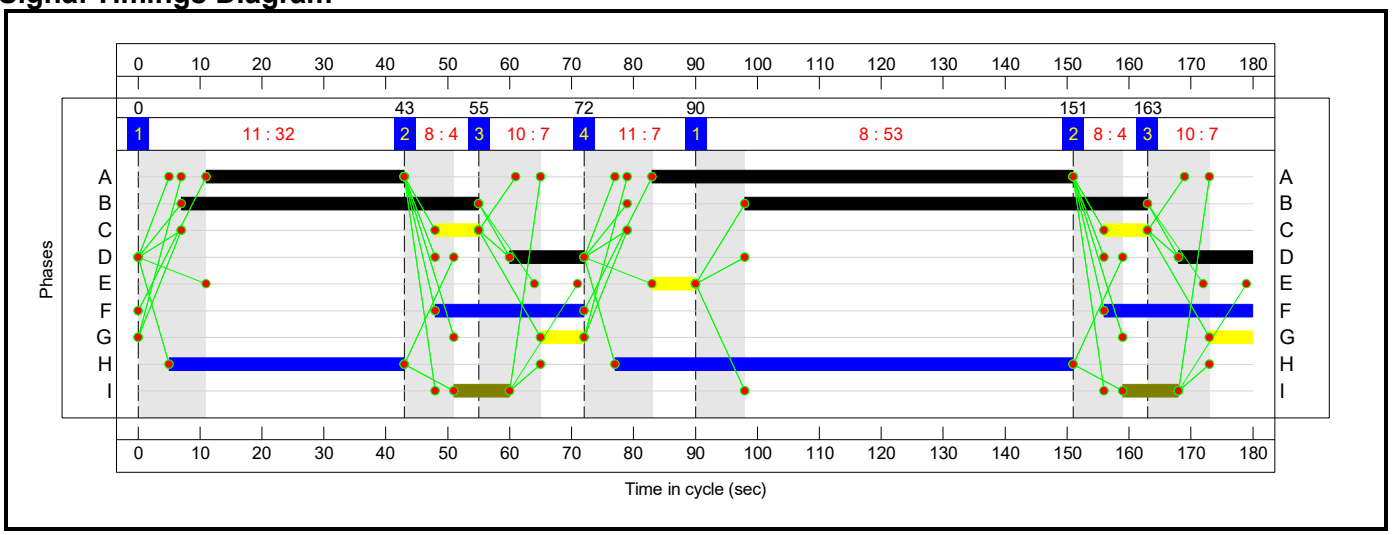
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	32	4	7	7	53	4	7
Change Point	0	43	55	72	90	151	163

Signal Timings Diagram

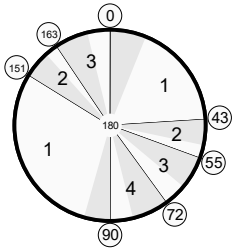


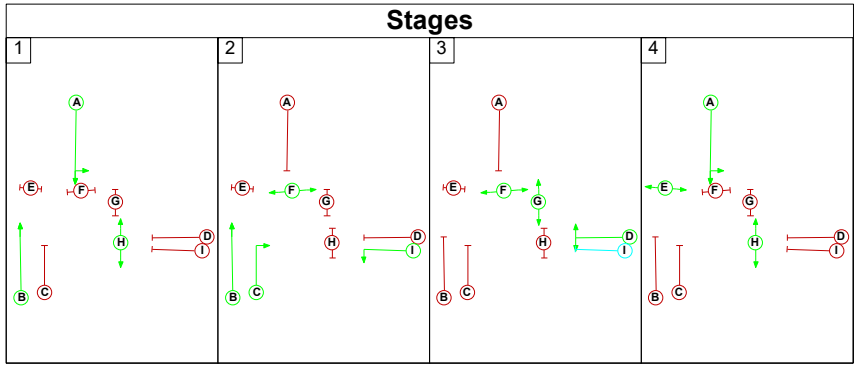
Full Input Data And Results

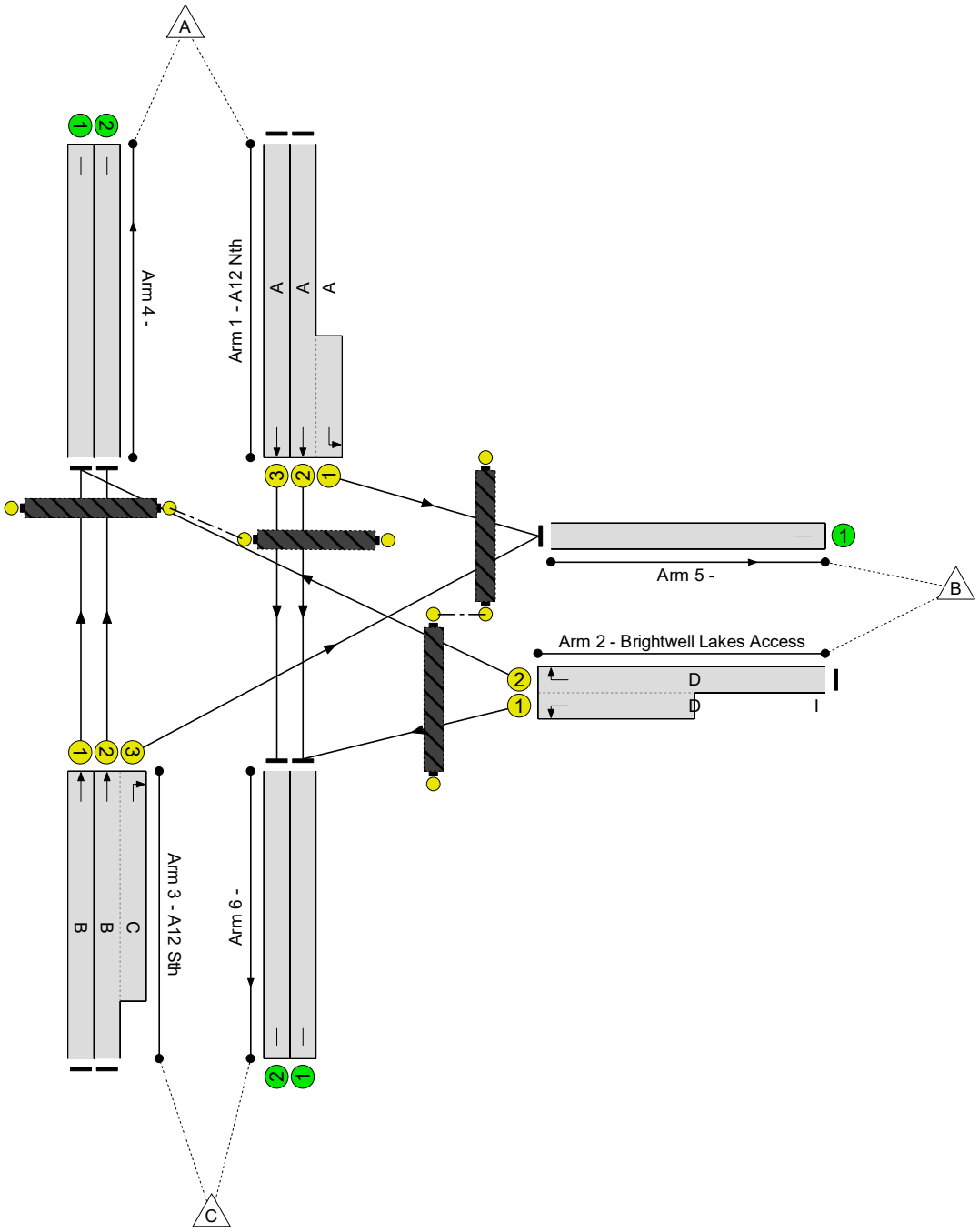
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -10.9 %
Total Traffic Delay: 62.3 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.8%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.8%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	983	2120:1819	1194+5	82.0 : 82.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	913	1980	1122	81.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	84	1786:1762	258+97	23.6 : 23.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1261	1980	1265	99.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1357	2120:1906	1354+5	99.8 : 99.8%
4/1		U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1352	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

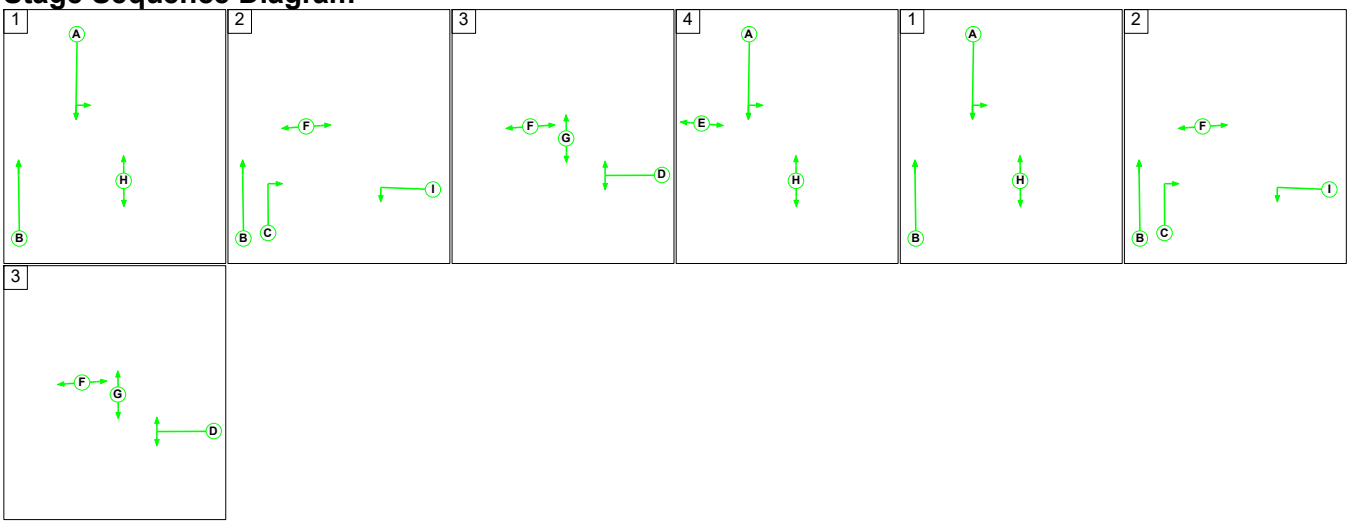
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**23.2**	**39.1**	**0.0**	**62.3**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**23.2**	**39.1**	**0.0**	**62.3**	**-**	**-**	**-**	**-**
1/2+1/1	983	983	-	-	-	4.4	2.2	-	6.6	24.3	20.2	2.2	22.4
1/3	913	913	-	-	-	4.0	2.1	-	6.2	24.3	18.4	2.1	20.5
2/2+2/1	84	84	-	-	-	0.8	0.2	-	0.9	40.4	1.7	0.2	1.8
3/1	1261	1261	-	-	-	6.7	16.8	-	23.5	67.0	37.8	16.8	54.6
3/2+3/3	1357	1357	-	-	-	7.3	17.8	-	25.1	66.5	43.4	17.8	61.3
4/1	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1352	1352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -10.9 PRC Over All Lanes (%): -10.9 Total Delay for Signalled Lanes (pcuHr): 62.30 Total Delay Over All Lanes(pcuHr): 62.30 Cycle Time (s): 180

Full Input Data And Results

Scenario 5: '23RC 17:00-18:00' (FG5: '23RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

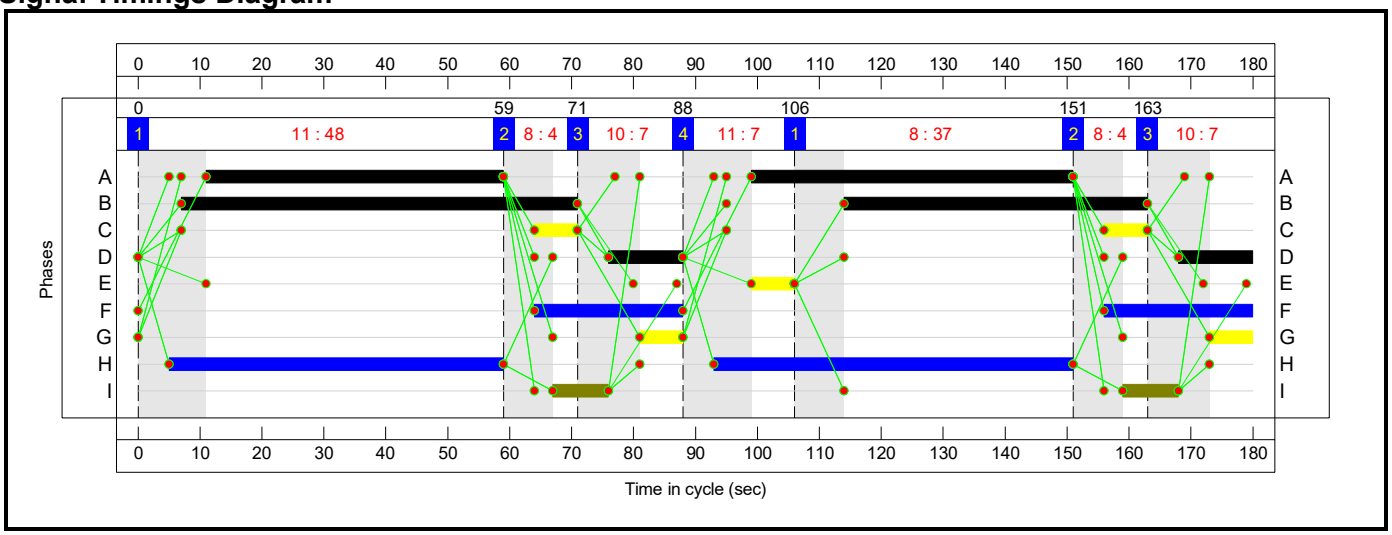
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	48	4	7	7	37	4	7
Change Point	0	59	71	88	106	151	163

Signal Timings Diagram

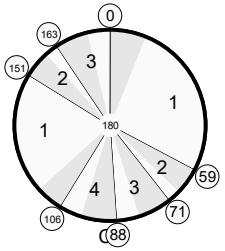


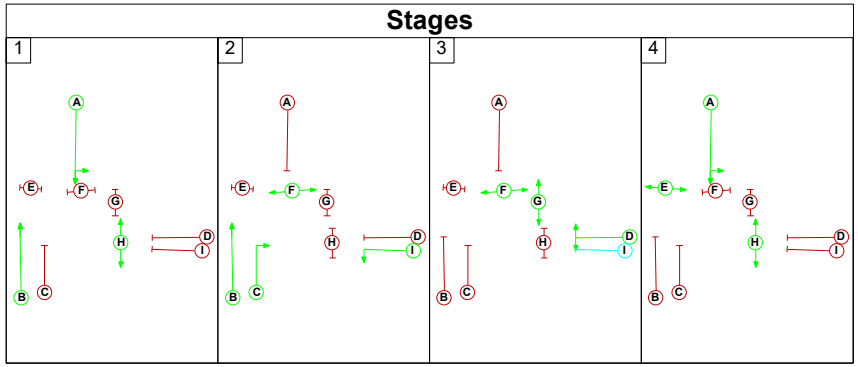
Full Input Data And Results

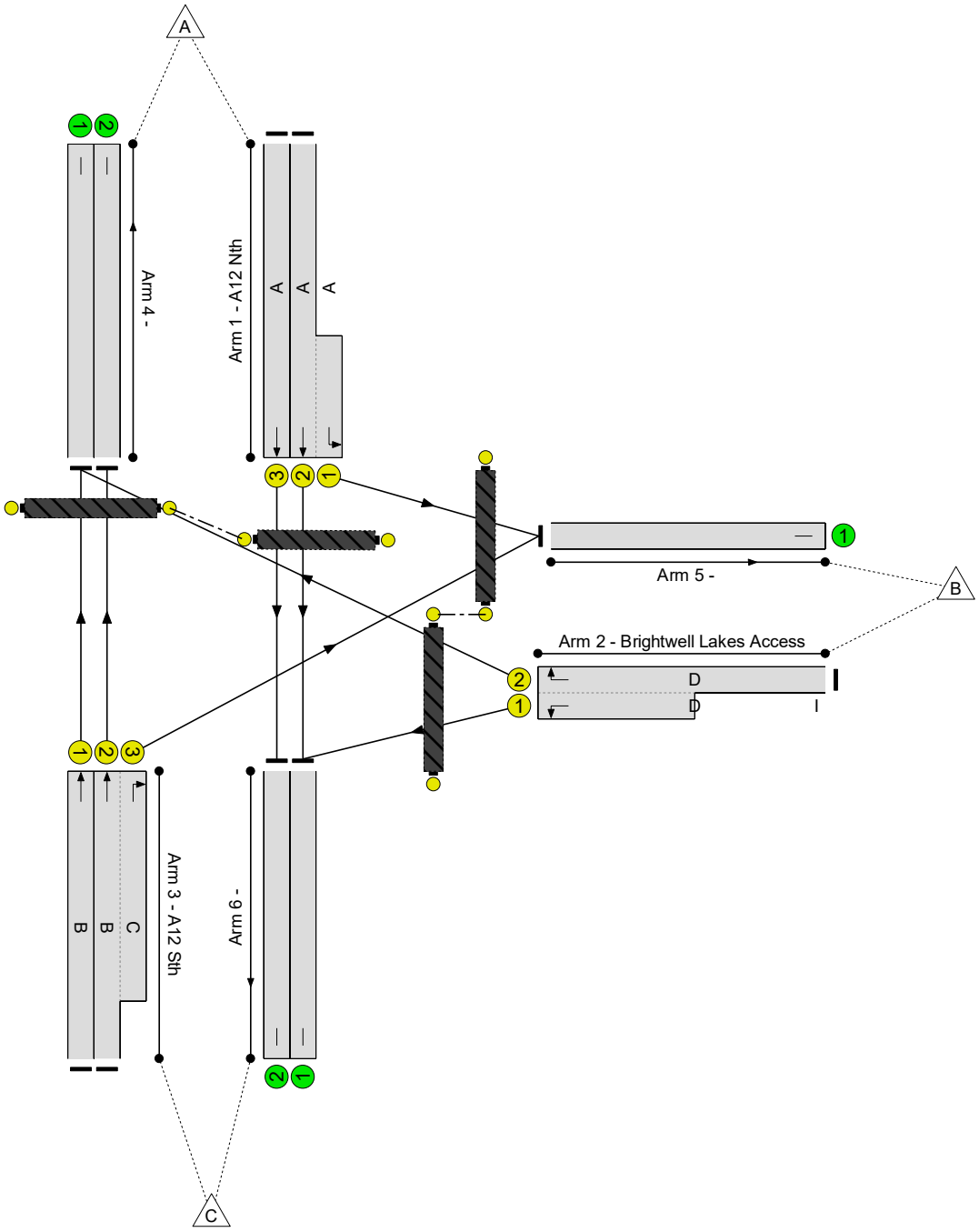
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 6.9 %
Total Traffic Delay: 23.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.2%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.2%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1013	2120:1819	1162+42	84.2 : 84.2%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	932	1980	1122	83.1%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	44	1786:1762	258+196	9.7 : 9.7%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	904	1980	1265	71.5%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1034	2120:1906	1344+65	73.4 : 73.4%
4/1		U	N/A	N/A	-		-	-	-	929	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	986	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	83	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	997	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	932	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

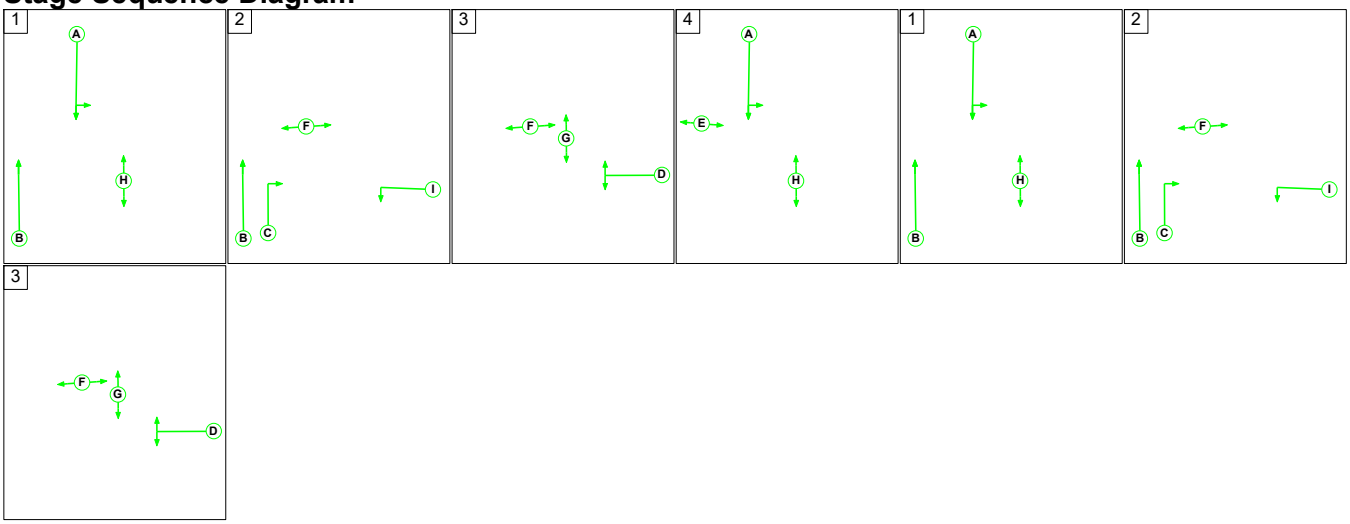
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.7**	**7.6**	**0.0**	**23.4**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**15.7**	**7.6**	**0.0**	**23.4**	**-**	**-**	**-**	**-**
1/2+1/1	1013	1013	-	-	-	4.5	2.6	-	7.1	25.1	20.6	2.6	23.2
1/3	932	932	-	-	-	4.1	2.4	-	6.5	25.2	18.9	2.4	21.3
2/2+2/1	44	44	-	-	-	0.4	0.1	-	0.4	34.7	0.6	0.1	0.6
3/1	904	904	-	-	-	2.9	1.2	-	4.2	16.7	19.3	1.2	20.6
3/2+3/3	1034	1034	-	-	-	3.8	1.4	-	5.1	17.9	21.4	1.4	22.7
4/1	929	929	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	986	986	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	83	83	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	997	997	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	932	932	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 6.9 Total Delay for Signalled Lanes (pcuHr): 23.35 Cycle Time (s): 180
PRC Over All Lanes (%): 6.9 Total Delay Over All Lanes(pcuHr): 23.35

Full Input Data And Results

Scenario 6: '23EY 06:00-07:00' (FG6: '23EY 06:00-07:00', Plan 2: 'Network Control Plan 2')

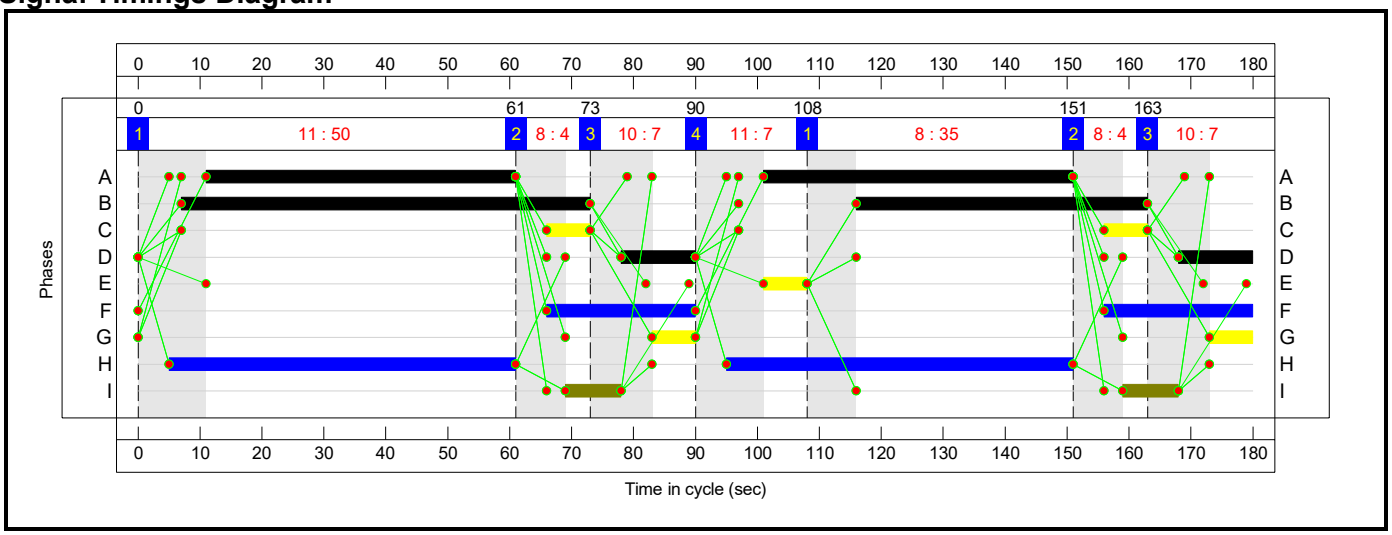
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

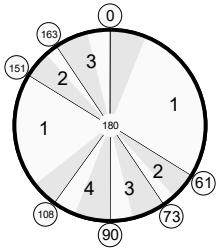


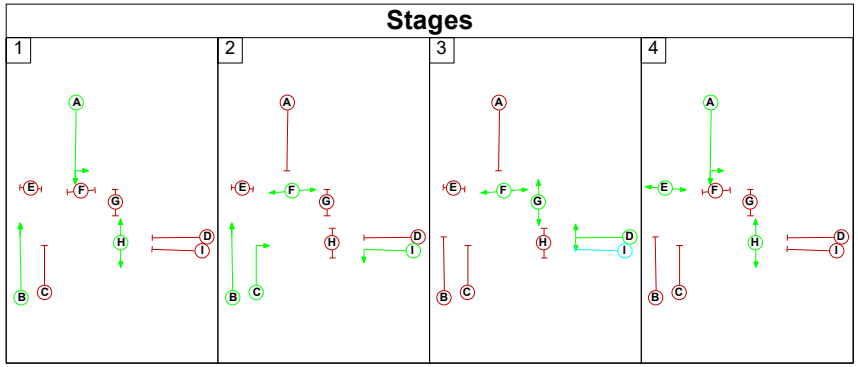
Full Input Data And Results

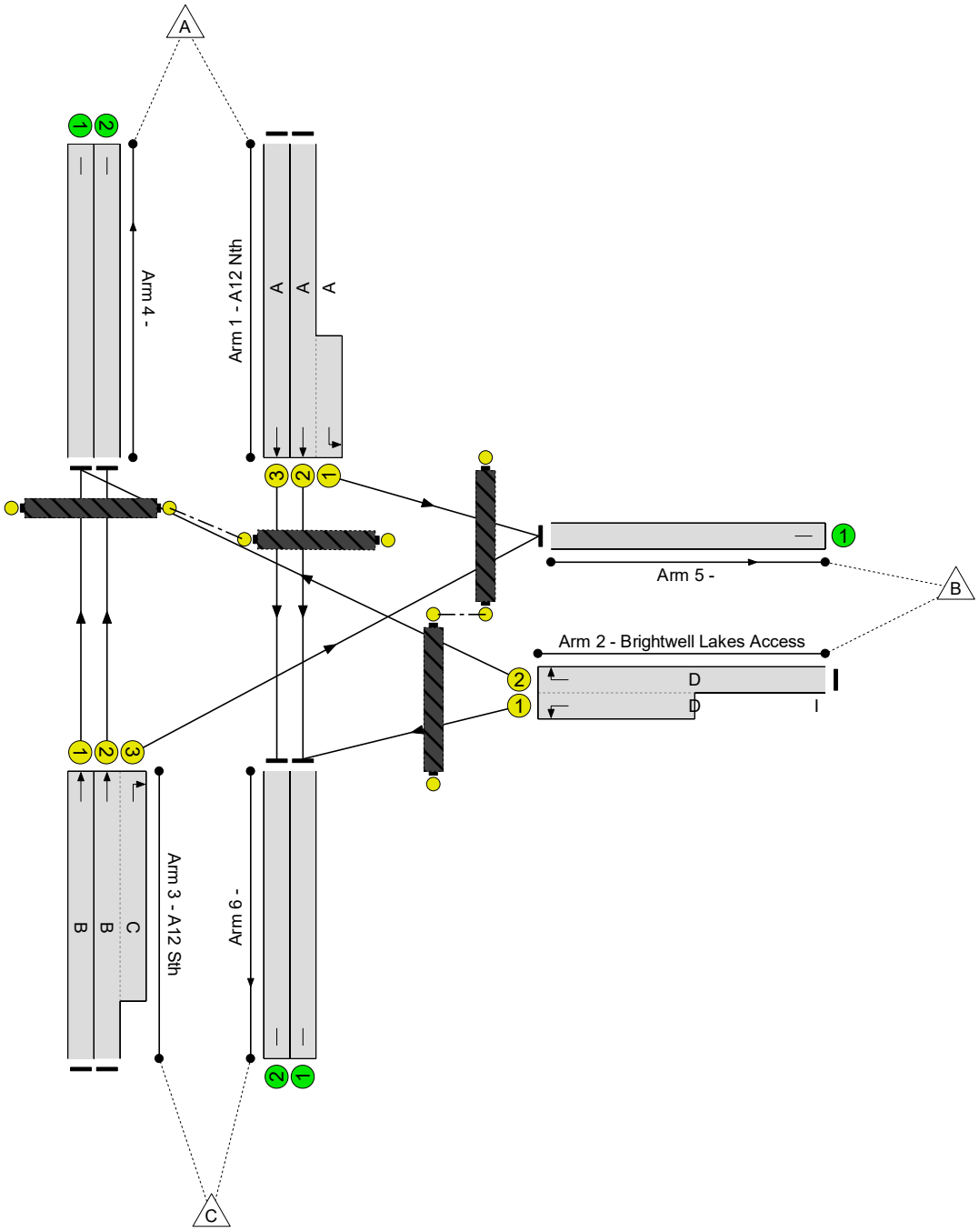
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 112.4 %
Total Traffic Delay: 6.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.4%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.4%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	508	2120:1819	1197+2	42.4 : 42.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	460	1980	1122	41.0%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	4	1786:1965	258+0	1.6 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	441	1980	1265	34.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	491	2120:2065	1354+0	36.3 : 0.0%
4/1		U	N/A	N/A	-		-	-	-	445	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**5.1**	**1.3**	**0.0**	**6.4**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**5.1**	**1.3**	**0.0**	**6.4**	**-**	**-**	**-**	**-**
1/2+1/1	508	508	-	-	-	1.6	0.4	-	1.9	13.7	7.3	0.4	7.6
1/3	460	460	-	-	-	1.4	0.3	-	1.8	13.7	6.4	0.3	6.7
2/2+2/1	4	4	-	-	-	0.0	0.0	-	0.0	40.4	0.1	0.0	0.1
3/1	441	441	-	-	-	1.0	0.3	-	1.3	10.4	6.6	0.3	6.9
3/2+3/3	491	491	-	-	-	1.1	0.3	-	1.4	10.4	7.4	0.3	7.6
4/1	445	445	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 112.4
PRC Over All Lanes (%): 112.4

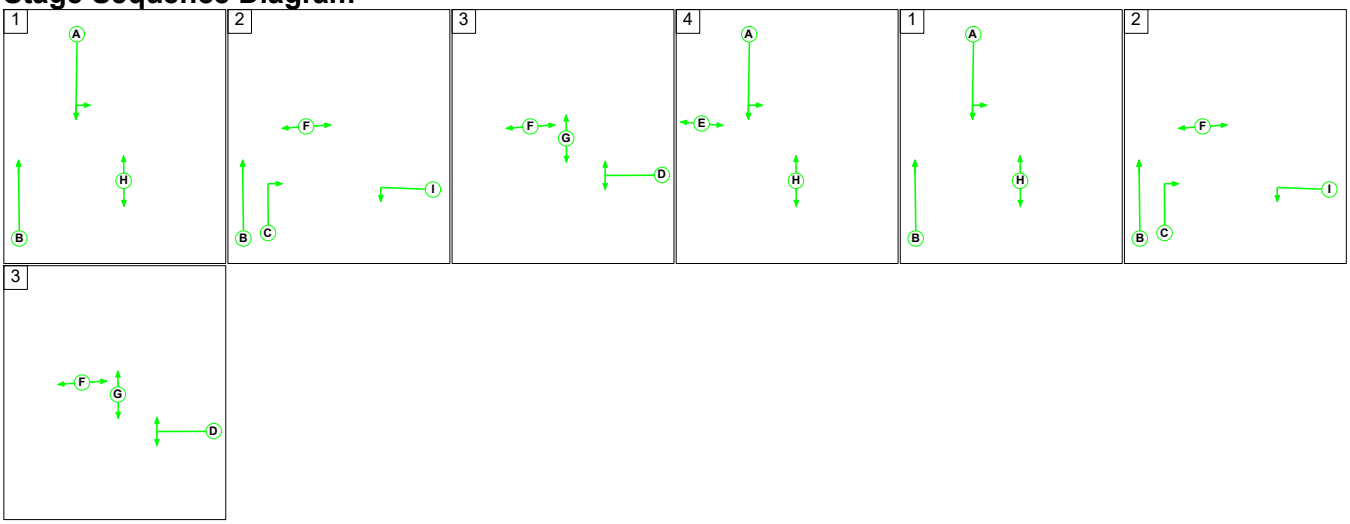
Total Delay for Signalled Lanes (pcuHr): 6.42
Total Delay Over All Lanes(pcuHr): 6.42

Cycle Time (s): 180

Full Input Data And Results

Scenario 7: '23EY 07:00-08:00' (FG7: '23EY 07:00-08:00', Plan 2: 'Network Control Plan 2')

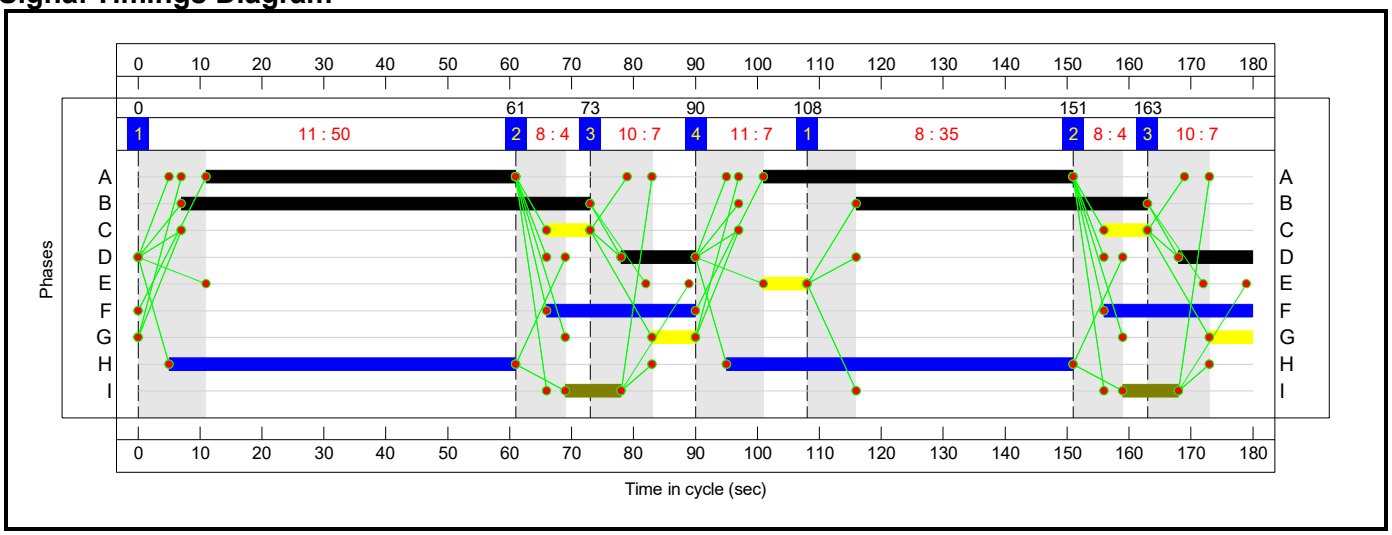
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

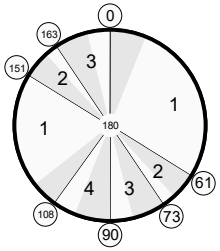


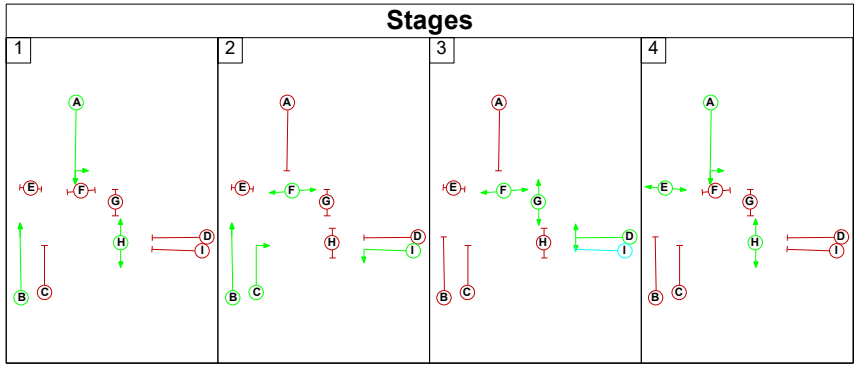
Full Input Data And Results

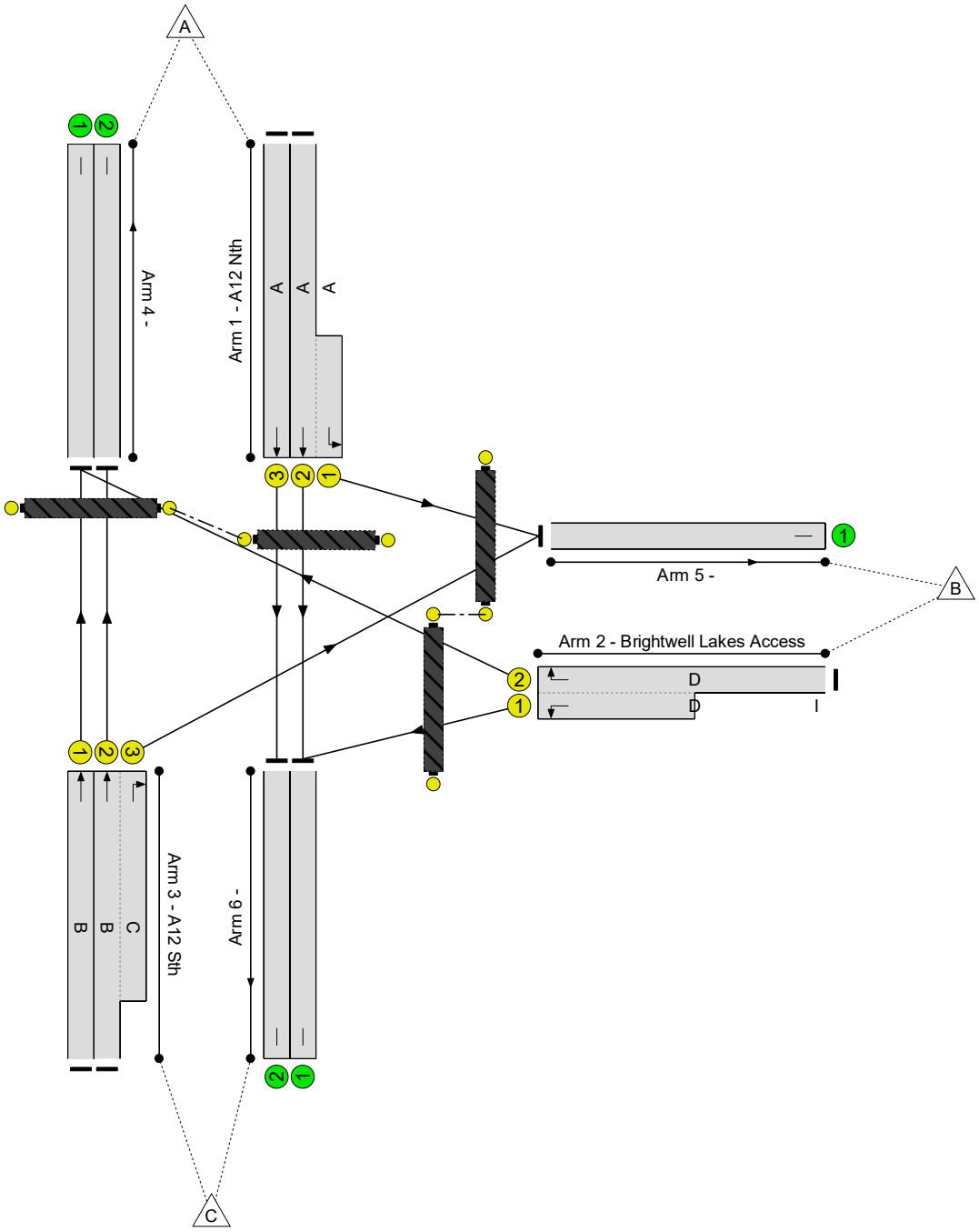
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 10.1 %
Total Traffic Delay: 22.7 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.7%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.7%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	907	2120:1819	1195+4	75.6 : 75.6%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	838	1980	1122	74.7%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	45	1786:1762	258+189	10.1 : 10.1%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1023	1980	1265	80.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1109	2120:1906	1354+2	81.7 : 81.7%
4/1		U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1107	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	923	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	838	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

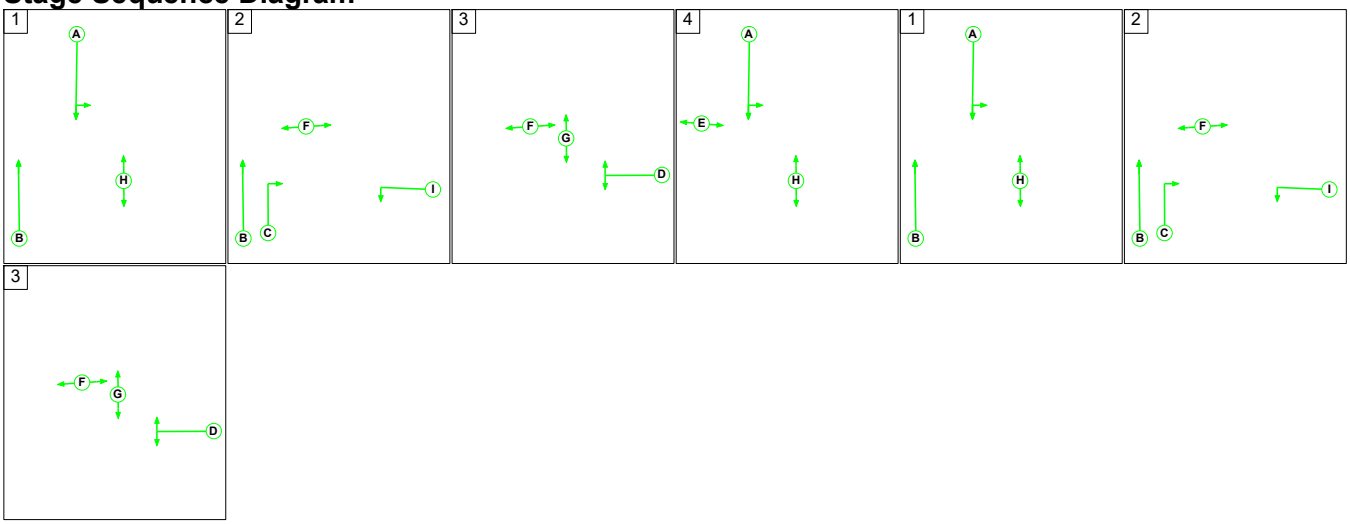
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.4**	**7.3**	**0.0**	**22.7**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**15.4**	**7.3**	**0.0**	**22.7**	**-**	**-**	**-**	**-**
1/2+1/1	907	907	-	-	-	3.7	1.5	-	5.3	20.9	17.1	1.5	18.6
1/3	838	838	-	-	-	3.4	1.5	-	4.9	20.9	15.6	1.5	17.1
2/2+2/1	45	45	-	-	-	0.4	0.1	-	0.4	34.8	0.6	0.1	0.6
3/1	1023	1023	-	-	-	3.7	2.1	-	5.8	20.5	24.4	2.1	26.5
3/2+3/3	1109	1109	-	-	-	4.1	2.2	-	6.3	20.5	27.0	2.2	29.2
4/1	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1107	1107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	923	923	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 10.1 Total Delay for Signalled Lanes (pcuHr): 22.71 Cycle Time (s): 180
PRC Over All Lanes (%): 10.1 Total Delay Over All Lanes(pcuHr): 22.71

Full Input Data And Results

Scenario 8: '23EY 08:00-09:00' (FG8: '23EY 08:00-09:00', Plan 2: 'Network Control Plan 2')

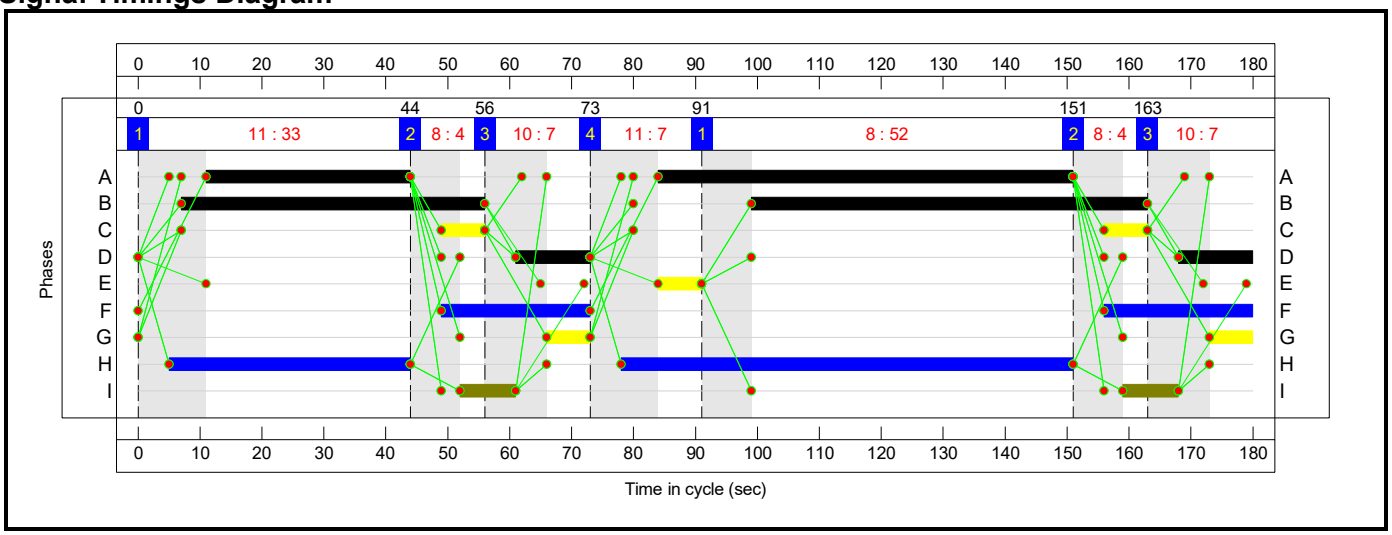
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	33	4	7	7	52	4	7
Change Point	0	44	56	73	91	151	163

Signal Timings Diagram

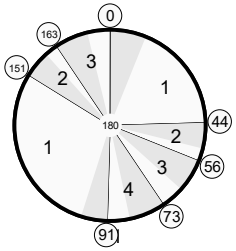


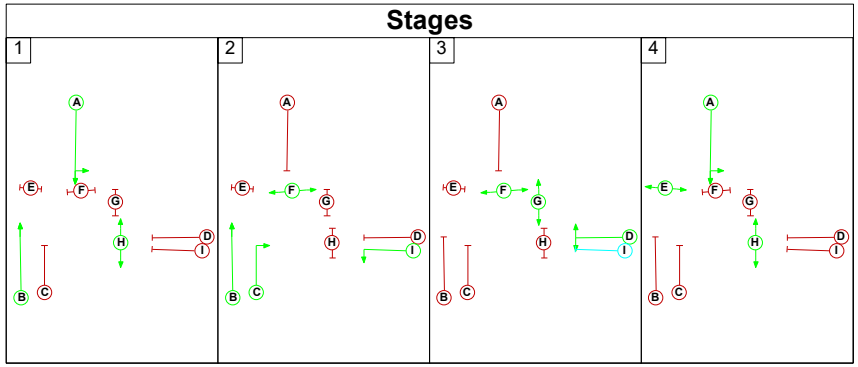
Full Input Data And Results

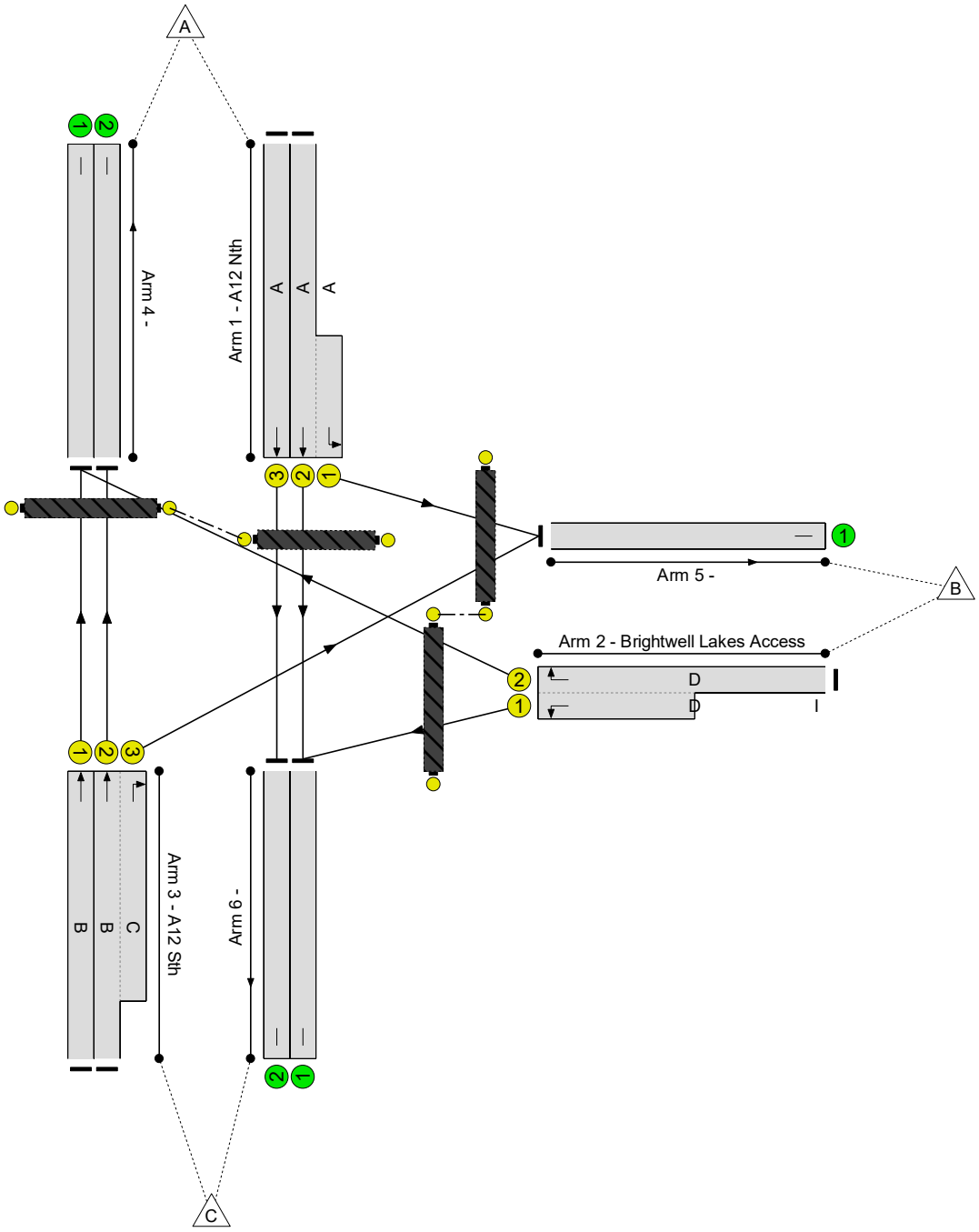
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -12.8 %
Total Traffic Delay: 79.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.5%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.5%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	995	2120:1819	1194+5	83.0 : 83.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	925	1980	1122	82.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	84	1786:1762	258+97	23.6 : 23.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1282	1980	1265	101.3%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1380	2120:1906	1354+5	101.5 : 101.5%
4/1		U	N/A	N/A	-		-	-	-	1343	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1375	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1014	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	925	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

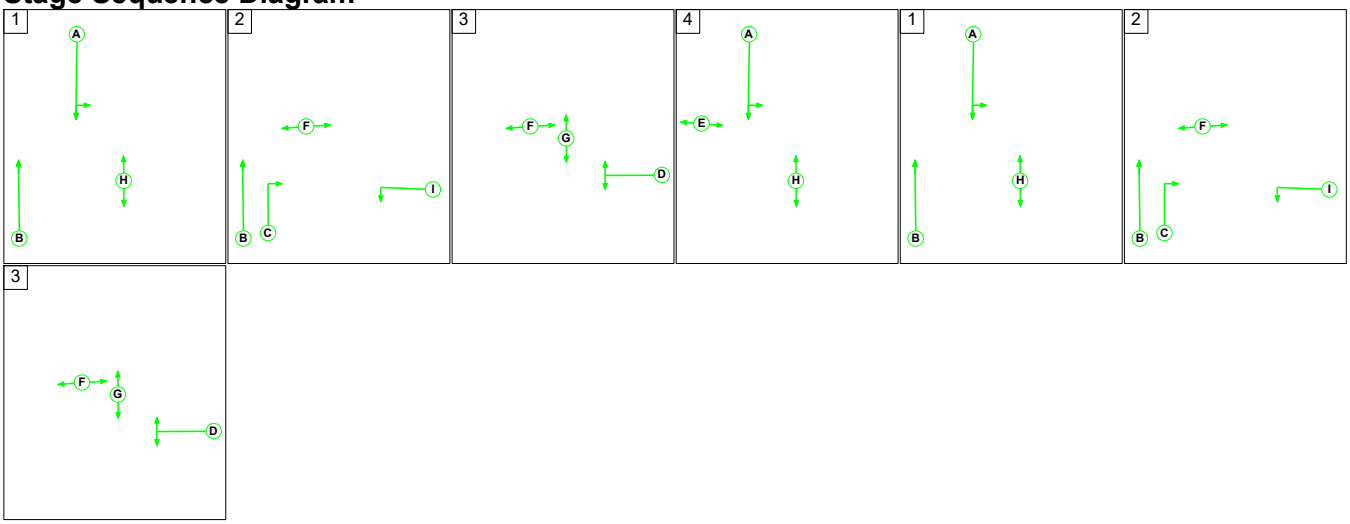
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**27.7**	**51.9**	**0.0**	**79.6**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**27.7**	**51.9**	**0.0**	**79.6**	**-**	**-**	**-**	**-**
1/2+1/1	995	995	-	-	-	4.5	2.4	-	6.9	24.9	20.6	2.4	23.0
1/3	925	925	-	-	-	4.1	2.3	-	6.4	24.9	18.8	2.3	21.1
2/2+2/1	84	84	-	-	-	0.8	0.2	-	0.9	40.2	1.6	0.2	1.8
3/1	1282	1265	-	-	-	8.7	22.7	-	31.4	88.0	39.8	22.7	62.5
3/2+3/3	1380	1359	-	-	-	9.6	24.4	-	34.1	88.9	48.7	24.4	73.2
4/1	1326	1326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1354	1354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1014	1014	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -12.8 PRC Over All Lanes (%): -12.8 Total Delay for Signalled Lanes (pcuHr): 79.63 Total Delay Over All Lanes(pcuHr): 79.63 Cycle Time (s): 180

Full Input Data And Results

Scenario 9: '23EY 15:00-16:00' (FG9: '23EY 15:00-16:00', Plan 2: 'Network Control Plan 2')

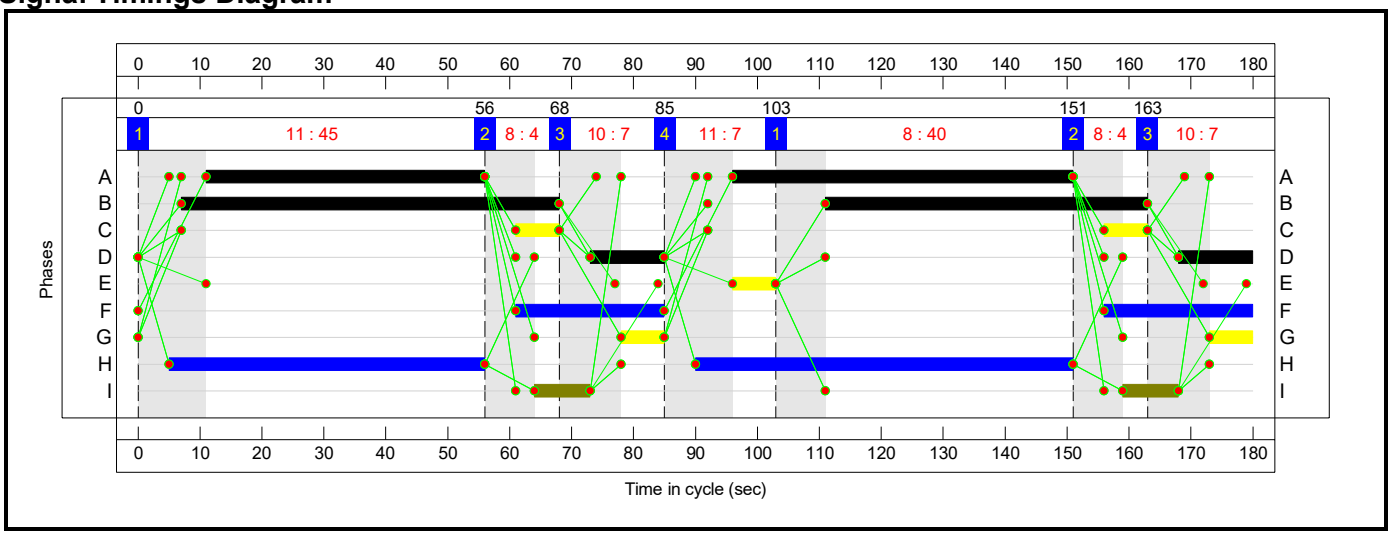
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	45	4	7	7	40	4	7
Change Point	0	56	68	85	103	151	163

Signal Timings Diagram

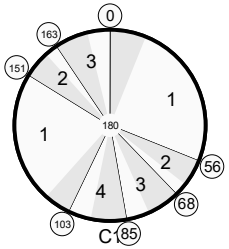


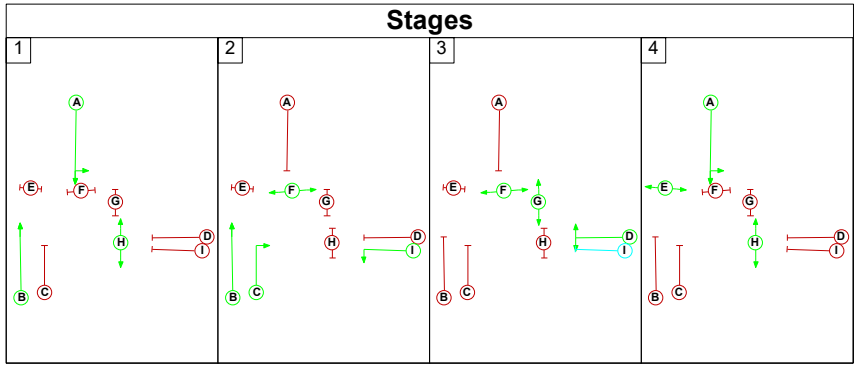
Full Input Data And Results

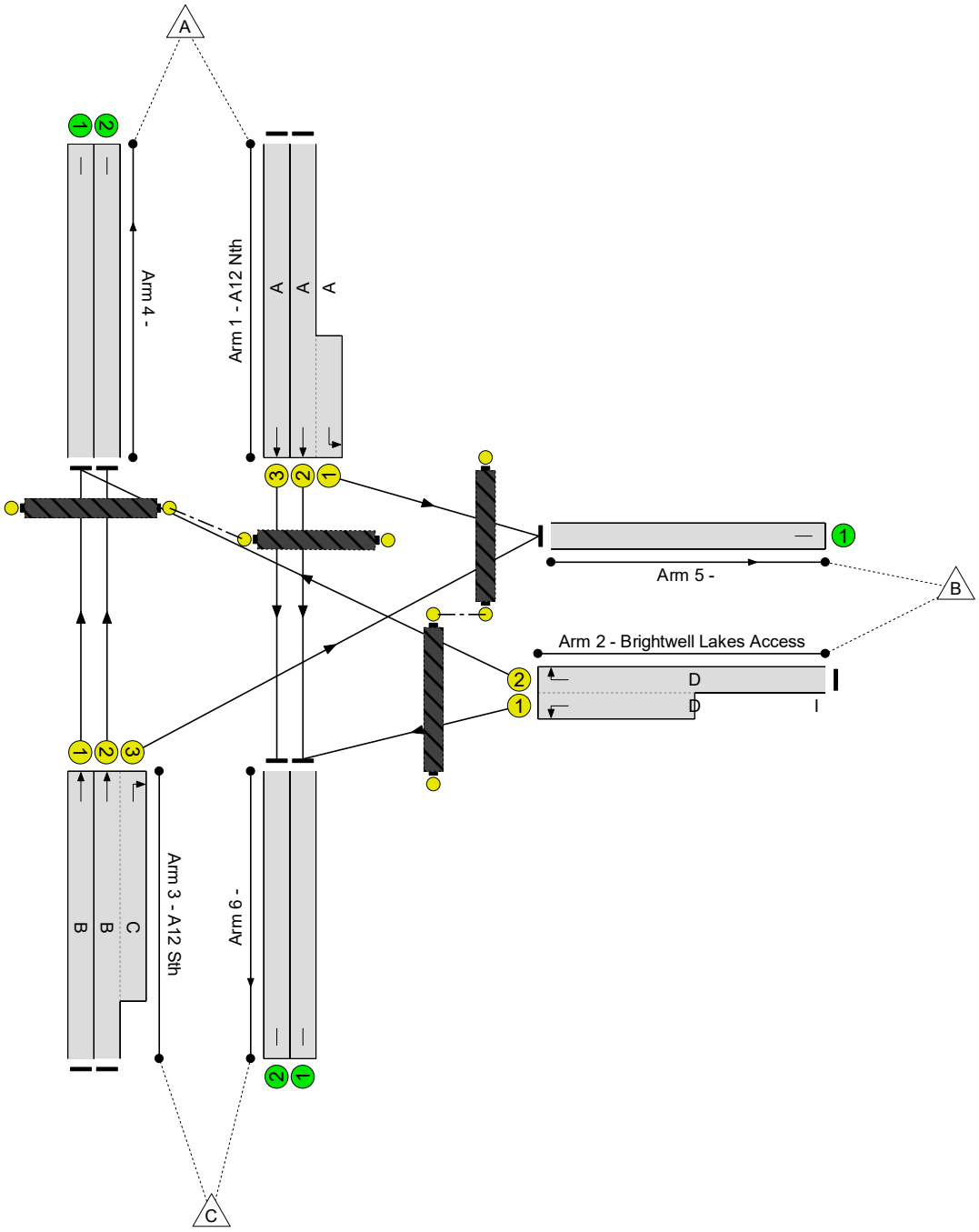
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 5.4 %
Total Traffic Delay: 25.0 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.4%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.4%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1028	2120:1819	1158+46	85.4 : 85.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	945	1980	1122	84.2%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	40	1786:1762	258+172	9.3 : 9.3%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	956	1980	1265	75.6%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1069	2120:1906	1350+39	77.0 : 77.0%
4/1		U	N/A	N/A	-		-	-	-	980	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1039	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1005	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	945	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

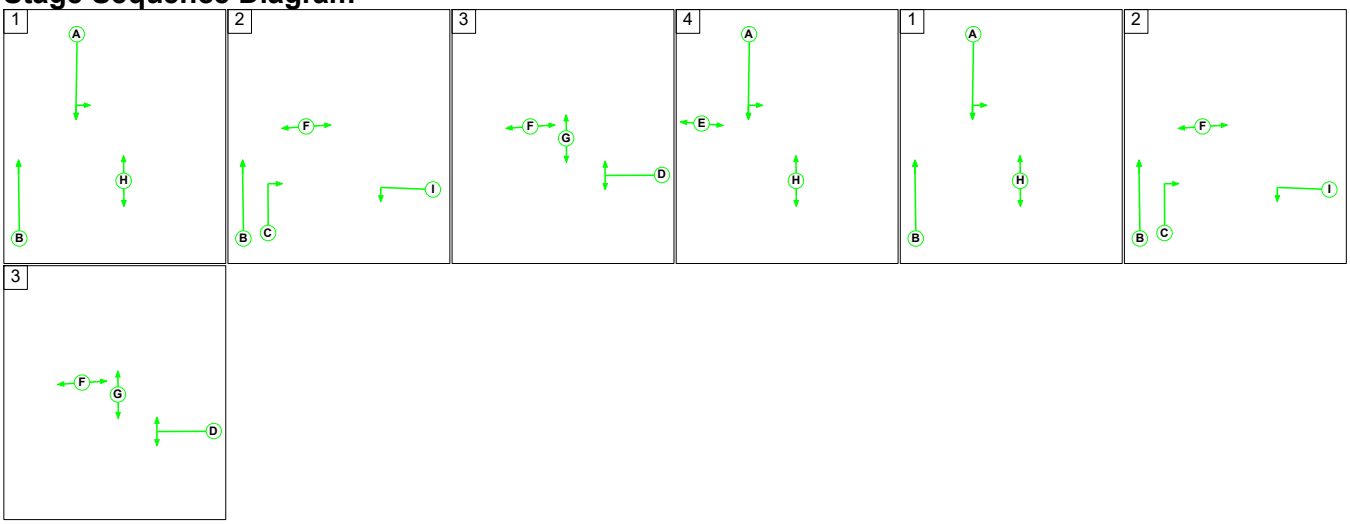
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**16.4**	**8.7**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**16.4**	**8.7**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
1/2+1/1	1028	1028	-	-	-	4.6	2.8	-	7.4	26.0	21.1	2.8	24.0
1/3	945	945	-	-	-	4.2	2.6	-	6.8	26.0	19.4	2.6	22.0
2/2+2/1	40	40	-	-	-	0.3	0.1	-	0.4	35.2	0.6	0.1	0.6
3/1	956	956	-	-	-	3.3	1.5	-	4.8	18.1	21.5	1.5	23.0
3/2+3/3	1069	1069	-	-	-	3.9	1.7	-	5.6	18.8	23.7	1.7	25.3
4/1	980	980	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1039	1039	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1005	1005	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	945	945	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 5.4 Total Delay for Signalled Lanes (pcuHr): 25.05 Cycle Time (s): 180
PRC Over All Lanes (%): 5.4 Total Delay Over All Lanes(pcuHr): 25.05

Full Input Data And Results

Scenario 10: '23EY 17:00-18:00' (FG10: '23EY 17:00-18:00', Plan 2: 'Network Control Plan 2')

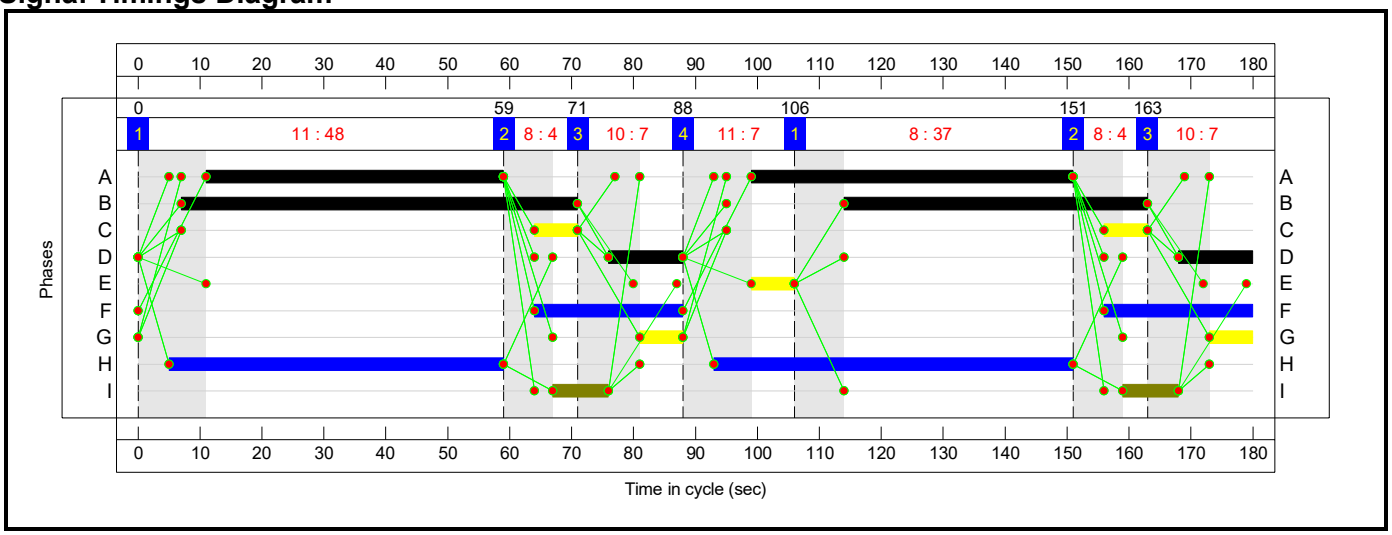
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	48	4	7	7	37	4	7
Change Point	0	59	71	88	106	151	163

Signal Timings Diagram

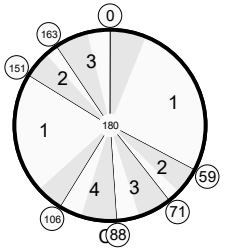


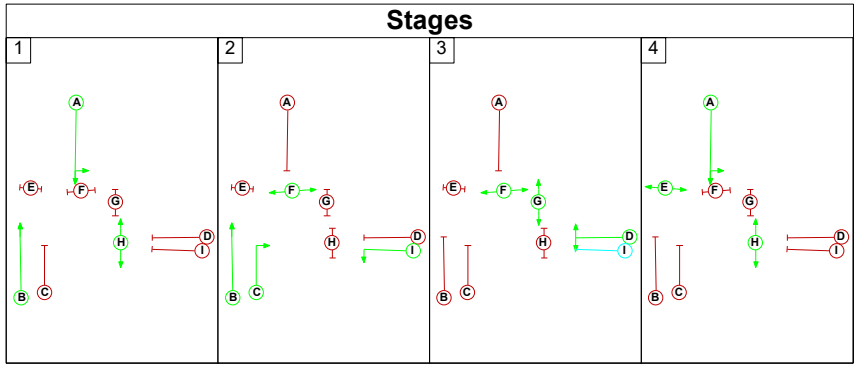
Full Input Data And Results

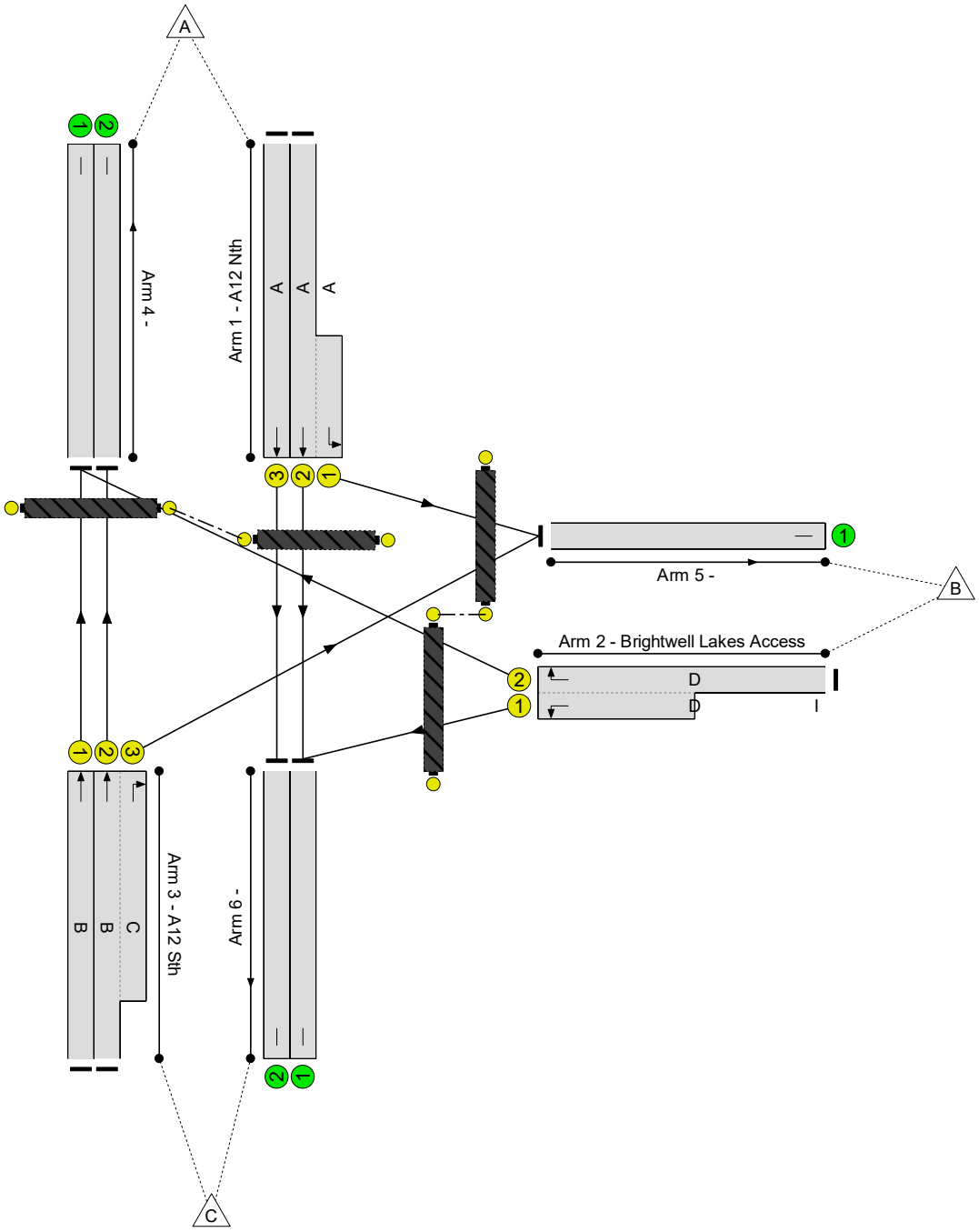
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 7.9 %
Total Traffic Delay: 23.3 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.4%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.4%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1004	2120:1819	1162+42	83.4 : 83.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	923	1980	1122	82.3%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	44	1786:1762	258+196	9.7 : 9.7%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	920	1980	1265	72.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1050	2120:1906	1344+64	74.6 : 74.6%
4/1		U	N/A	N/A	-		-	-	-	945	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	83	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	923	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

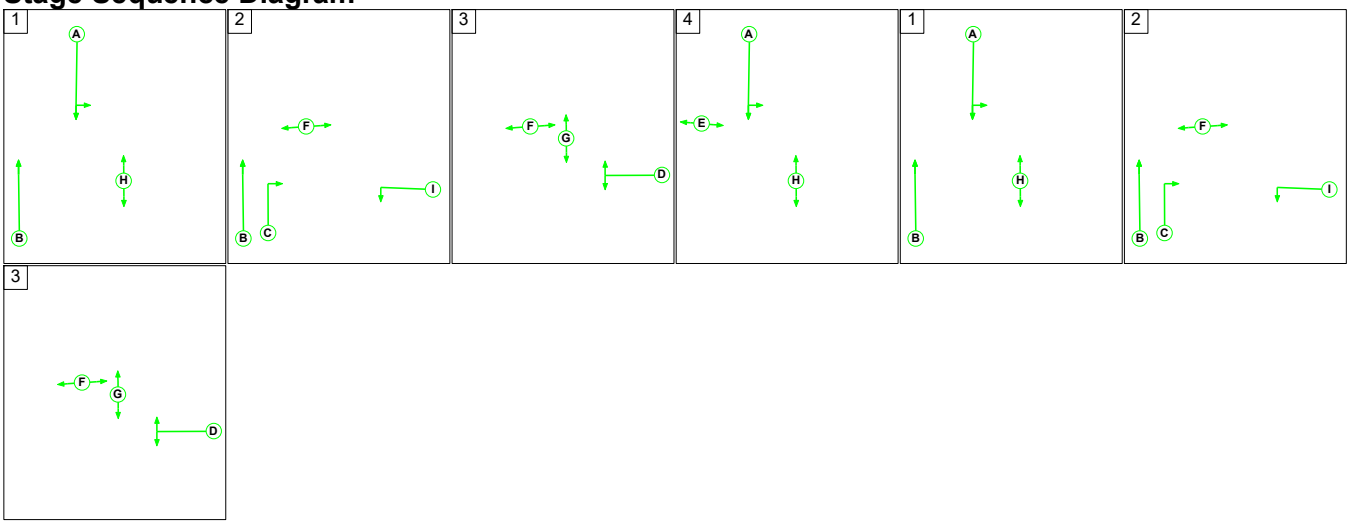
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.8**	**7.6**	**0.0**	**23.3**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**15.8**	**7.6**	**0.0**	**23.3**	**-**	**-**	**-**	**-**
1/2+1/1	1004	1004	-	-	-	4.4	2.5	-	6.9	24.6	20.1	2.5	22.6
1/3	923	923	-	-	-	4.1	2.3	-	6.3	24.7	18.7	2.3	21.0
2/2+2/1	44	44	-	-	-	0.4	0.1	-	0.4	34.7	0.6	0.1	0.6
3/1	920	920	-	-	-	3.0	1.3	-	4.4	17.1	19.9	1.3	21.3
3/2+3/3	1050	1050	-	-	-	3.9	1.5	-	5.3	18.3	22.0	1.5	23.4
4/1	945	945	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	83	83	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	923	923	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 7.9 Total Delay for Signalled Lanes (pcuHr): 23.31 Cycle Time (s): 180
PRC Over All Lanes (%): 7.9 Total Delay Over All Lanes(pcuHr): 23.31

Full Input Data And Results

Scenario 11: '28RC 06:00-07:00' (FG11: '28RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

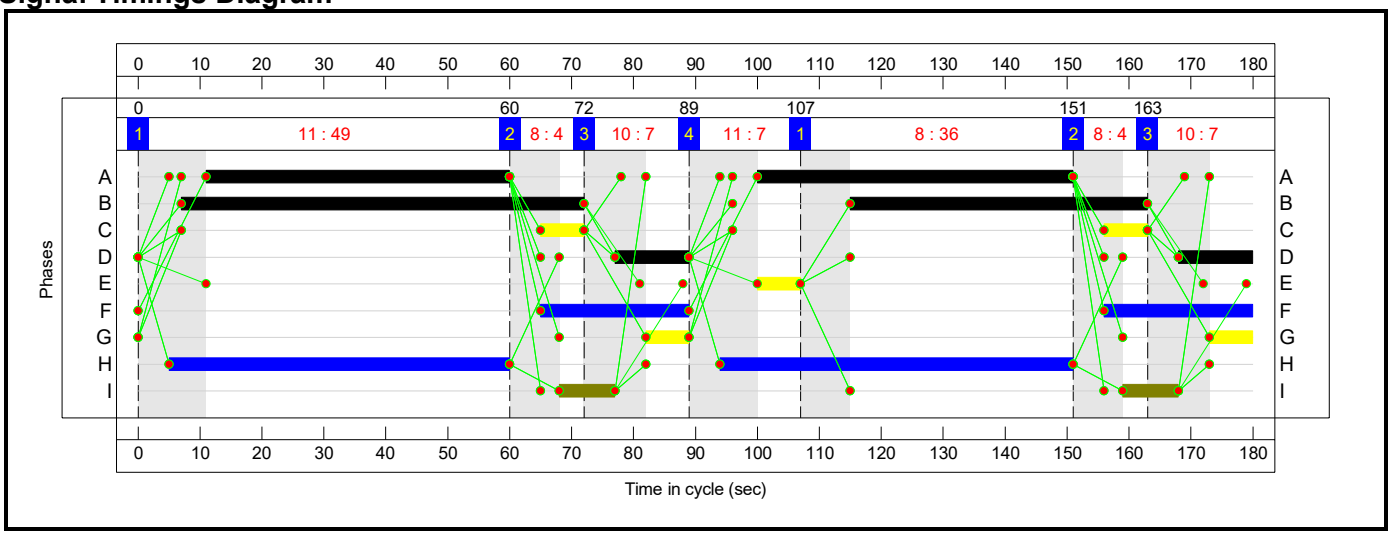
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

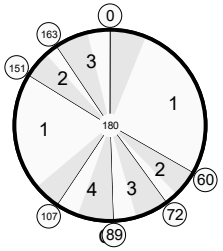


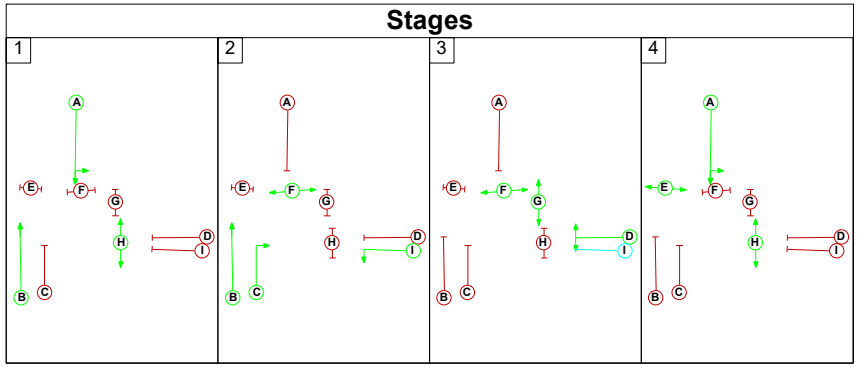
Full Input Data And Results

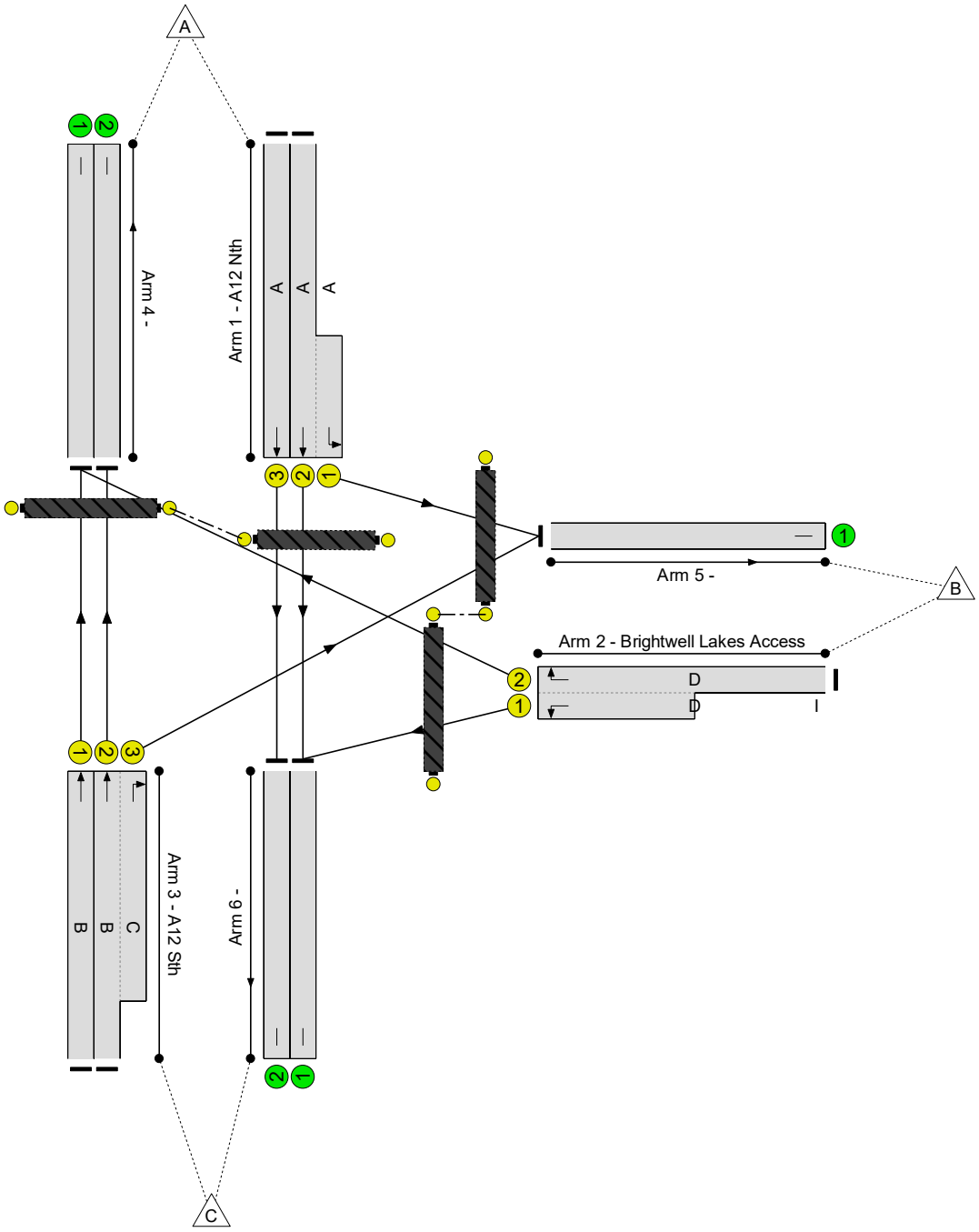
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 109.9 %
Total Traffic Delay: 6.3 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	514	2120:1980	1199+0	42.9 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	465	1980	1122	41.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	2	1786:1965	258+0	0.8 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	419	1980	1265	33.1%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	468	2120:2065	1354+0	34.6 : 0.0%
4/1		U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	468	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	465	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

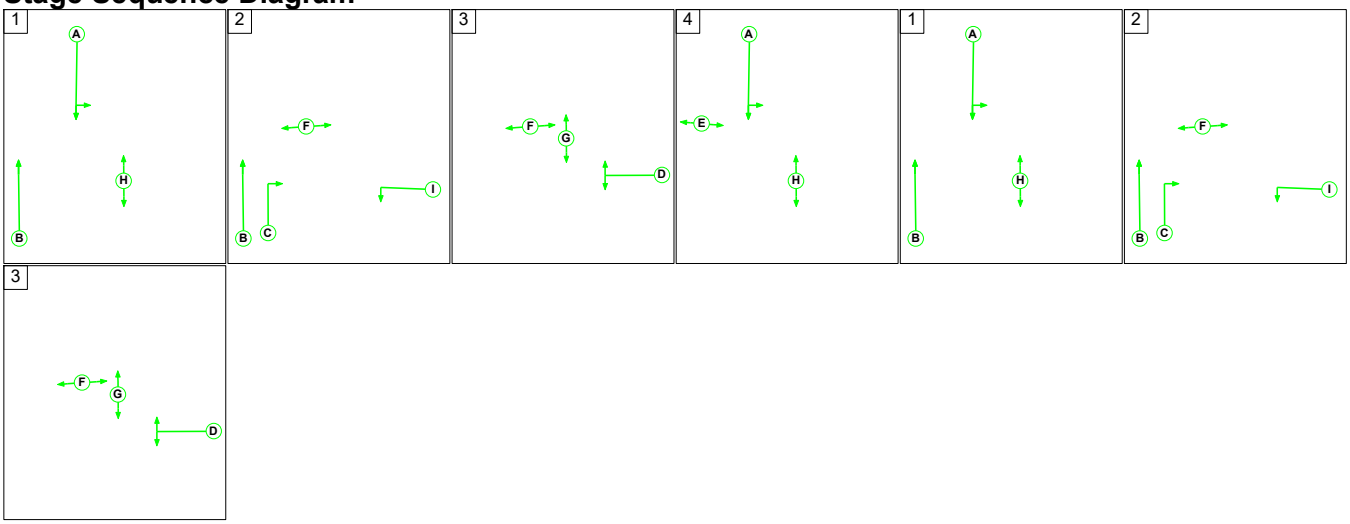
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**5.0**	**1.2**	**0.0**	**6.3**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**5.0**	**1.2**	**0.0**	**6.3**	**-**	**-**	**-**	**-**
1/2+1/1	514	514	-	-	-	1.6	0.4	-	2.0	13.8	7.3	0.4	7.7
1/3	465	465	-	-	-	1.4	0.4	-	1.8	13.8	6.5	0.4	6.8
2/2+2/1	2	2	-	-	-	0.0	0.0	-	0.0	40.4	0.0	0.0	0.0
3/1	419	419	-	-	-	0.9	0.2	-	1.2	10.2	6.2	0.2	6.4
3/2+3/3	468	468	-	-	-	1.1	0.3	-	1.3	10.2	6.9	0.3	7.2
4/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	465	465	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 109.9 Total Delay for Signalled Lanes (pcuHr): 6.29 Cycle Time (s): 180
PRC Over All Lanes (%): 109.9 Total Delay Over All Lanes(pcuHr): 6.29

Full Input Data And Results

Scenario 12: '28RC 07:00-08:00' (FG12: '28RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

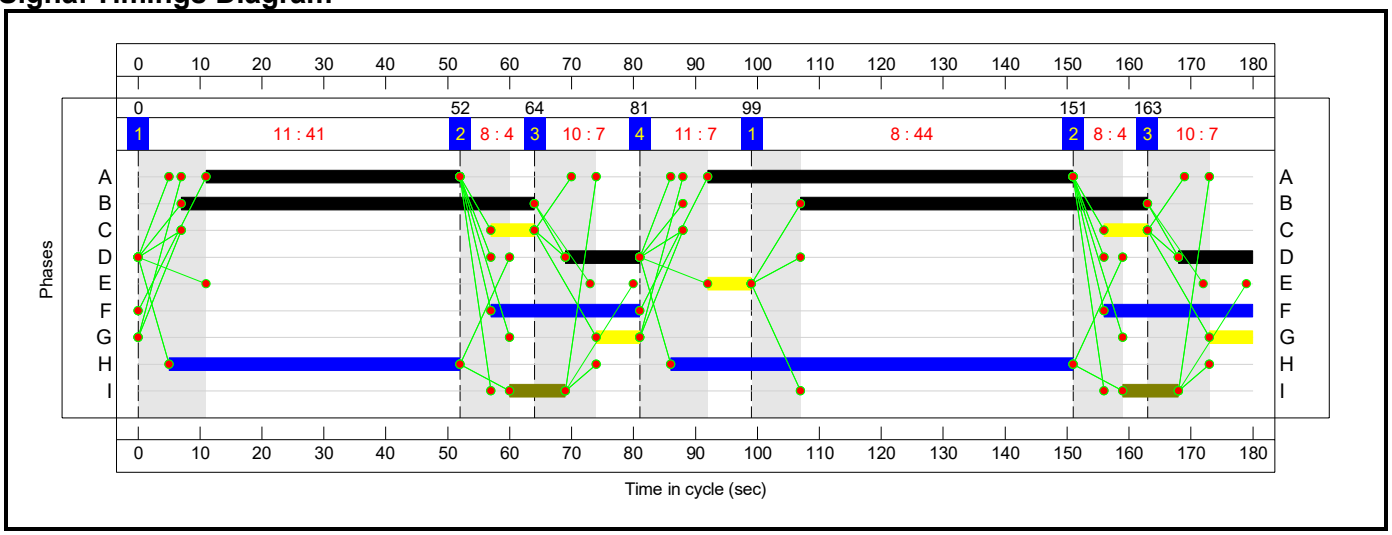
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	41	4	7	7	44	4	7
Change Point	0	52	64	81	99	151	163

Signal Timings Diagram

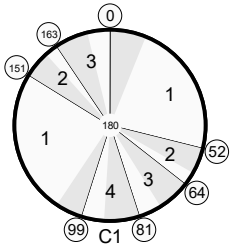


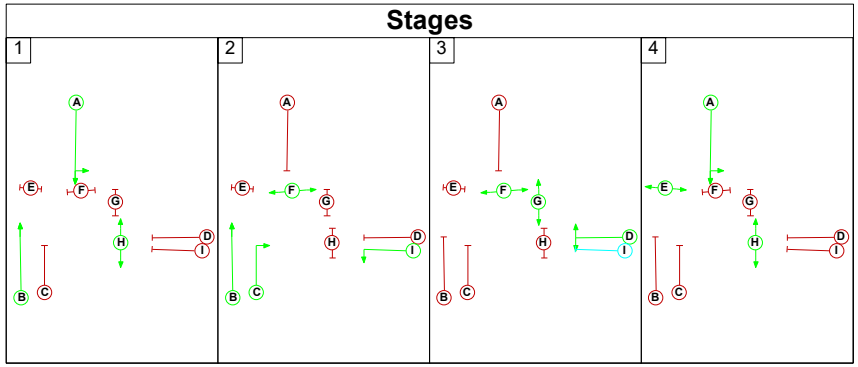
Full Input Data And Results

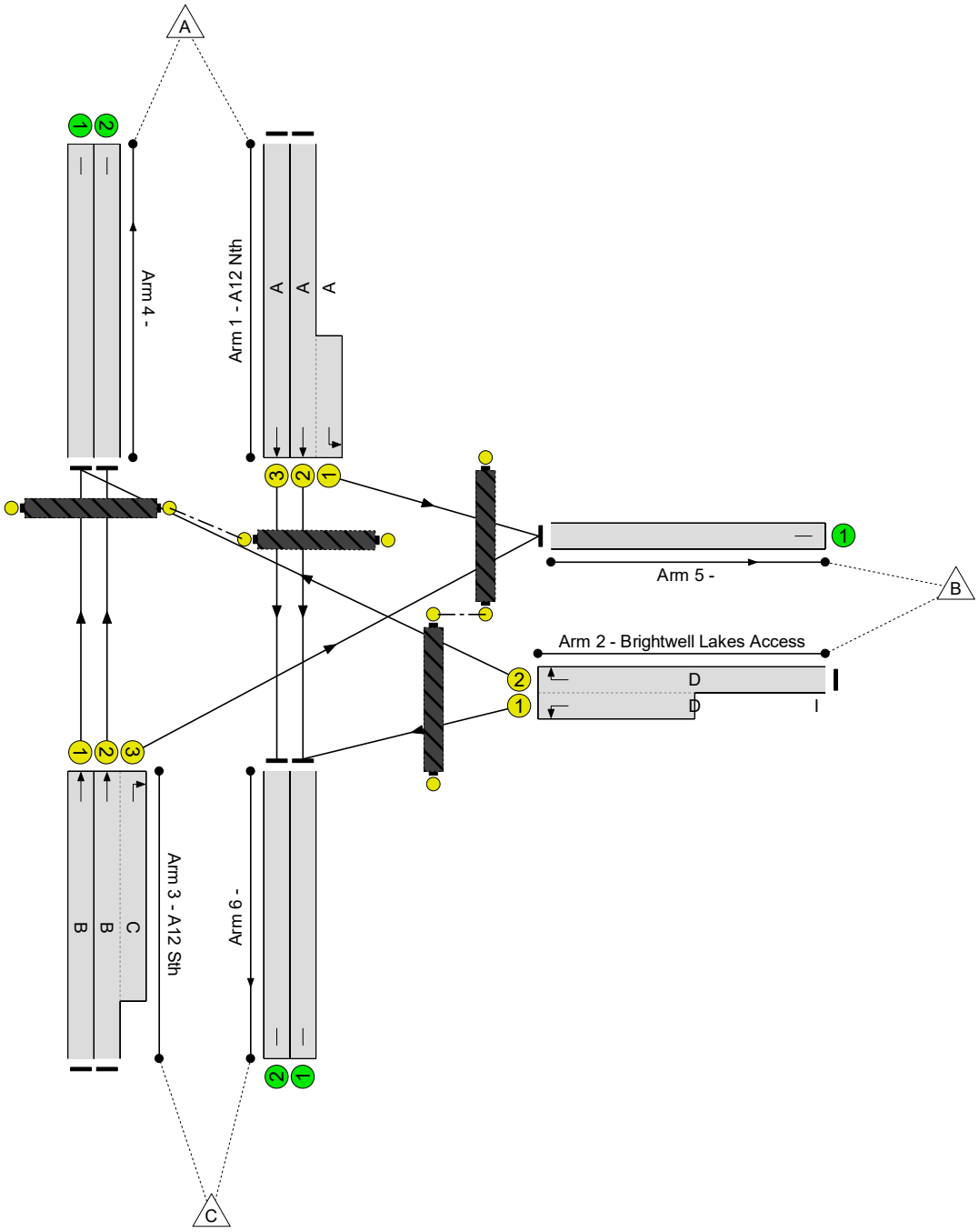
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 9.9 %
Total Traffic Delay: 23.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	912	2120:1819	1187+13	76.0 : 76.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	840	1980	1122	74.9%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	127	1786:1762	218+411	20.2 : 20.2%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1021	1980	1265	80.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1133	2120:1906	1352+32	81.9 : 81.9%
4/1		U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1107	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	36	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	985	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	840	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

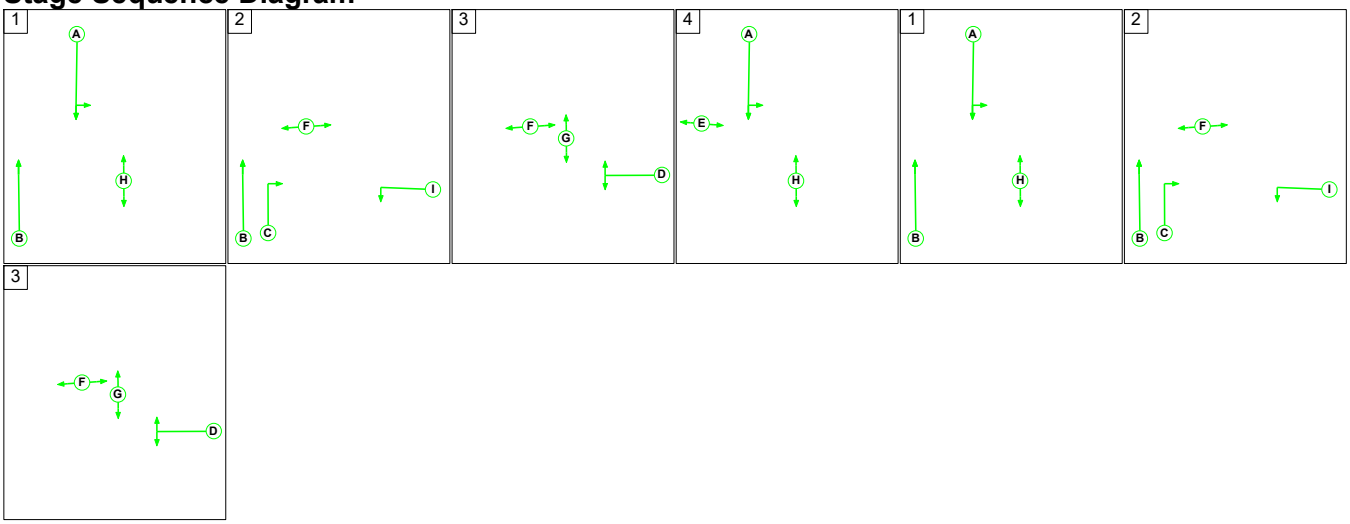
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**16.3**	**7.4**	**0.0**	**23.8**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**16.3**	**7.4**	**0.0**	**23.8**	**-**	**-**	**-**	**-**
1/2+1/1	912	912	-	-	-	3.7	1.6	-	5.3	21.0	17.1	1.6	18.7
1/3	840	840	-	-	-	3.4	1.5	-	4.9	21.0	15.6	1.5	17.1
2/2+2/1	127	127	-	-	-	1.1	0.1	-	1.2	33.4	1.8	0.1	2.0
3/1	1021	1021	-	-	-	3.7	2.1	-	5.8	20.4	24.4	2.1	26.4
3/2+3/3	1133	1133	-	-	-	4.4	2.2	-	6.6	21.0	27.0	2.2	29.3
4/1	1065	1065	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1107	1107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	36	36	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	985	985	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	840	840	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 9.9 Total Delay for Signalled Lanes (pcuHr): 23.78 Cycle Time (s): 180
PRC Over All Lanes (%): 9.9 Total Delay Over All Lanes(pcuHr): 23.78

Full Input Data And Results

Scenario 13: '28RC 08:00-09:00' (FG13: '28RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

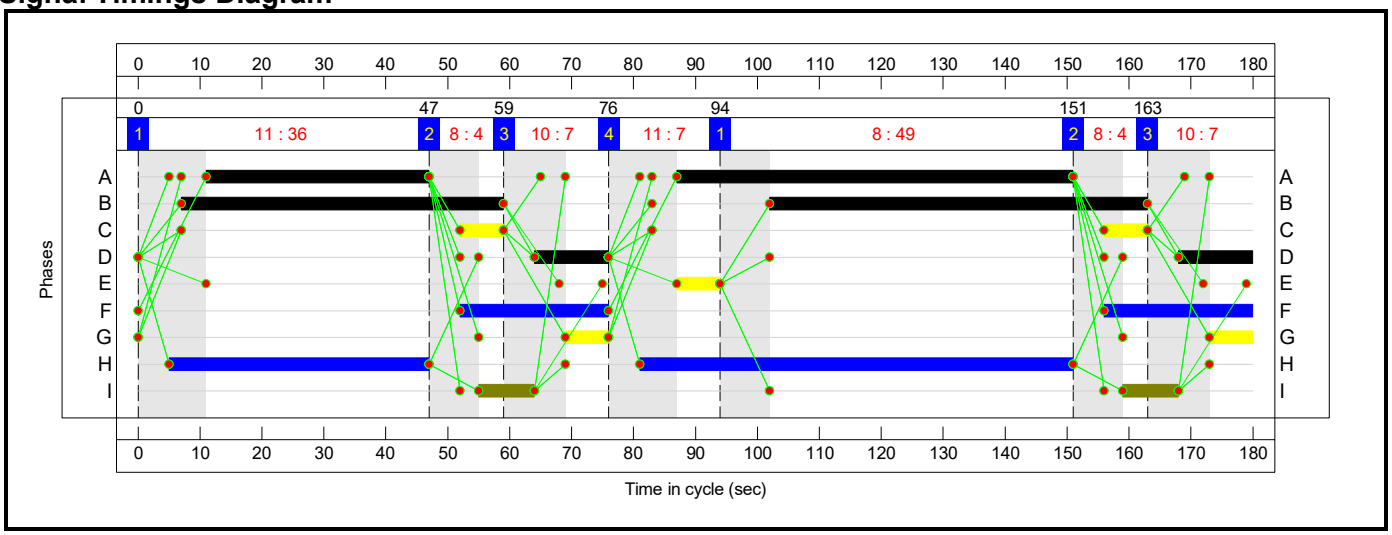
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	36	4	7	7	49	4	7
Change Point	0	47	59	76	94	151	163

Signal Timings Diagram

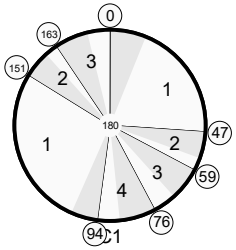


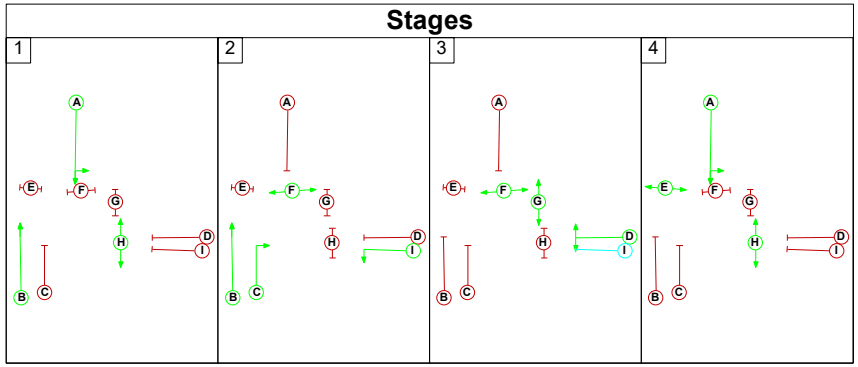
Full Input Data And Results

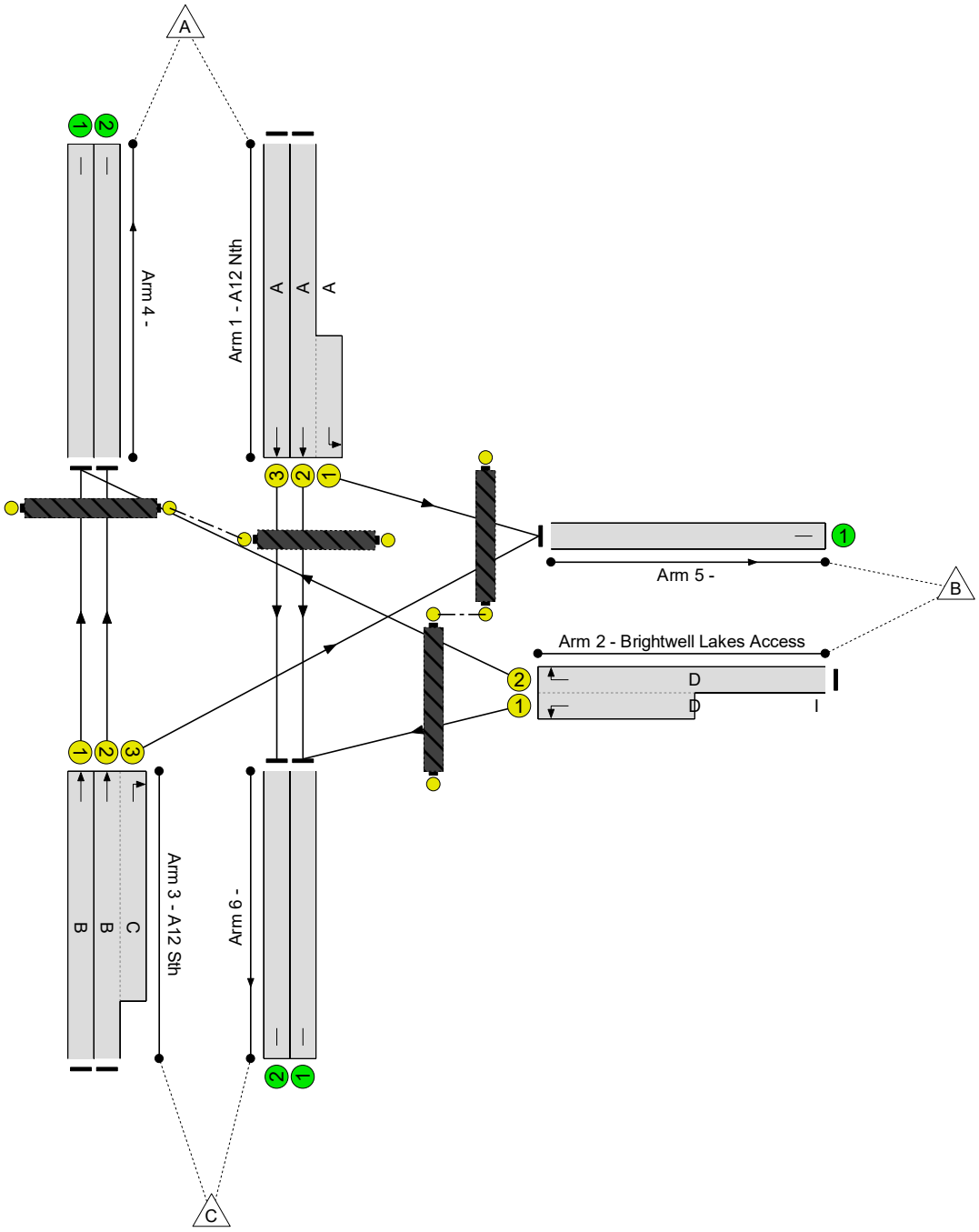
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -15.3 %
Total Traffic Delay: 113.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.8%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.8%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1049	2120:1819	1177+24	87.3 : 87.3%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	972	1980	1122	86.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	188	1786:1762	258+167	44.2 : 44.2%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1310	1980	1265	103.6%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1462	2120:1906	1344+66	103.8 : 103.8%
4/1		U	N/A	N/A	-		-	-	-	1424	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1394	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	972	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**37.2**	**75.9**	**0.0**	**113.1**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**37.2**	**75.9**	**0.0**	**113.1**	**-**	**-**	**-**	**-**
1/2+1/1	1049	1049	-	-	-	5.0	3.3	-	8.3	28.4	22.9	3.3	26.2
1/3	972	972	-	-	-	4.6	3.1	-	7.7	28.4	21.0	3.1	24.1
2/2+2/1	188	188	-	-	-	1.7	0.4	-	2.1	40.6	3.1	0.4	3.5
3/1	1310	1265	-	-	-	11.9	32.6	-	44.5	122.2	42.3	32.6	74.9
3/2+3/3	1462	1409	-	-	-	14.0	36.5	-	50.5	124.4	51.9	36.5	88.4
4/1	1379	1379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1344	1344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	87	87	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	972	972	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -15.3
PRC Over All Lanes (%): -15.3

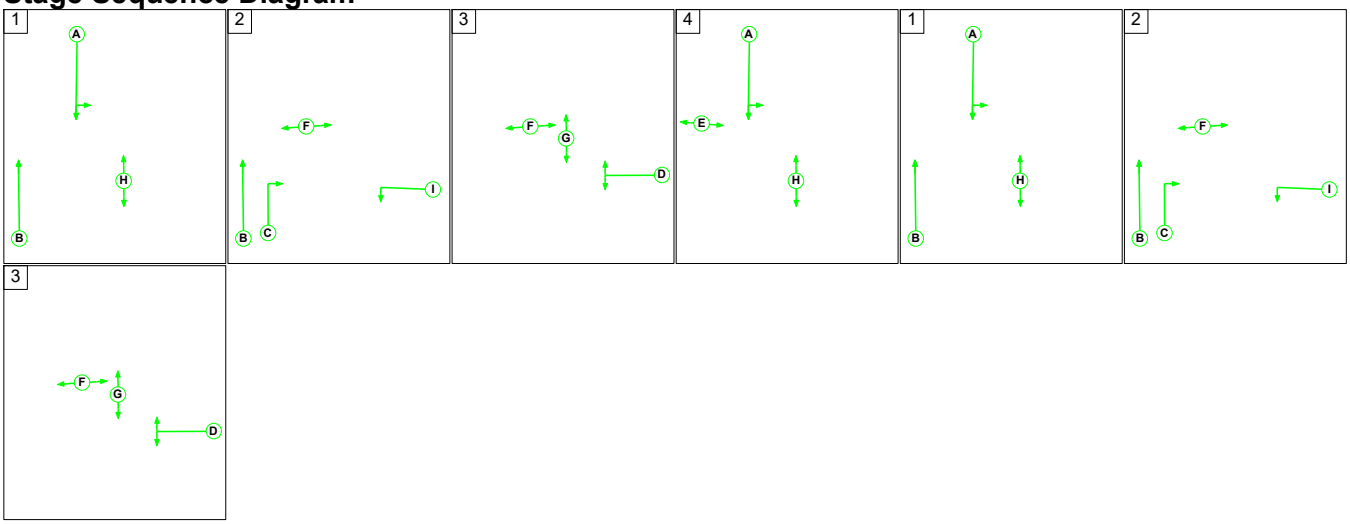
Total Delay for Signalled Lanes (pcuHr): 113.06
Total Delay Over All Lanes(pcuHr): 113.06

Cycle Time (s): 180

Full Input Data And Results

Scenario 14: '28RC 15:00-16:00' (FG14: '28RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

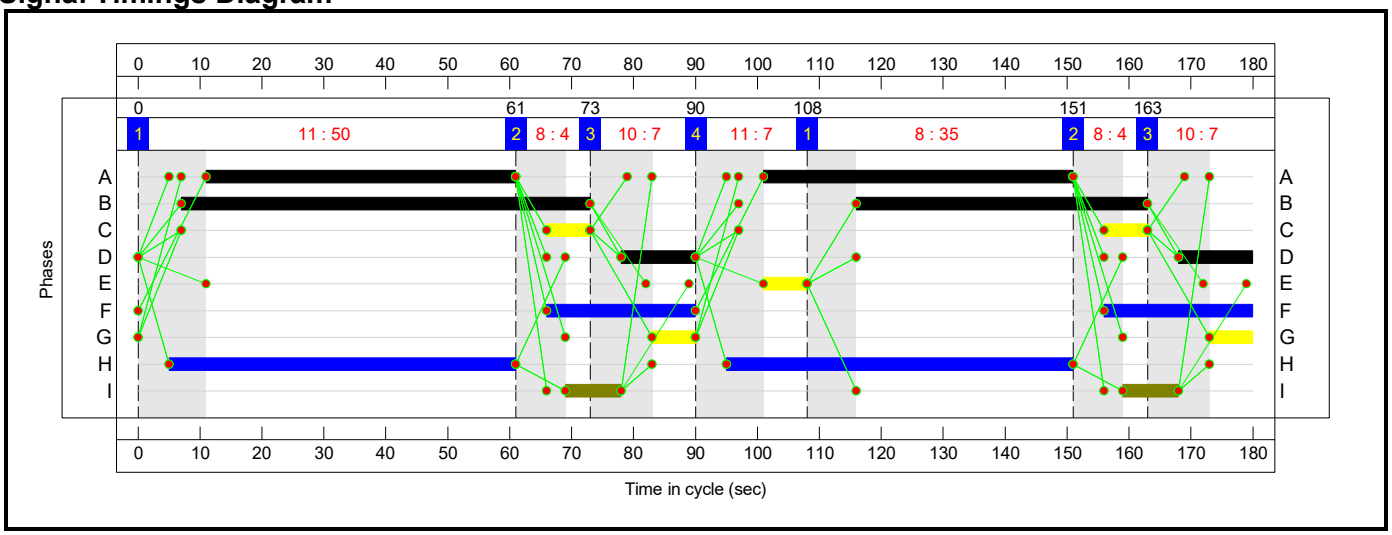
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

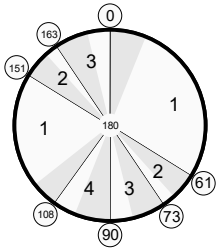


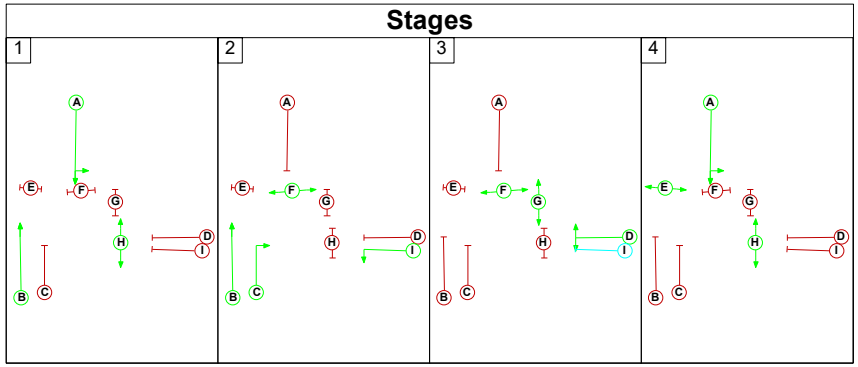
Full Input Data And Results

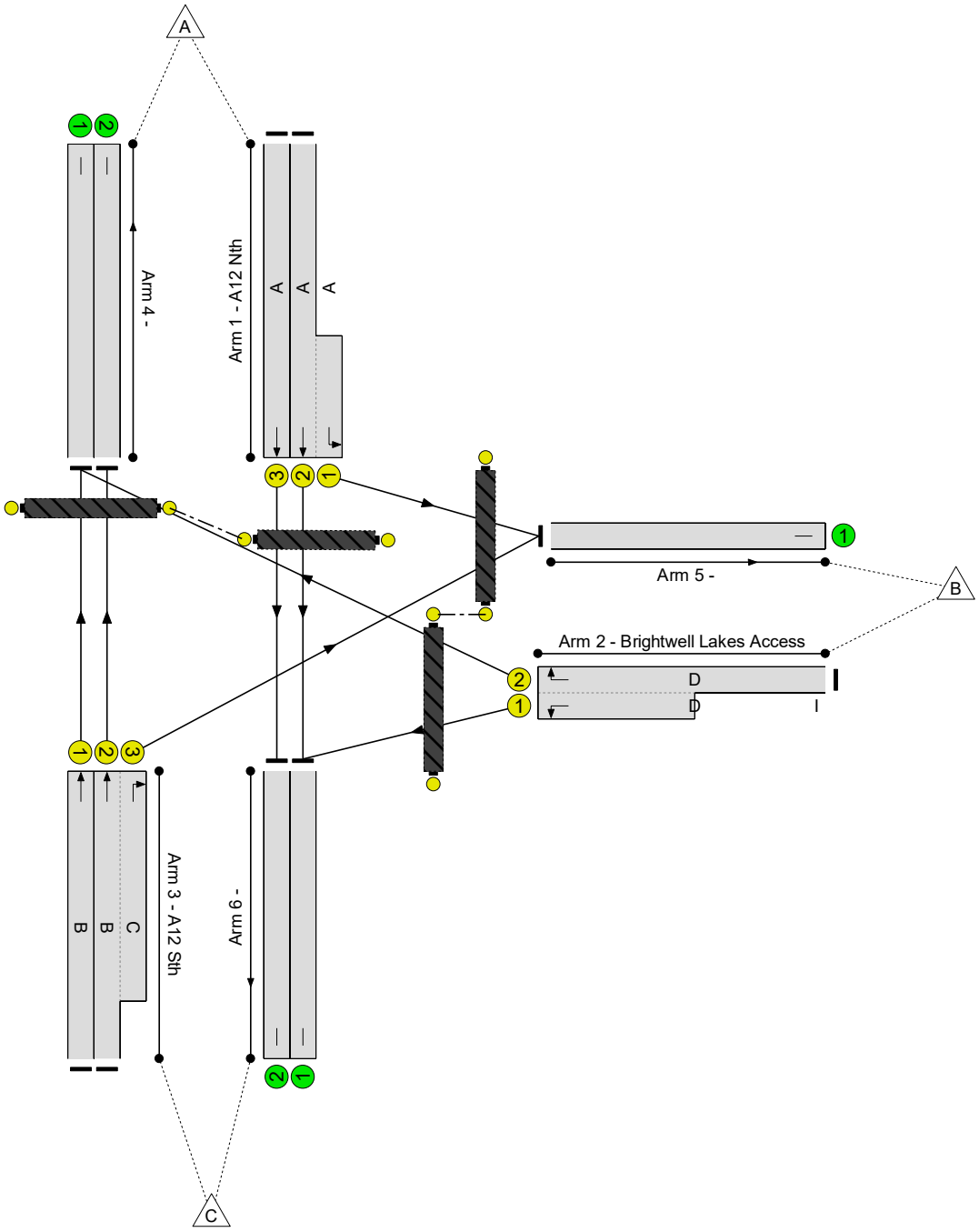
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -0.1 %
Total Traffic Delay: 32.7 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.1%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.1%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1088	2120:1819	1132+75	90.1 : 90.1%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1000	1980	1122	89.1%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	114	1786:1762	258+408	17.4 : 16.9%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1020	1980	1265	80.6%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1232	2120:1906	1323+156	83.3 : 83.3%
4/1		U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1089	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1000	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**20.0**	**12.7**	**0.0**	**32.7**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**20.0**	**12.7**	**0.0**	**32.7**	**-**	**-**	**-**	**-**
1/2+1/1	1088	1088	-	-	-	5.1	4.2	-	9.3	30.9	23.4	4.2	27.6
1/3	1000	1000	-	-	-	4.7	3.9	-	8.6	31.0	21.7	3.9	25.5
2/2+2/1	114	114	-	-	-	0.9	0.1	-	1.0	32.8	1.3	0.1	1.4
3/1	1020	1020	-	-	-	3.7	2.0	-	5.8	20.4	24.4	2.0	26.4
3/2+3/3	1232	1232	-	-	-	5.5	2.4	-	8.0	23.2	26.8	2.4	29.2
4/1	1065	1065	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1089	1089	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1000	1000	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -0.1
PRC Over All Lanes (%): -0.1

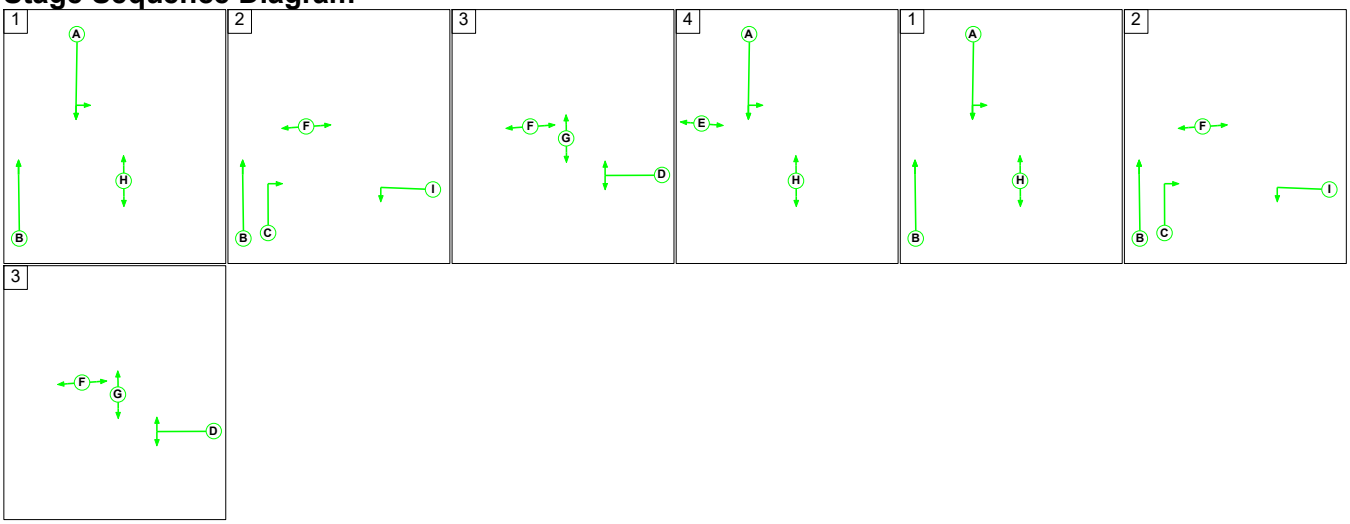
Total Delay for Signalled Lanes (pcuHr): 32.69
Total Delay Over All Lanes(pcuHr): 32.69

Cycle Time (s): 180

Full Input Data And Results

Scenario 15: '28RC 17:00-18:00' (FG15: '28RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

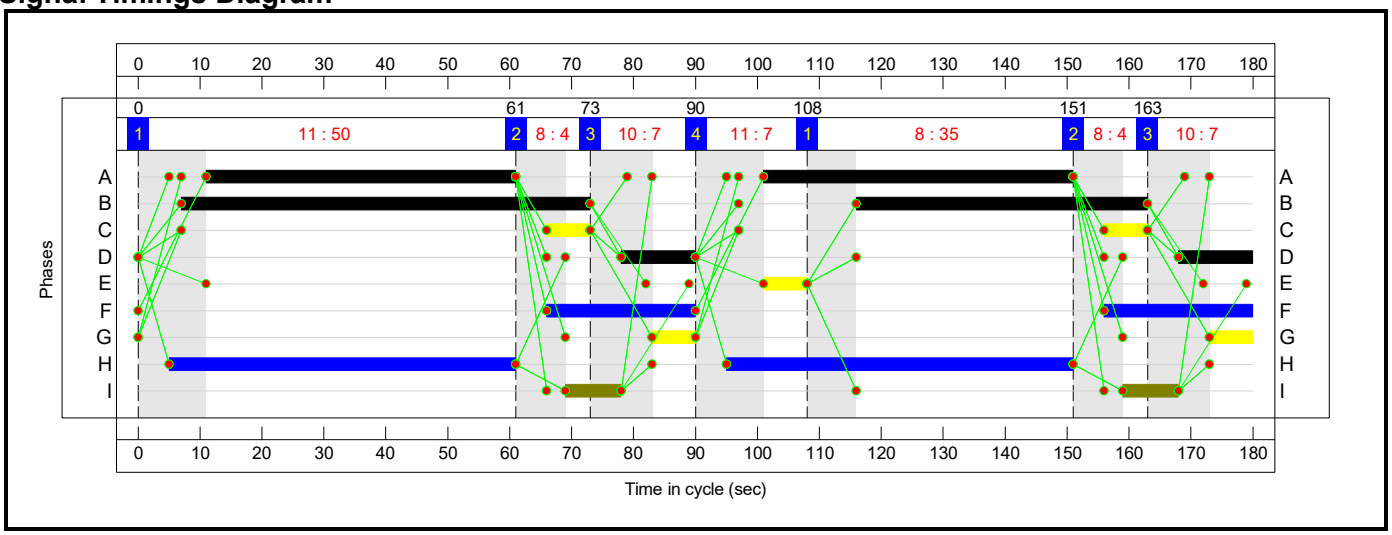
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

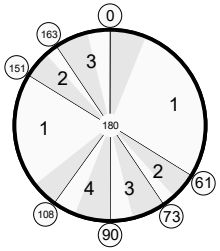


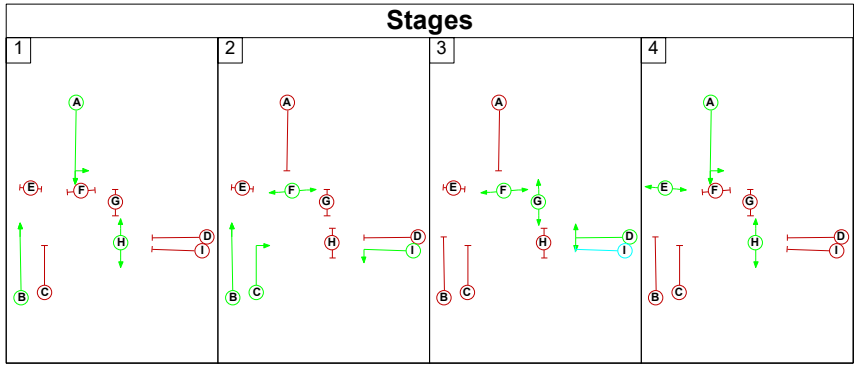
Full Input Data And Results

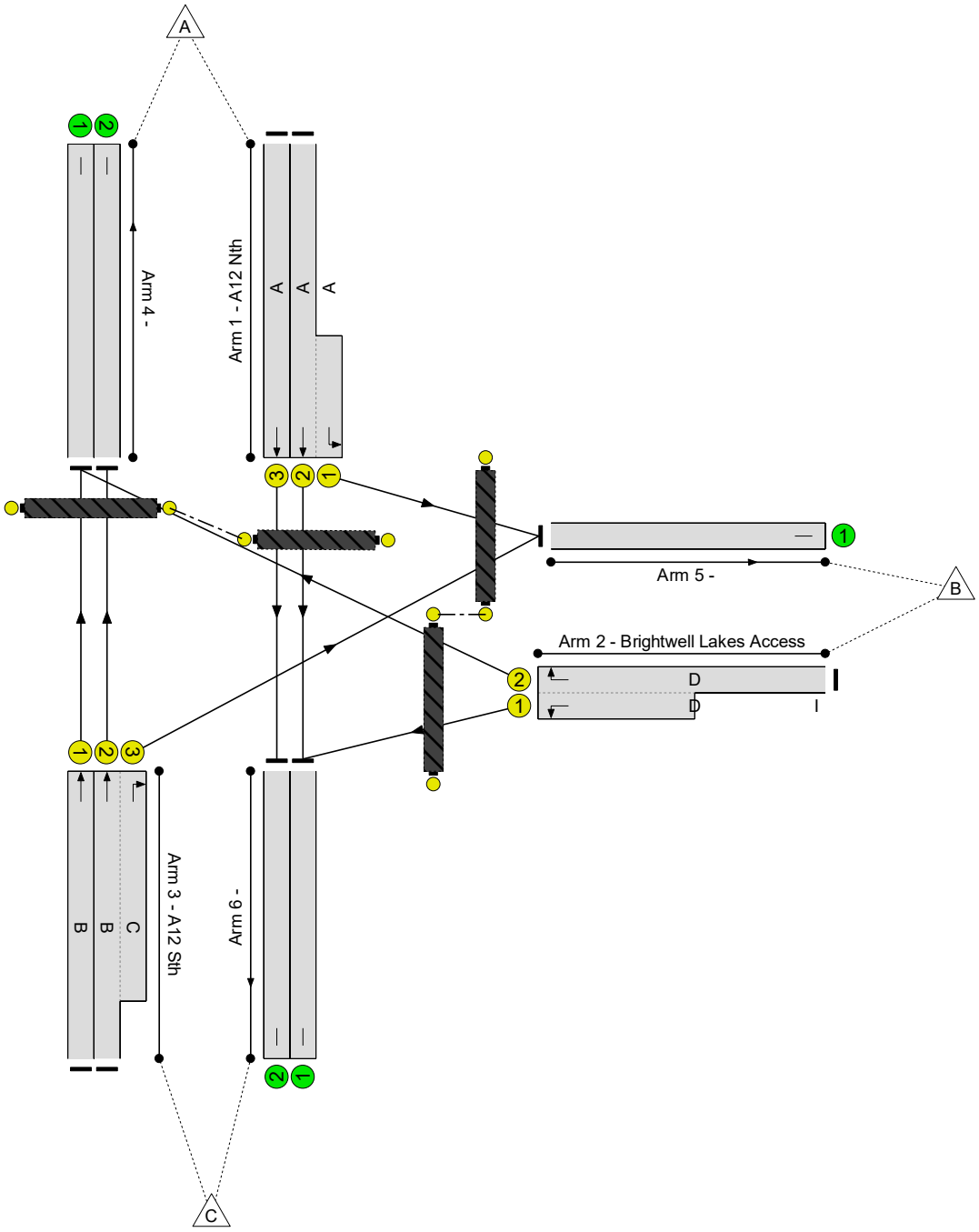
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -31.2 %
Total Traffic Delay: 49.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.0%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1068	2120:1819	1144+62	88.5 : 88.5%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	983	1980	1122	87.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	163	1786:1762	204+413	26.4 : 26.4%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	991	1980	1265	78.3%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1219	2120:1906	1303+169	78.2 : 118.0%
4/1		U	N/A	N/A	-		-	-	-	1045	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1019	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1122	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	983	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

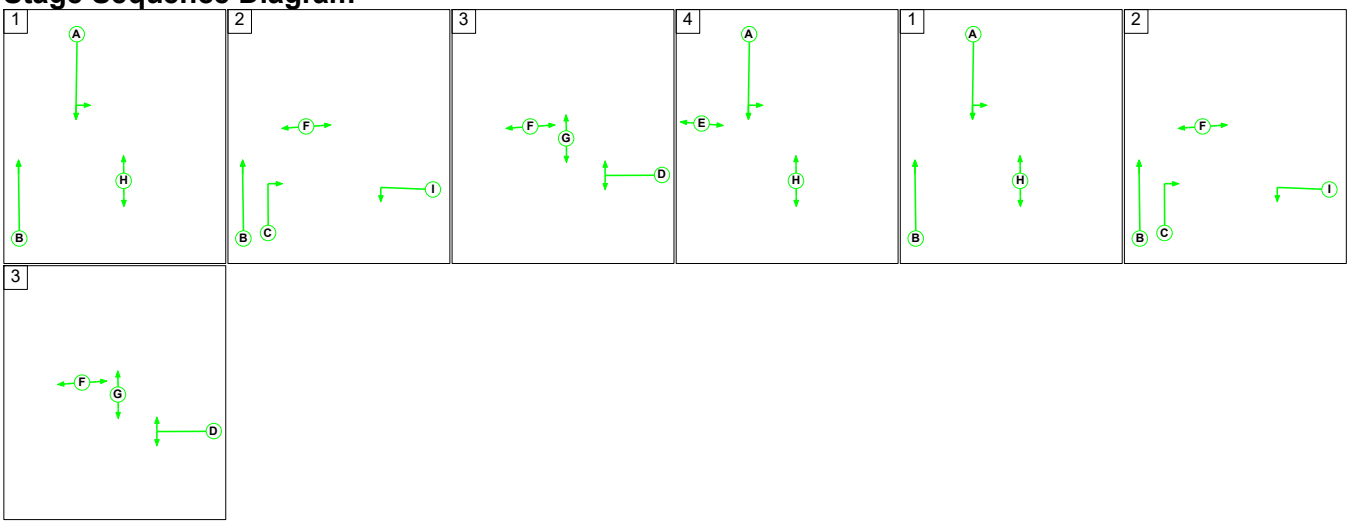
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.9**	**26.7**	**0.0**	**49.6**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**22.9**	**26.7**	**0.0**	**49.6**	**-**	**-**	**-**	**-**
1/2+1/1	1068	1068	-	-	-	4.9	3.7	-	8.6	29.0	22.5	3.7	26.1
1/3	983	983	-	-	-	4.6	3.4	-	8.0	29.1	21.0	3.4	24.4
2/2+2/1	163	163	-	-	-	1.3	0.2	-	1.5	33.6	2.2	0.2	2.4
3/1	991	991	-	-	-	3.5	1.8	-	5.3	19.2	23.1	1.8	24.9
3/2+3/3	1219	1188	-	-	-	8.6	17.6	-	26.2	77.5	22.6	17.6	40.3
4/1	1045	1045	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1019	1019	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1122	1122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	983	983	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -31.2 Total Delay for Signalled Lanes (pcuHr): 49.60 Cycle Time (s): 180
PRC Over All Lanes (%): -31.2 Total Delay Over All Lanes(pcuHr): 49.60

Full Input Data And Results

Scenario 16: '28PC 06:00-07:00' (FG16: '28PC 06:00-07:00', Plan 2: 'Network Control Plan 2')

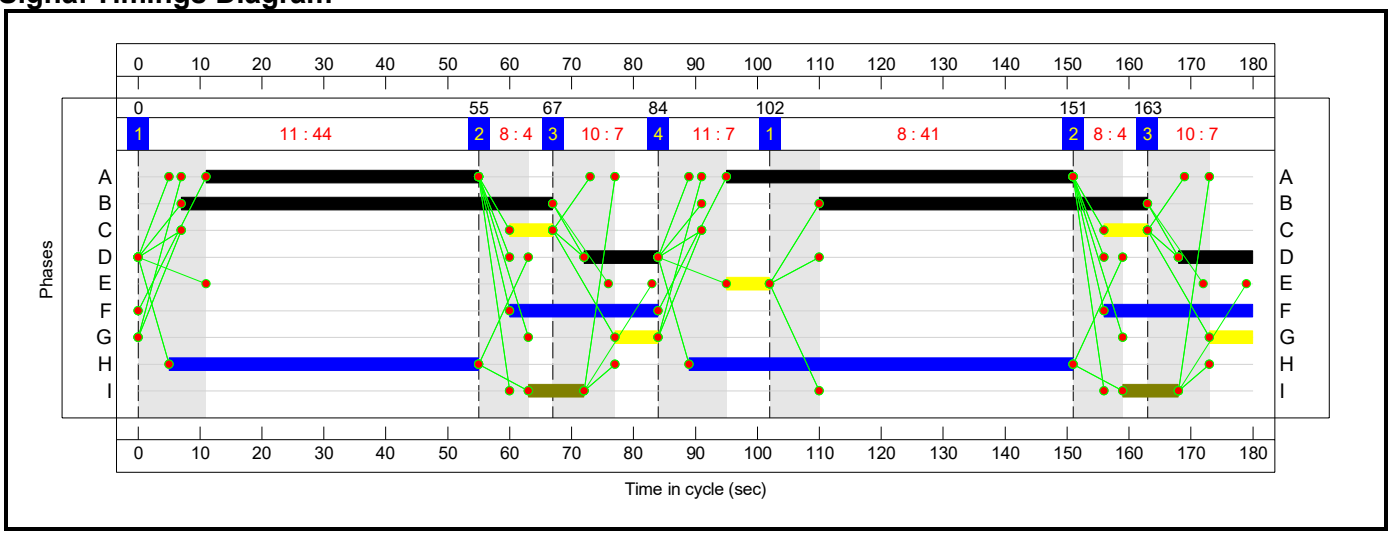
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	44	4	7	7	41	4	7
Change Point	0	55	67	84	102	151	163

Signal Timings Diagram

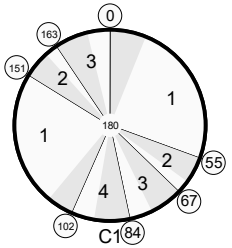


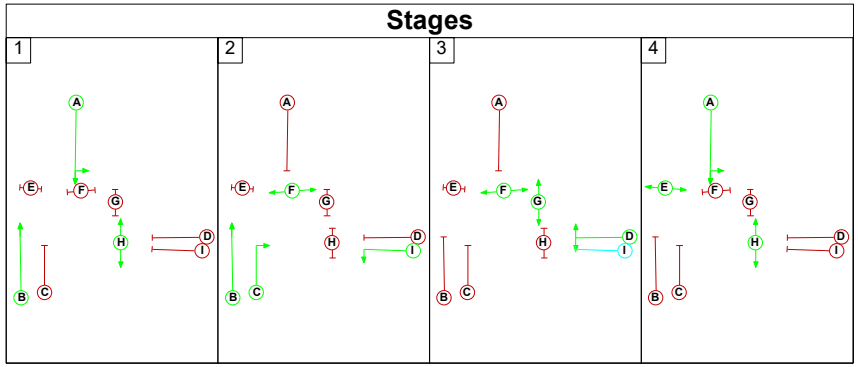
Full Input Data And Results

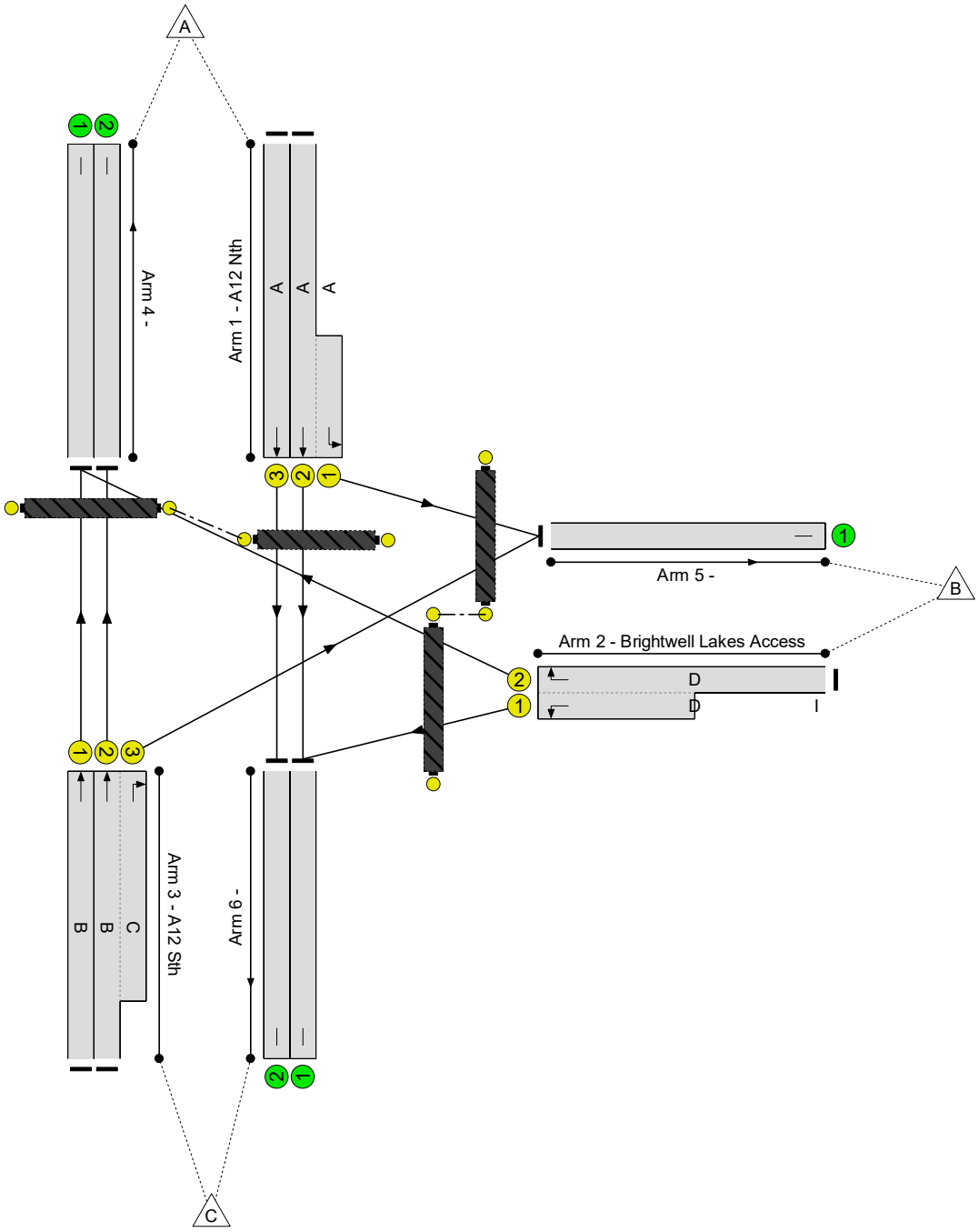
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 109.9 %
Total Traffic Delay: 6.9 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	514	2120:1980	1199+0	42.9 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	466	1980	1122	41.5%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	0	1965:1965	284+284	0.0 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	491	1980	1265	38.8%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	544	2120:2065	1354+0	40.2 : 0.0%
4/1		U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	544	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

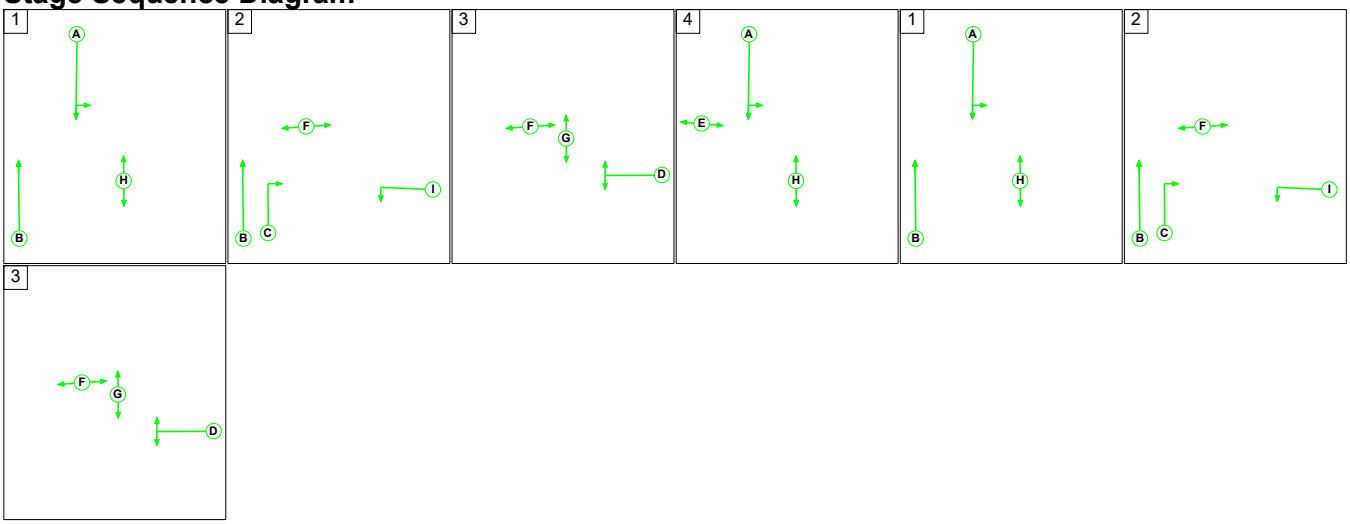
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**5.5**	**1.4**	**0.0**	**6.9**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**5.5**	**1.4**	**0.0**	**6.9**	**-**	**-**	**-**	**-**
1/2+1/1	514	514	-	-	-	1.6	0.4	-	2.0	13.8	7.3	0.4	7.7
1/3	466	466	-	-	-	1.4	0.4	-	1.8	13.8	6.6	0.4	7.0
2/2+2/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	491	491	-	-	-	1.2	0.3	-	1.5	10.8	7.5	0.3	7.8
3/2+3/3	544	544	-	-	-	1.3	0.3	-	1.6	10.8	8.5	0.3	8.8
4/1	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 109.9 Total Delay for Signalled Lanes (pcuHr): 6.86 Cycle Time (s): 180
PRC Over All Lanes (%): 109.9 Total Delay Over All Lanes(pcuHr): 6.86

Full Input Data And Results

Scenario 17: '28PC 07:00-08:00' (FG17: '28PC 07:00-08:00', Plan 2: 'Network Control Plan 2')

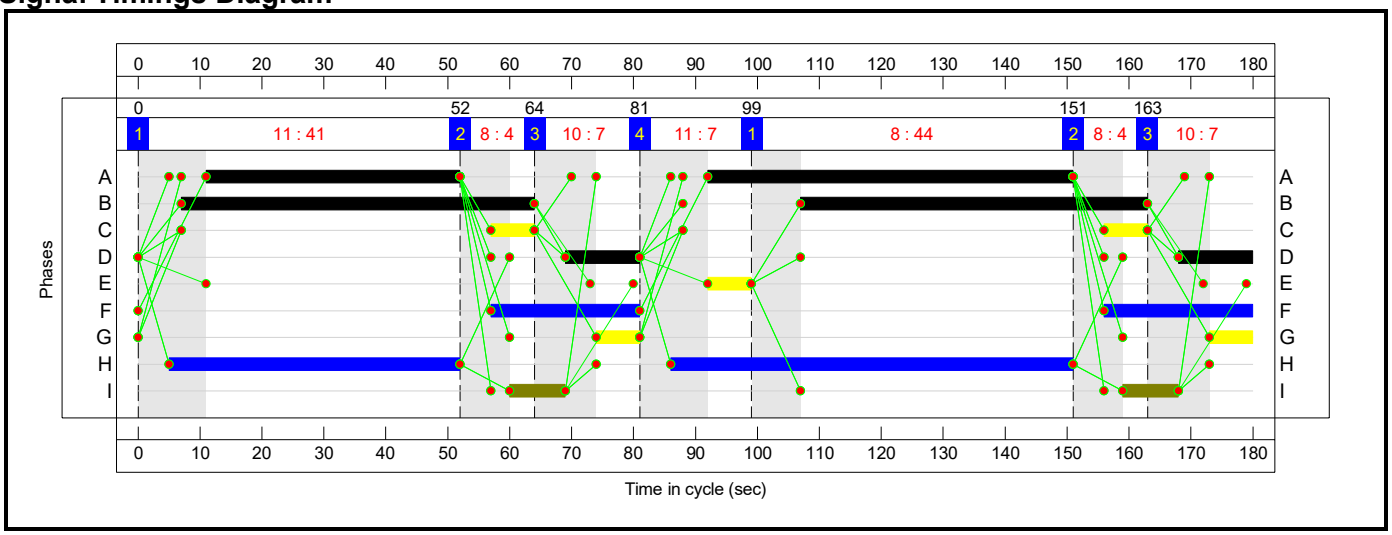
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	41	4	7	7	44	4	7
Change Point	0	52	64	81	99	151	163

Signal Timings Diagram

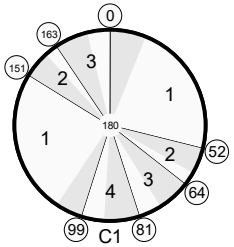


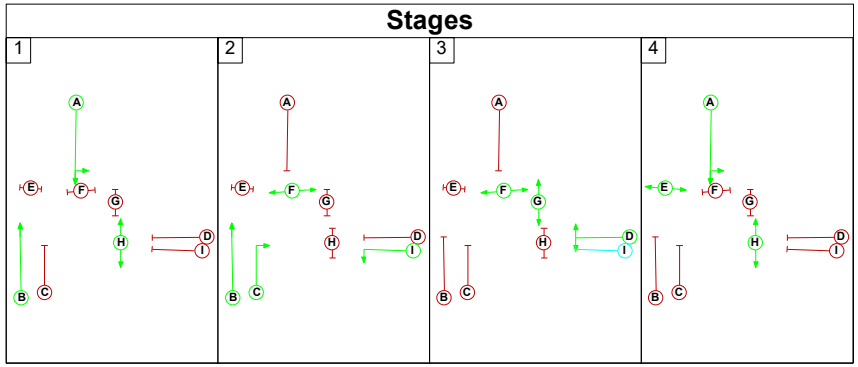
Full Input Data And Results

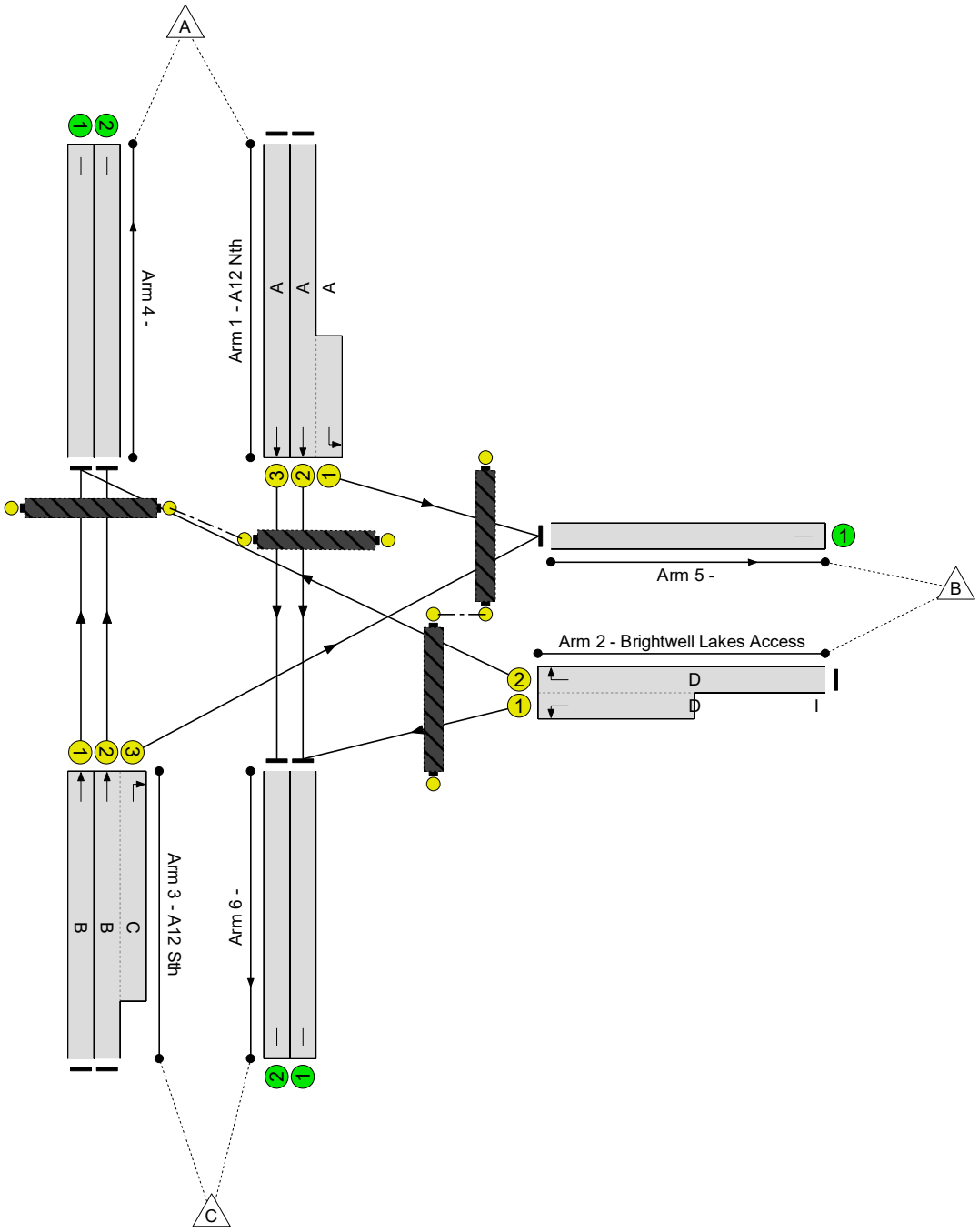
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 4.6 %
Total Traffic Delay: 26.2 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.0%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	915	2120:1819	1187+13	76.2 : 76.2%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	843	1980	1122	75.1%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	127	1786:1762	218+411	20.2 : 20.2%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1075	1980	1265	85.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1189	2120:1906	1352+30	86.0 : 86.0%
4/1		U	N/A	N/A	-		-	-	-	1119	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1163	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	36	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

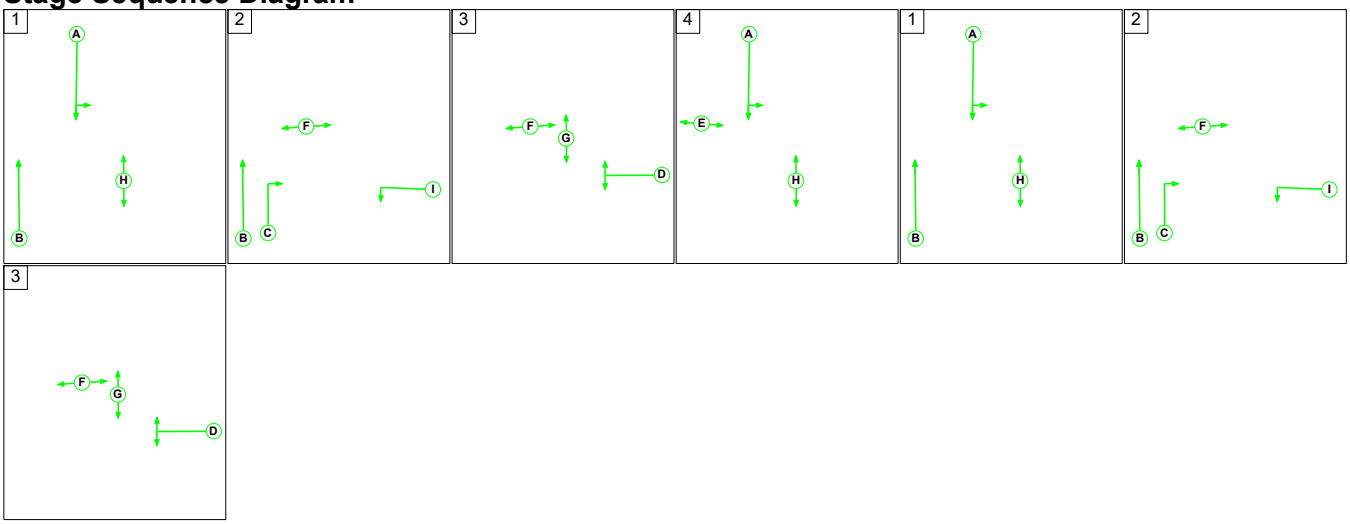
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.3**	**8.9**	**0.0**	**26.2**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**17.3**	**8.9**	**0.0**	**26.2**	**-**	**-**	**-**	**-**
1/2+1/1	915	915	-	-	-	3.8	1.6	-	5.4	21.1	17.2	1.6	18.8
1/3	843	843	-	-	-	3.4	1.5	-	4.9	21.1	15.7	1.5	17.2
2/2+2/1	127	127	-	-	-	1.1	0.1	-	1.2	33.4	1.8	0.1	2.0
3/1	1075	1075	-	-	-	4.2	2.7	-	6.9	23.1	27.2	2.7	29.9
3/2+3/3	1189	1189	-	-	-	4.8	3.0	-	7.8	23.7	30.1	3.0	33.0
4/1	1119	1119	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	36	36	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	843	843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 4.6 Total Delay for Signalled Lanes (pcuHr): 26.21 Cycle Time (s): 180
PRC Over All Lanes (%): 4.6 Total Delay Over All Lanes(pcuHr): 26.21

Full Input Data And Results

Scenario 18: '28PC 08:00-09:00' (FG18: '28PC 08:00-09:00', Plan 2: 'Network Control Plan 2')

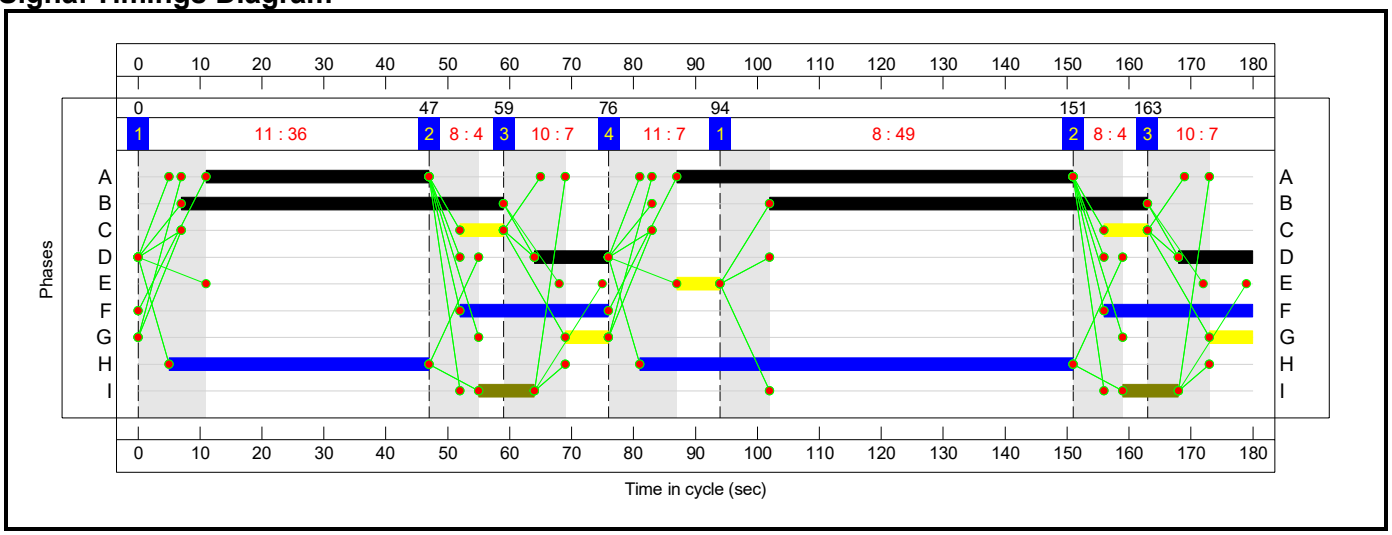
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	36	4	7	7	49	4	7
Change Point	0	47	59	76	94	151	163

Signal Timings Diagram

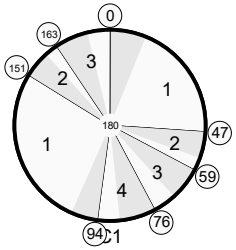


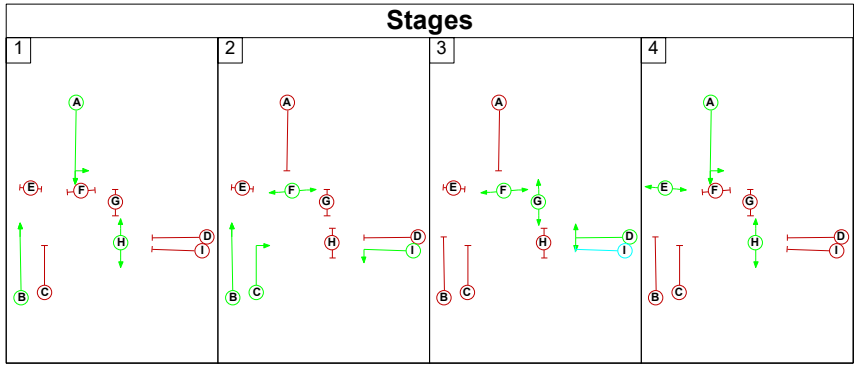
Full Input Data And Results

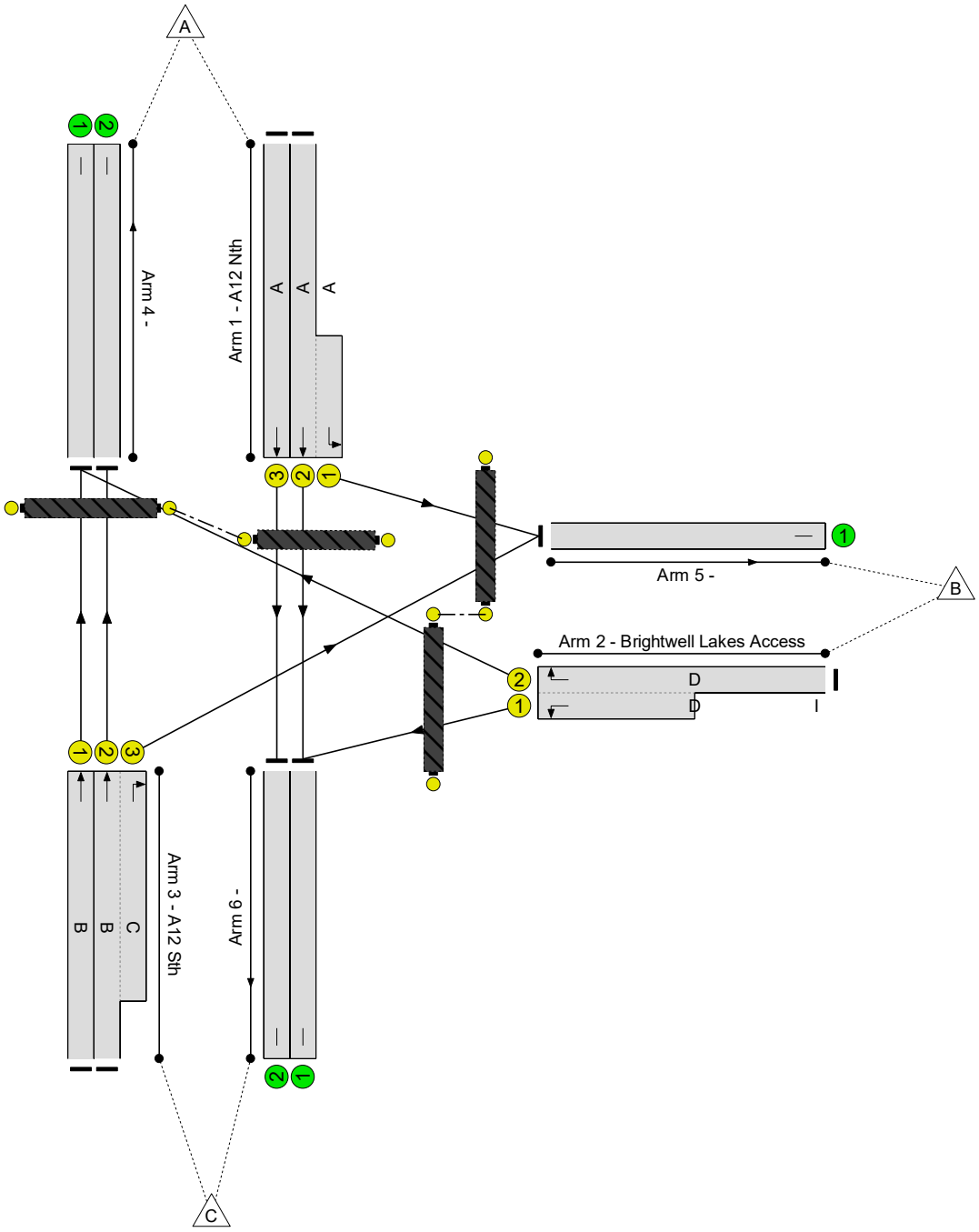
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -14.1 %
Total Traffic Delay: 99.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.7%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.7%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1049	2120:1819	1177+24	87.3 : 87.3%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	972	1980	1122	86.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	202	1786:1762	258+199	44.2 : 44.2%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1297	1980	1265	102.5%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1448	2120:1906	1343+66	102.7 : 102.7%
4/1		U	N/A	N/A	-		-	-	-	1411	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1380	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1116	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	972	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**34.4**	**65.4**	**0.0**	**99.8**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**34.4**	**65.4**	**0.0**	**99.8**	**-**	**-**	**-**	**-**
1/2+1/1	1049	1049	-	-	-	5.0	3.3	-	8.3	28.4	22.9	3.3	26.2
1/3	972	972	-	-	-	4.6	3.1	-	7.7	28.4	21.0	3.1	24.1
2/2+2/1	202	202	-	-	-	1.8	0.4	-	2.2	39.8	3.1	0.4	3.5
3/1	1297	1265	-	-	-	10.5	27.7	-	38.2	106.1	40.7	27.7	68.4
3/2+3/3	1448	1410	-	-	-	12.5	30.9	-	43.4	107.9	50.0	30.9	81.0
4/1	1379	1379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1343	1343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	87	87	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1116	1116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	972	972	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -14.1
PRC Over All Lanes (%): -14.1

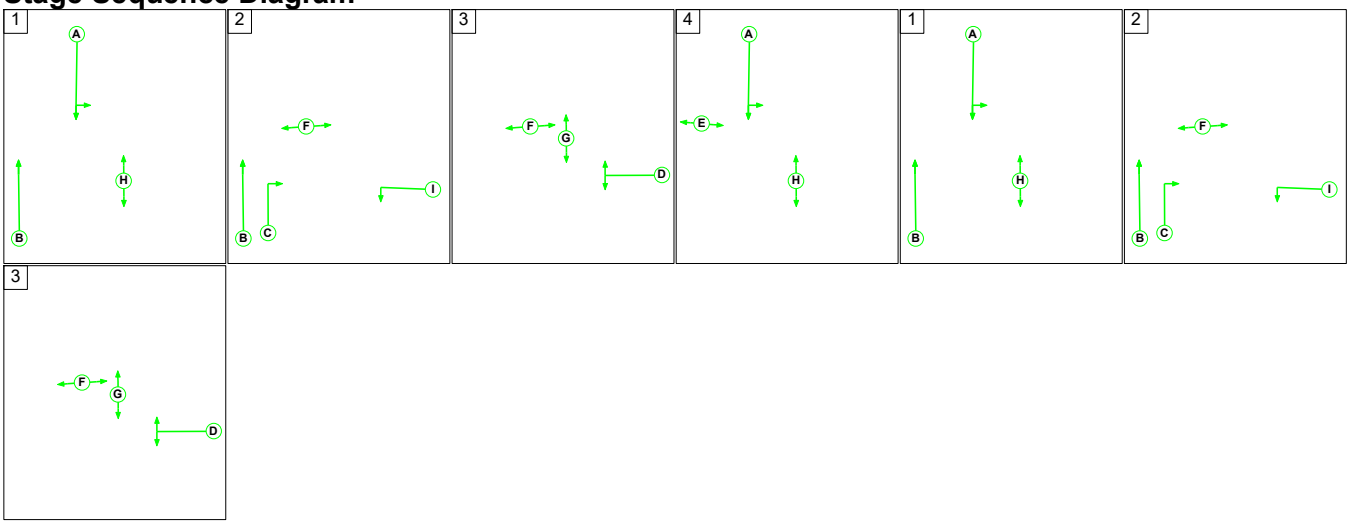
Total Delay for Signalled Lanes (pcuHr): 99.80
Total Delay Over All Lanes(pcuHr): 99.80

Cycle Time (s): 180

Full Input Data And Results

Scenario 19: '28PC 15:00-16:00' (FG19: '28PC 15:00-16:00', Plan 2: 'Network Control Plan 2')

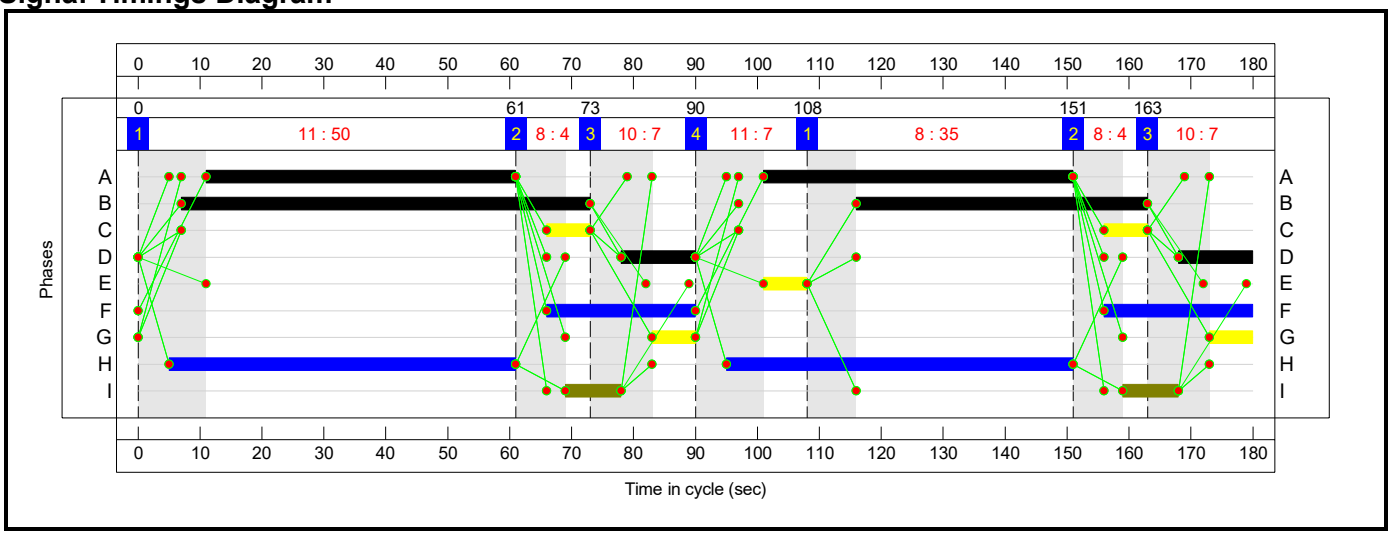
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

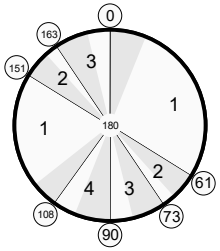


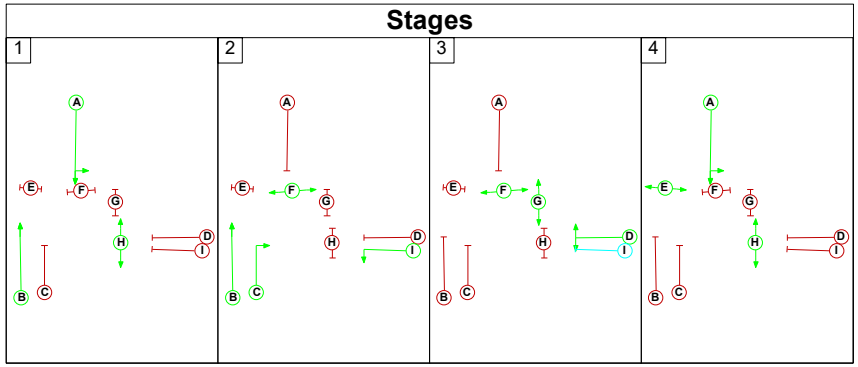
Full Input Data And Results

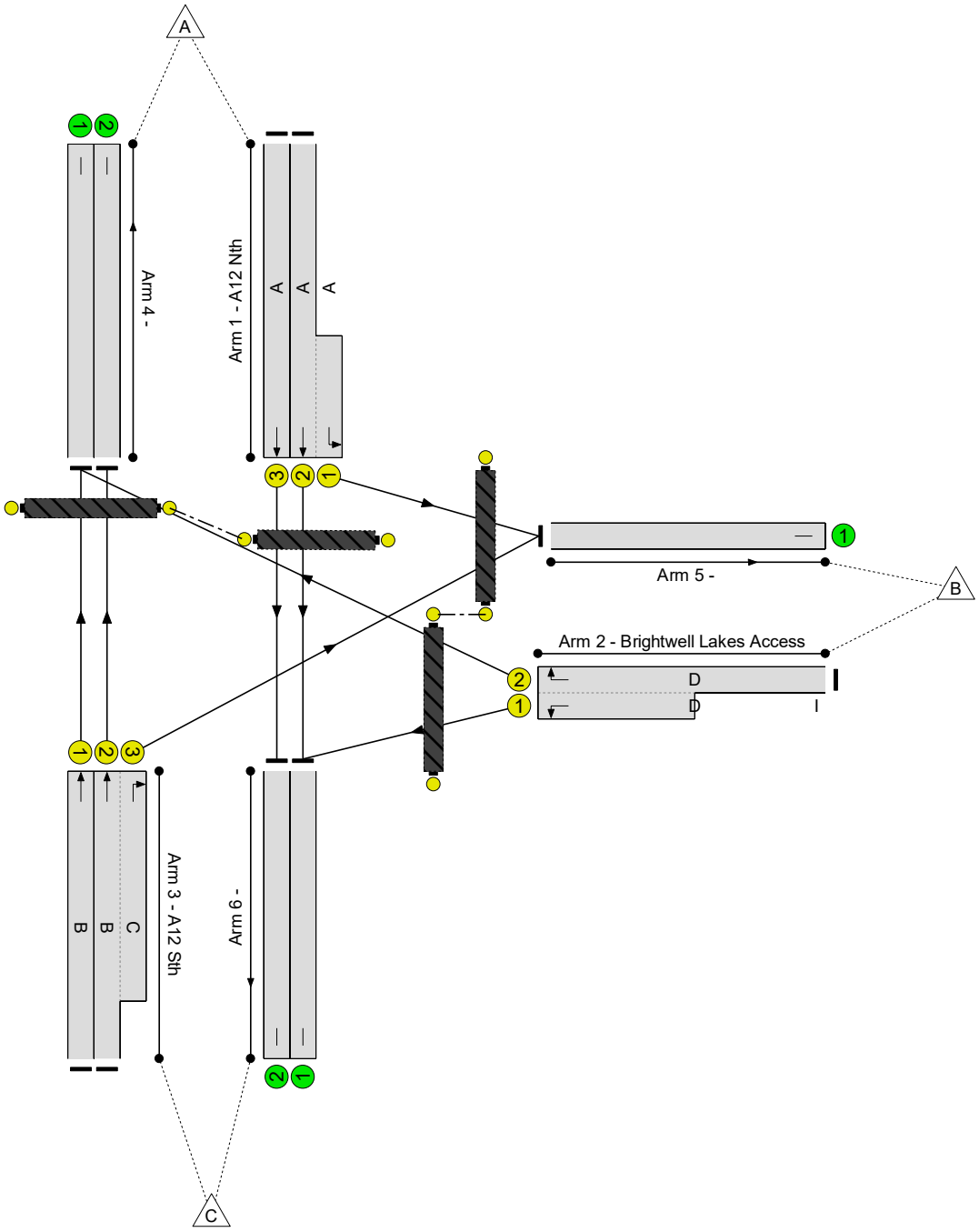
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -1.7 %
Total Traffic Delay: 34.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.5%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.5%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1105	2120:1819	1133+74	91.5 : 91.5%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1018	1980	1122	90.7%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	114	1786:1762	258+408	17.4 : 16.9%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1026	1980	1265	81.1%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1237	2120:1906	1323+155	83.6 : 83.6%
4/1		U	N/A	N/A	-		-	-	-	1071	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1107	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1106	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1018	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**20.4**	**14.1**	**0.0**	**34.6**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**20.4**	**14.1**	**0.0**	**34.6**	**-**	**-**	**-**	**-**
1/2+1/1	1105	1105	-	-	-	5.3	4.9	-	10.2	33.1	24.1	4.9	29.0
1/3	1018	1018	-	-	-	4.9	4.5	-	9.4	33.3	22.6	4.5	27.1
2/2+2/1	114	114	-	-	-	0.9	0.1	-	1.0	32.8	1.3	0.1	1.4
3/1	1026	1026	-	-	-	3.8	2.1	-	5.9	20.6	24.8	2.1	26.9
3/2+3/3	1237	1237	-	-	-	5.5	2.5	-	8.1	23.4	27.1	2.5	29.6
4/1	1071	1071	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1107	1107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1106	1106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1018	1018	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -1.7
PRC Over All Lanes (%): -1.7

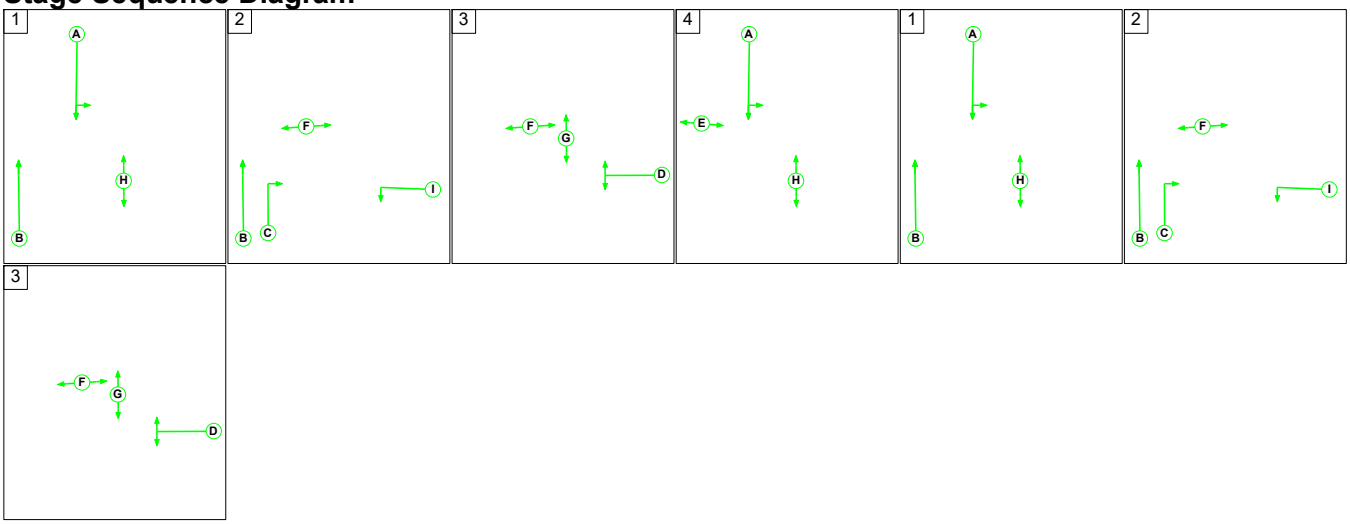
Total Delay for Signalled Lanes (pcuHr): 34.57
Total Delay Over All Lanes(pcuHr): 34.57

Cycle Time (s): 180

Full Input Data And Results

Scenario 20: '28PC 17:00-18:00' (FG20: '28PC 17:00-18:00', Plan 2: 'Network Control Plan 2')

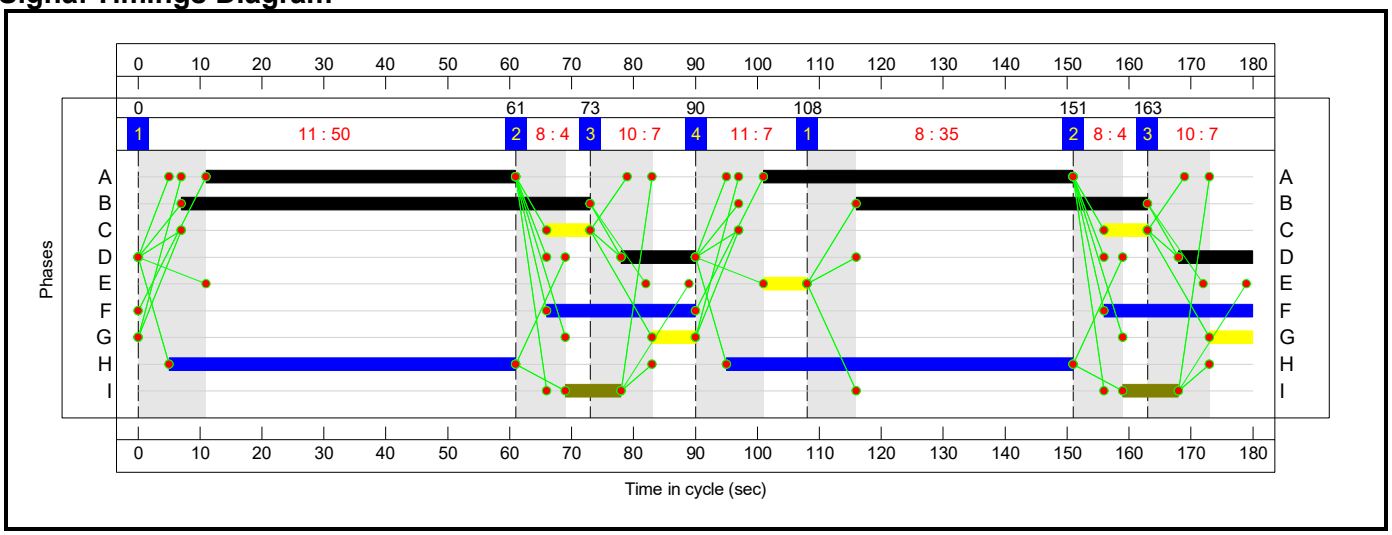
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

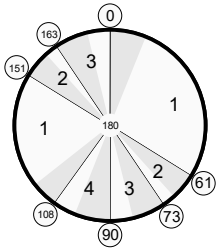


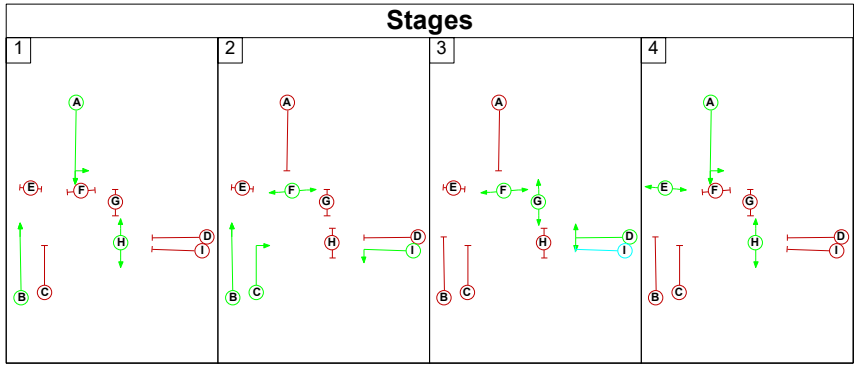
Full Input Data And Results

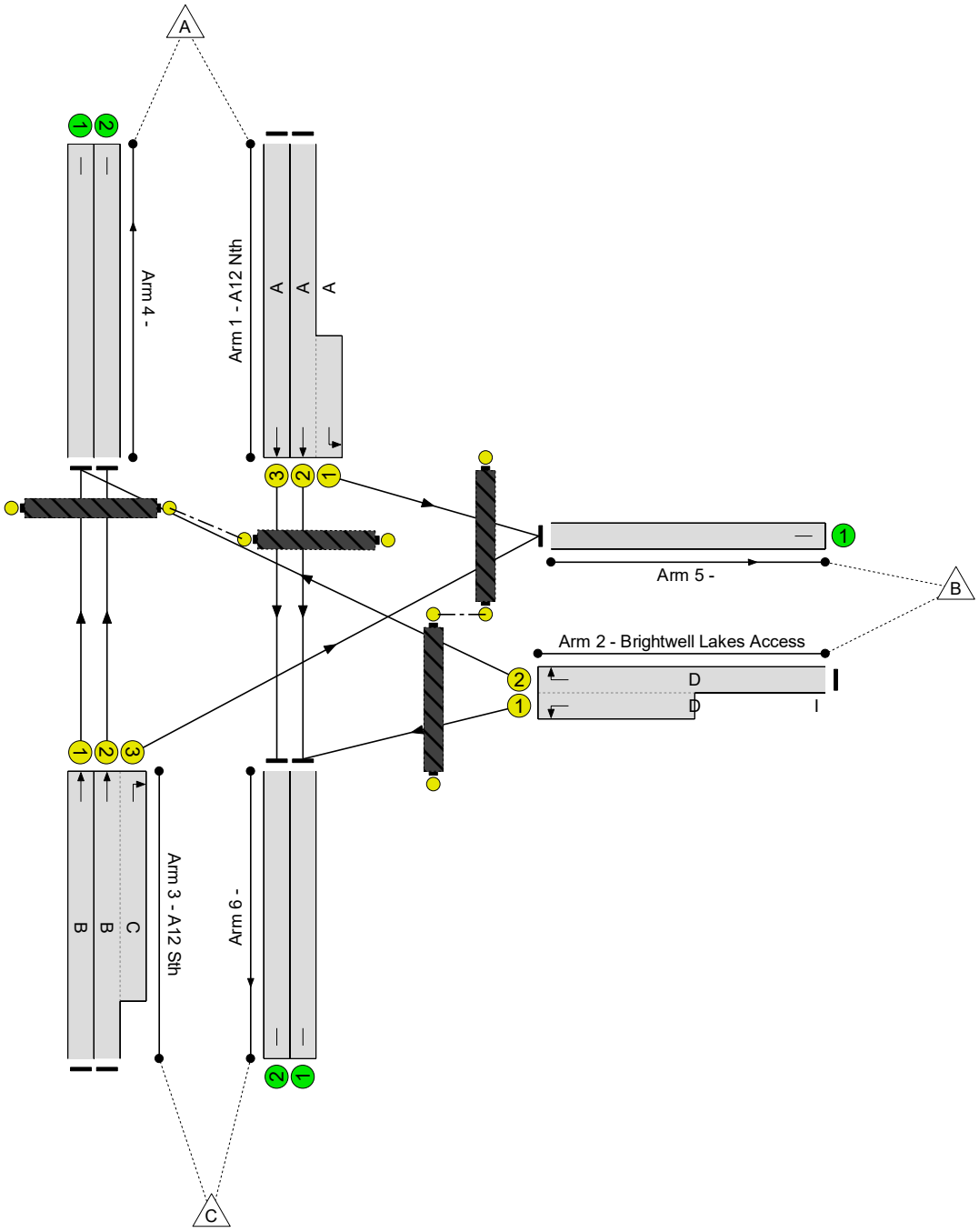
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -31.2 %
Total Traffic Delay: 50.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.0%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1079	2120:1819	1145+61	89.5 : 89.5%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	993	1980	1122	88.5%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	163	1786:1762	204+413	26.4 : 26.4%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	991	1980	1265	78.3%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1219	2120:1906	1303+169	78.2 : 118.0%
4/1		U	N/A	N/A	-		-	-	-	1045	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1019	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1133	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	993	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**23.1**	**27.2**	**0.0**	**50.4**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**23.1**	**27.2**	**0.0**	**50.4**	**-**	**-**	**-**	**-**
1/2+1/1	1079	1079	-	-	-	5.0	4.0	-	9.0	30.1	23.0	4.0	27.0
1/3	993	993	-	-	-	4.7	3.6	-	8.3	30.2	21.5	3.6	25.2
2/2+2/1	163	163	-	-	-	1.3	0.2	-	1.5	33.6	2.2	0.2	2.4
3/1	991	991	-	-	-	3.5	1.8	-	5.3	19.2	23.1	1.8	24.9
3/2+3/3	1219	1188	-	-	-	8.6	17.6	-	26.2	77.5	22.6	17.6	40.3
4/1	1045	1045	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1019	1019	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1133	1133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	993	993	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -31.2
PRC Over All Lanes (%): -31.2

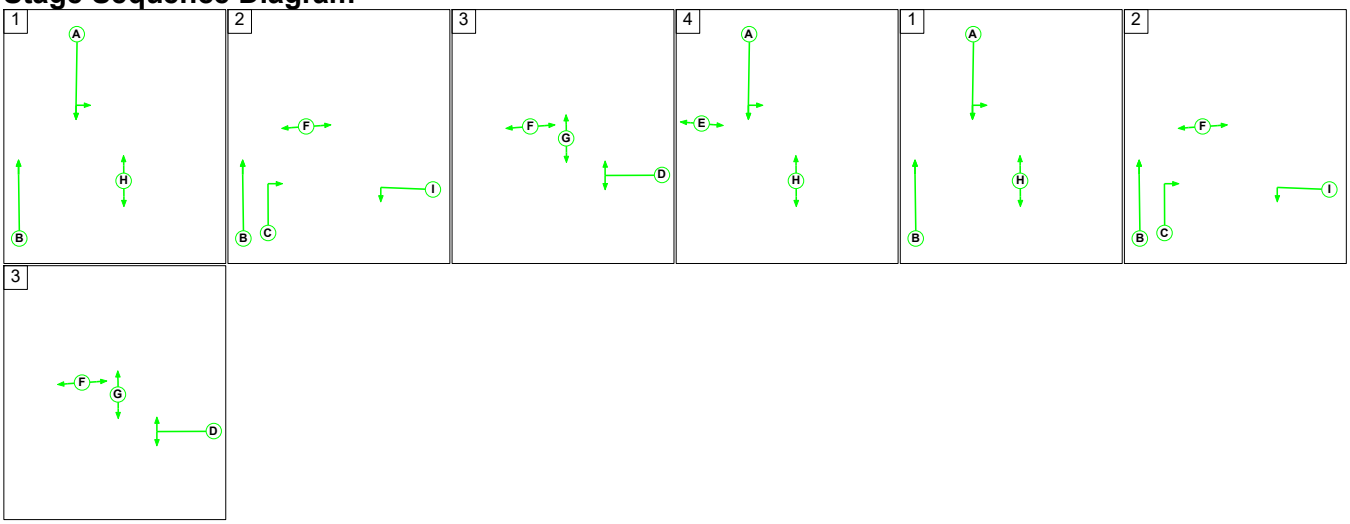
Total Delay for Signalled Lanes (pcuHr): 50.40
Total Delay Over All Lanes(pcuHr): 50.40

Cycle Time (s): 180

Full Input Data And Results

Scenario 21: '34RC 06:00-07:00' (FG21: '34RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

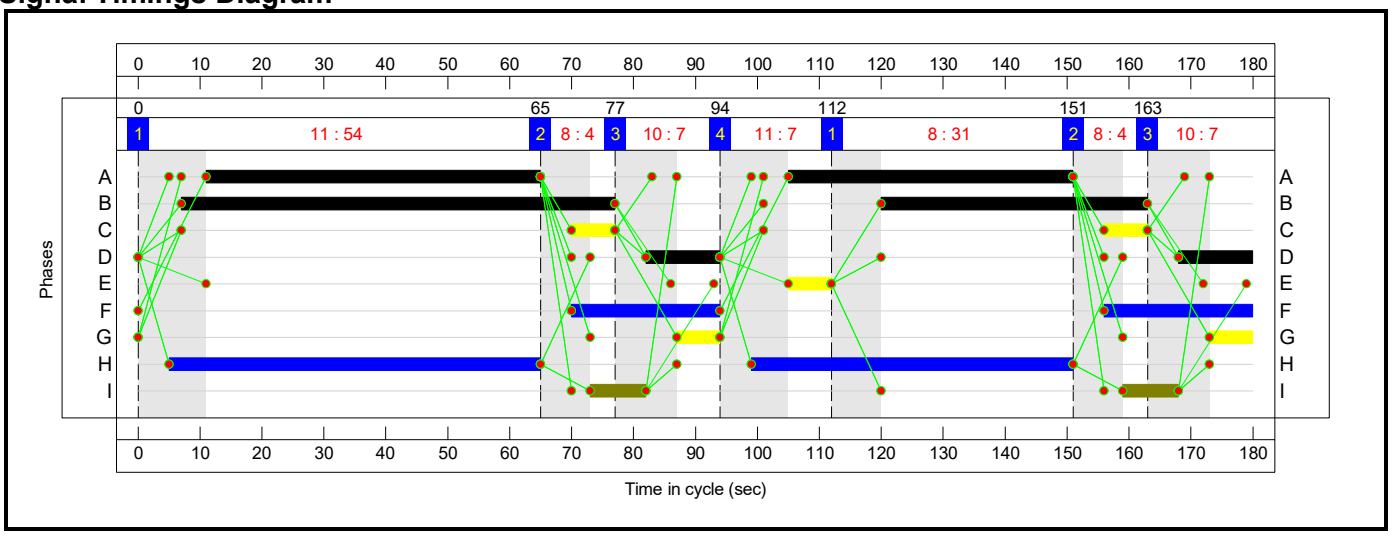
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	54	4	7	7	31	4	7
Change Point	0	65	77	94	112	151	163

Signal Timings Diagram

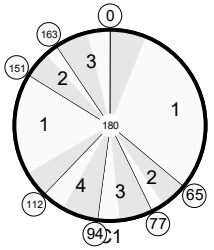


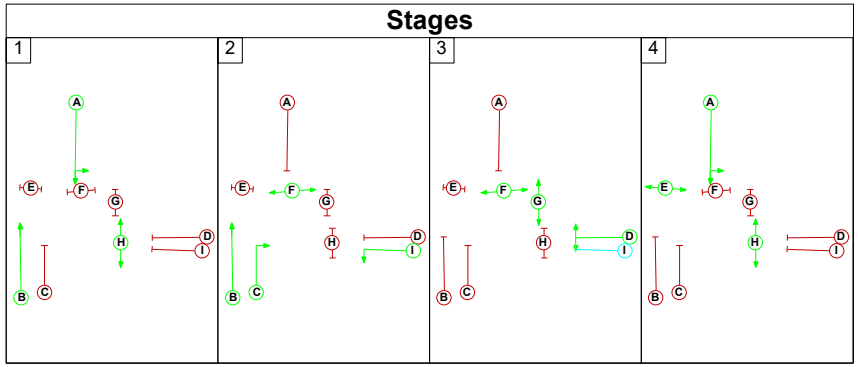
Full Input Data And Results

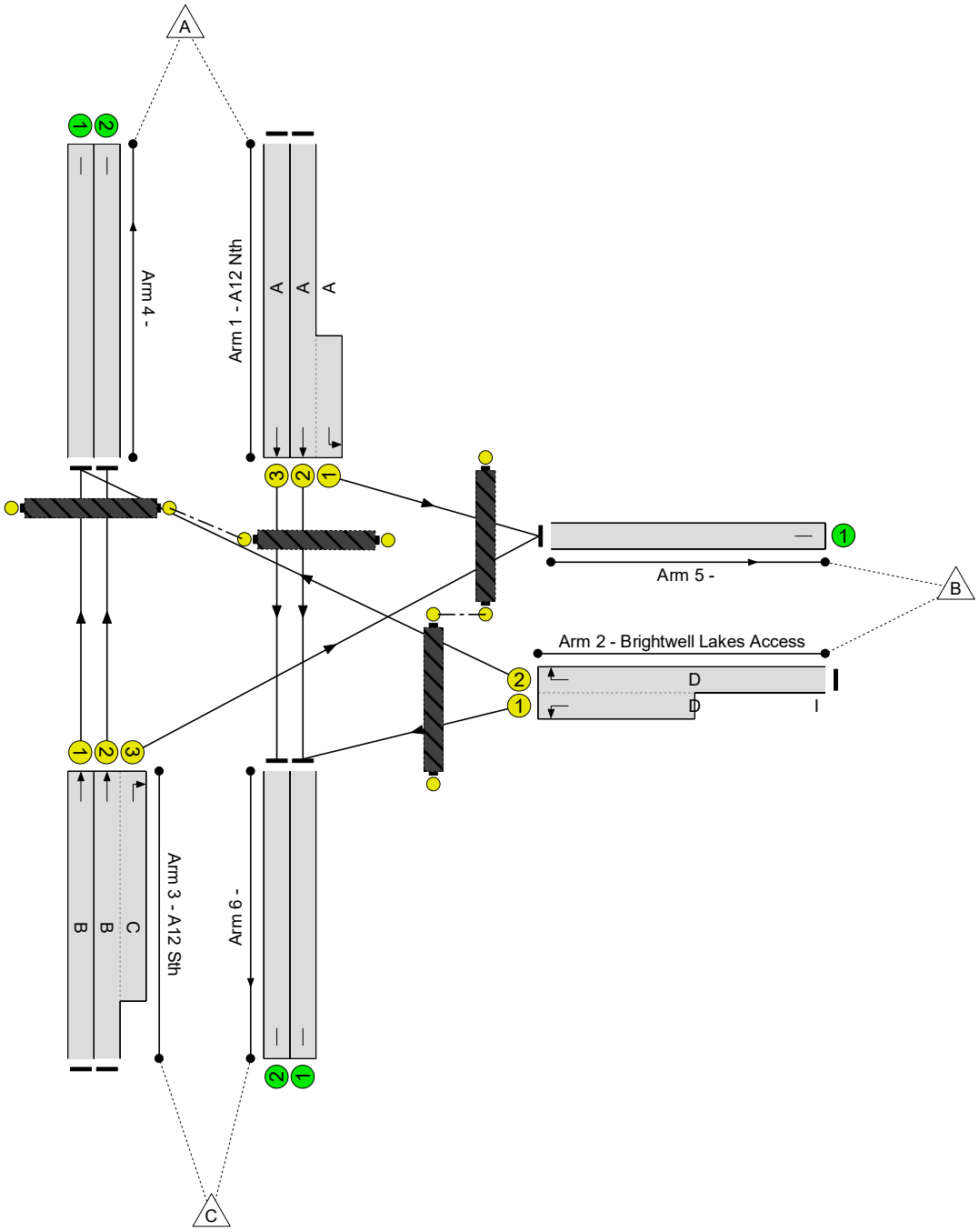
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 103.2 %
Total Traffic Delay: 6.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**44.3%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**44.3%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	531	2120:1980	1199+0	44.3 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	482	1980	1122	43.0%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	0	1965:1965	284+284	0.0 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	463	1980	1265	36.6%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	515	2120:2065	1354+0	38.0 : 0.0%
4/1		U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

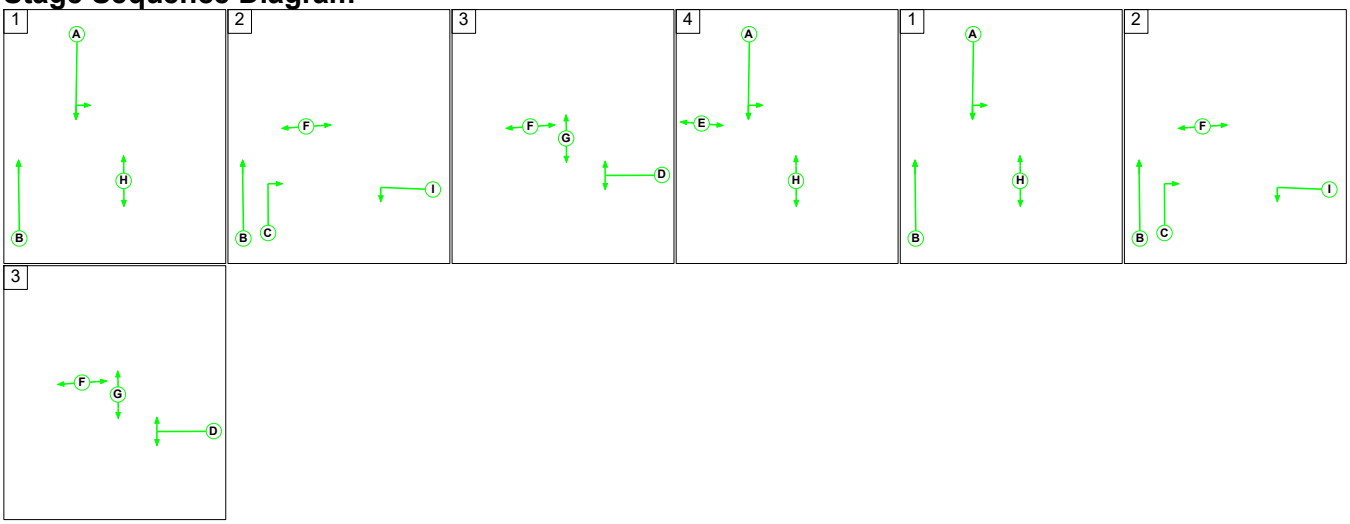
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**5.4**	**1.4**	**0.0**	**6.8**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**5.4**	**1.4**	**0.0**	**6.8**	**-**	**-**	**-**	**-**
1/2+1/1	531	531	-	-	-	1.7	0.4	-	2.1	14.0	7.7	0.4	8.1
1/3	482	482	-	-	-	1.5	0.4	-	1.9	14.0	6.8	0.4	7.2
2/2+2/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	463	463	-	-	-	1.1	0.3	-	1.4	10.6	6.9	0.3	7.2
3/2+3/3	515	515	-	-	-	1.2	0.3	-	1.5	10.6	7.9	0.3	8.2
4/1	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 103.2 Total Delay for Signalled Lanes (pcuHr): 6.80 Cycle Time (s): 180
PRC Over All Lanes (%): 103.2 Total Delay Over All Lanes(pcuHr): 6.80

Full Input Data And Results

Scenario 22: '34RC 07:00-08:00' (FG22: '34RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

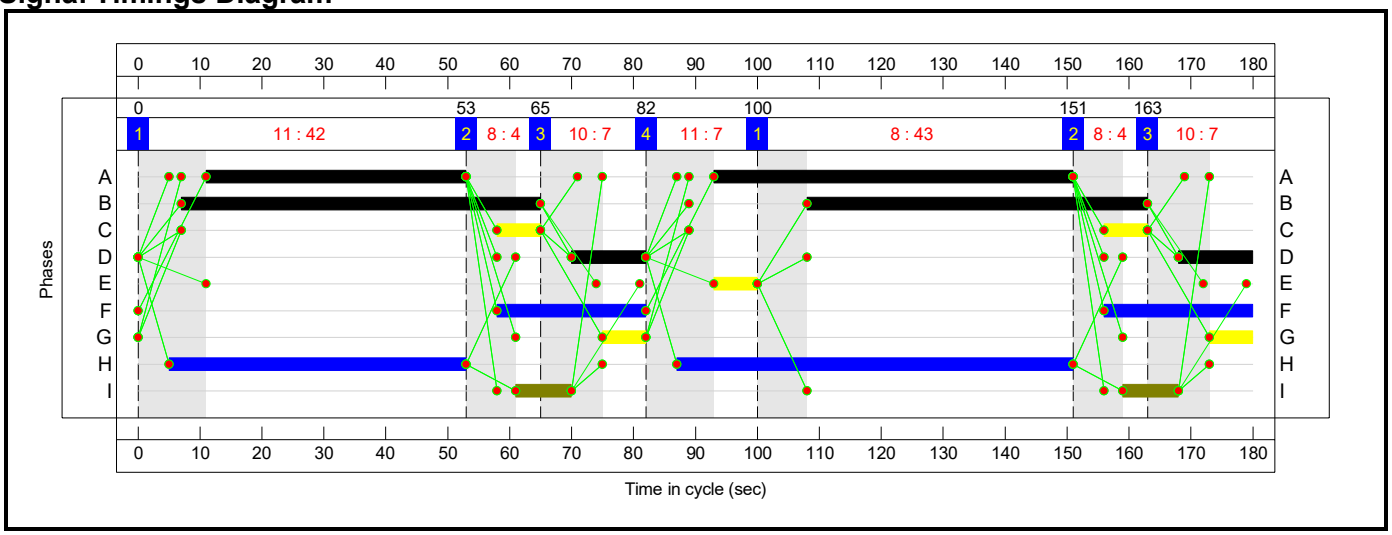
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	42	4	7	7	43	4	7
Change Point	0	53	65	82	100	151	163

Signal Timings Diagram

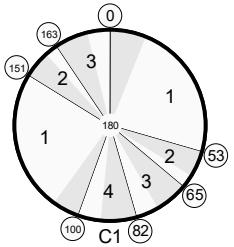


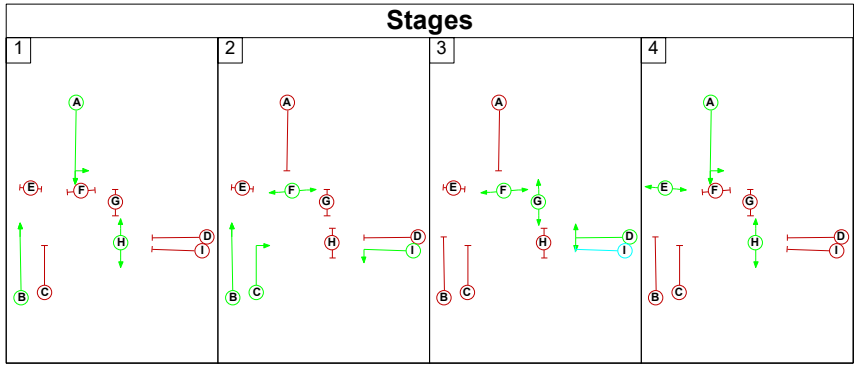
Full Input Data And Results

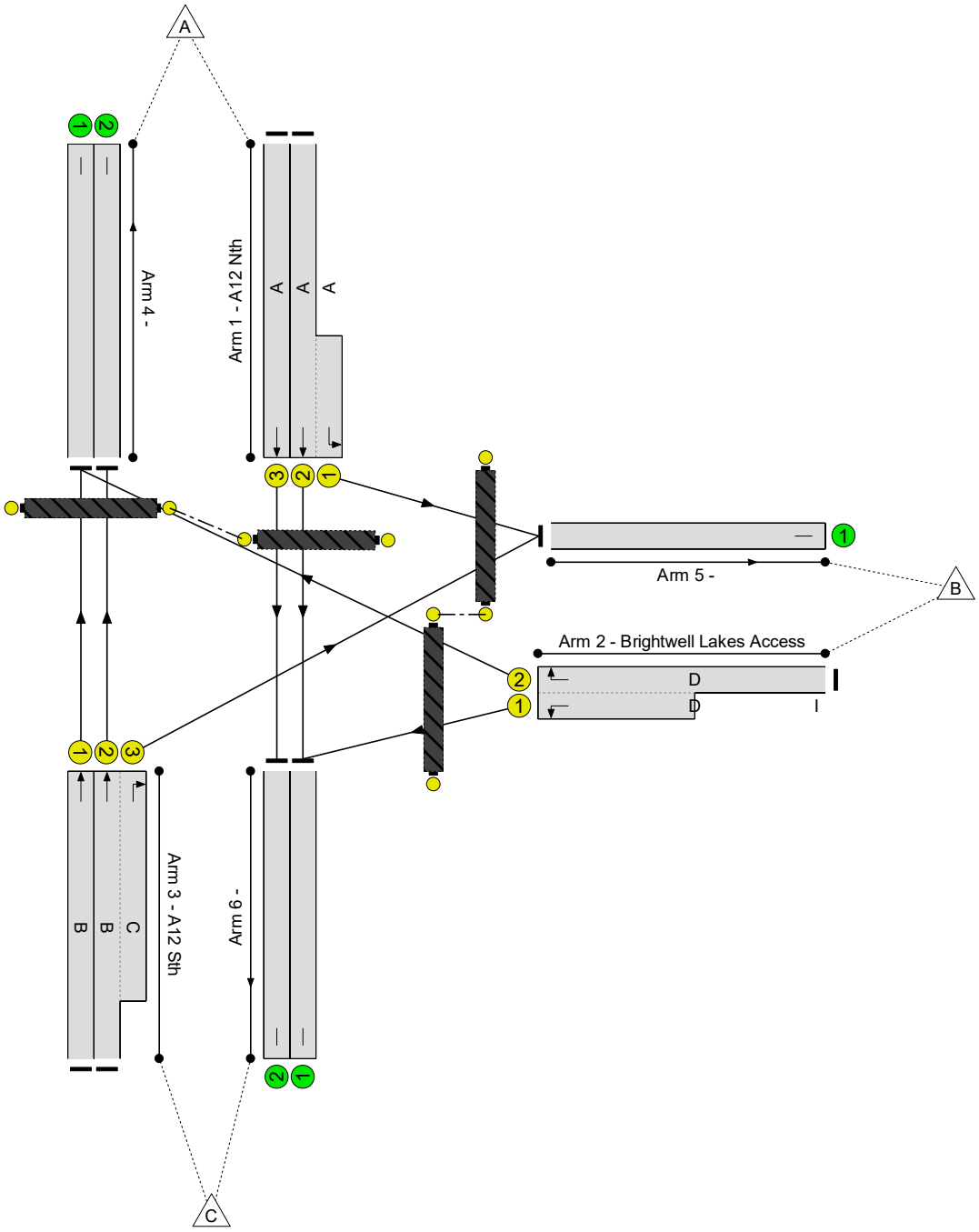
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 3.4 %
Total Traffic Delay: 29.3 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.0%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	965	2120:1819	1186+14	80.4 : 80.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	890	1980	1122	79.3%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	200	1786:1762	212+412	32.0 : 32.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1088	1980	1265	86.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1208	2120:1906	1350+38	87.0 : 87.0%
4/1		U	N/A	N/A	-		-	-	-	1156	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1175	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	44	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1086	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	890	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

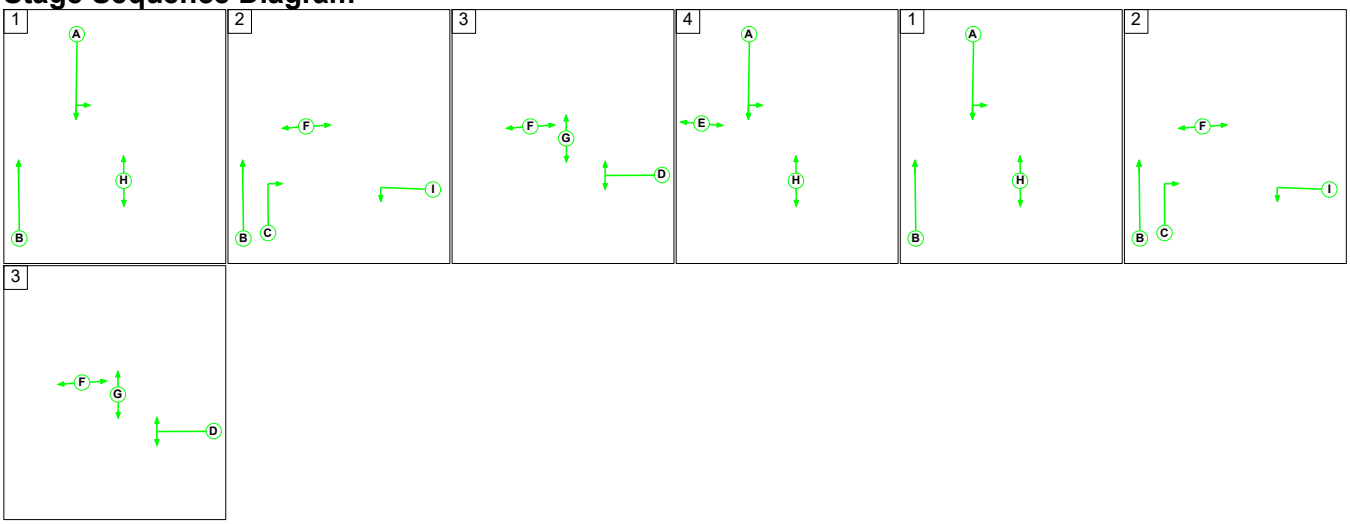
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**18.9**	**10.4**	**0.0**	**29.3**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**18.9**	**10.4**	**0.0**	**29.3**	**-**	**-**	**-**	**-**
1/2+1/1	965	965	-	-	-	4.1	2.0	-	6.2	23.0	19.0	2.0	21.0
1/3	890	890	-	-	-	3.8	1.9	-	5.7	23.0	17.3	1.9	19.2
2/2+2/1	200	200	-	-	-	1.7	0.2	-	1.9	34.6	3.0	0.2	3.2
3/1	1088	1088	-	-	-	4.3	3.0	-	7.2	24.0	28.1	3.0	31.1
3/2+3/3	1208	1208	-	-	-	5.0	3.2	-	8.3	24.6	31.1	3.2	34.4
4/1	1156	1156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1175	1175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	44	44	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1086	1086	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 3.4 Total Delay for Signalled Lanes (pcuHr): 29.28 Cycle Time (s): 180
PRC Over All Lanes (%): 3.4 Total Delay Over All Lanes(pcuHr): 29.28

Full Input Data And Results

Scenario 23: '34RC 08:00-09:00' (FG23: '34RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

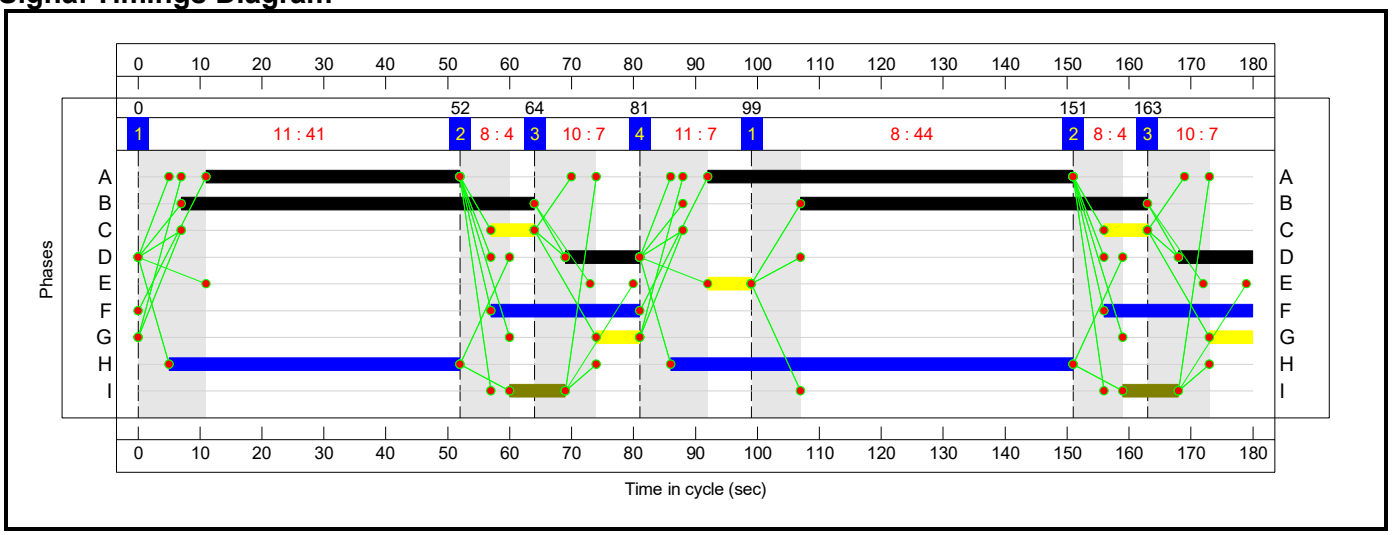
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	41	4	7	7	44	4	7
Change Point	0	52	64	81	99	151	163

Signal Timings Diagram

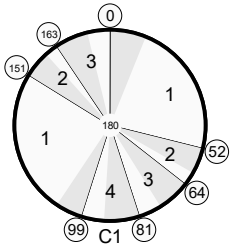


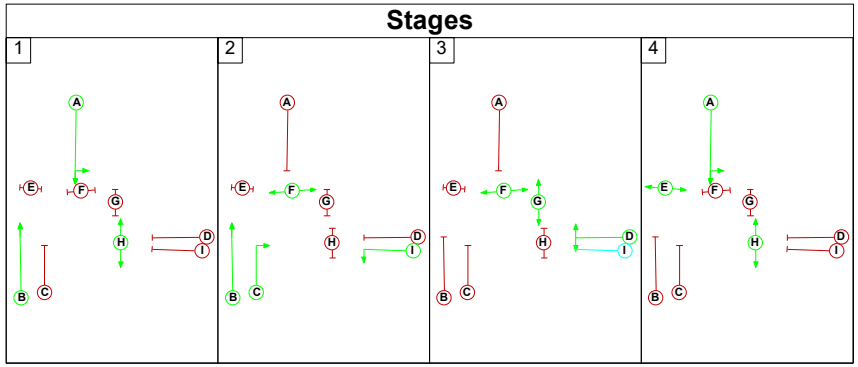
Full Input Data And Results

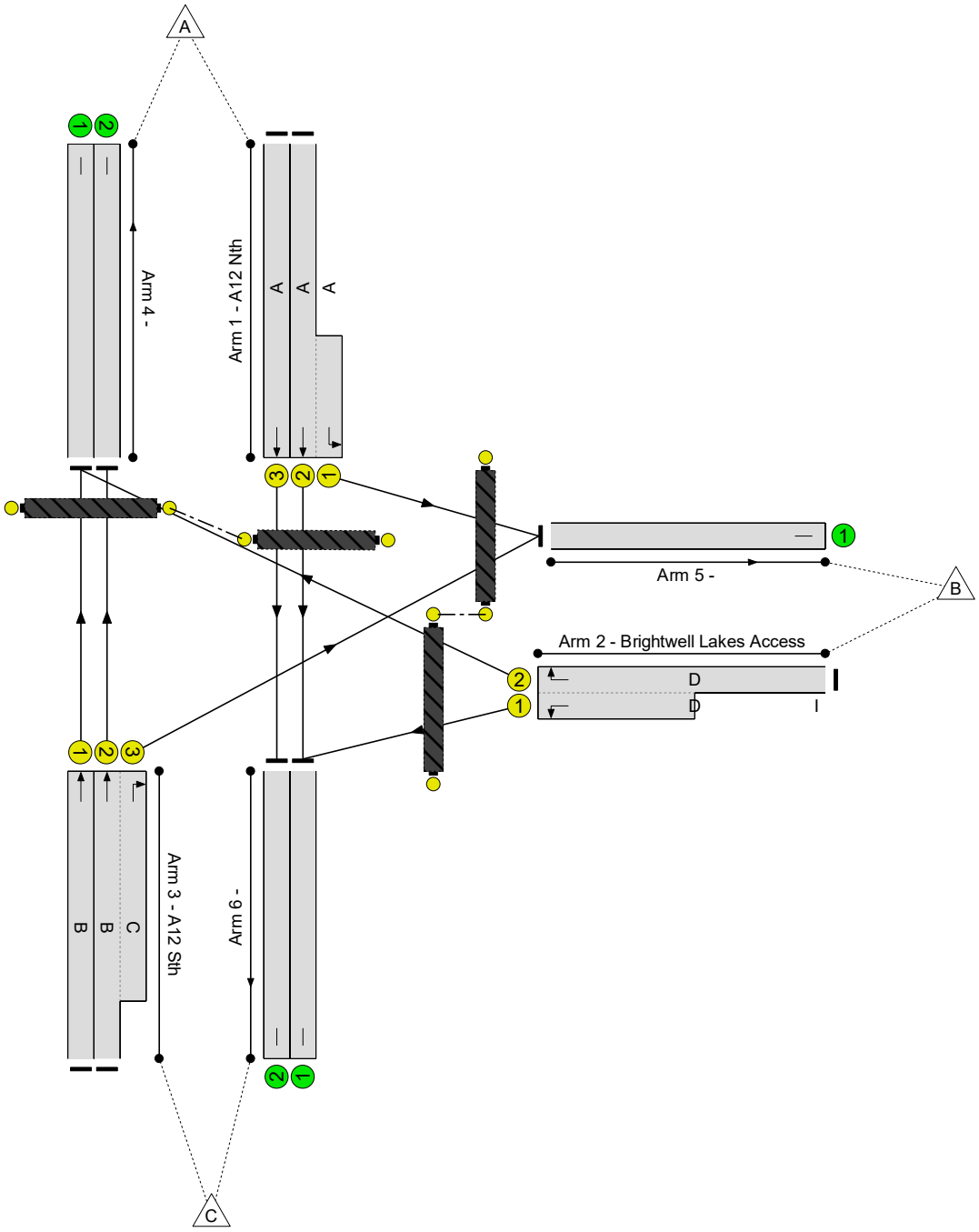
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -17.7 %
Total Traffic Delay: 151.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**105.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**105.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1111	2120:1819	1175+27	92.5 : 92.5%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1034	1980	1122	92.2%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	332	1786:1762	258+229	68.2 : 68.2%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1337	1980	1265	105.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1504	2120:1906	1340+80	105.9 : 105.9%
4/1		U	N/A	N/A	-		-	-	-	1513	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1419	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	110	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1242	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1034	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**46.5**	**104.9**	**0.0**	**151.4**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**46.5**	**104.9**	**0.0**	**151.4**	**-**	**-**	**-**	**-**
1/2+1/1	1111	1111	-	-	-	5.6	5.5	-	11.0	35.7	25.4	5.5	30.8
1/3	1034	1034	-	-	-	5.2	5.2	-	10.4	36.2	23.7	5.2	29.0
2/2+2/1	332	332	-	-	-	3.1	1.1	-	4.1	44.6	4.6	1.1	5.7
3/1	1337	1265	-	-	-	15.1	43.7	-	58.7	158.2	44.0	43.7	87.6
3/2+3/3	1504	1420	-	-	-	17.7	49.4	-	67.1	160.7	54.0	49.4	103.5
4/1	1441	1441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1340	1340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1242	1242	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1034	1034	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -17.7
PRC Over All Lanes (%): -17.7

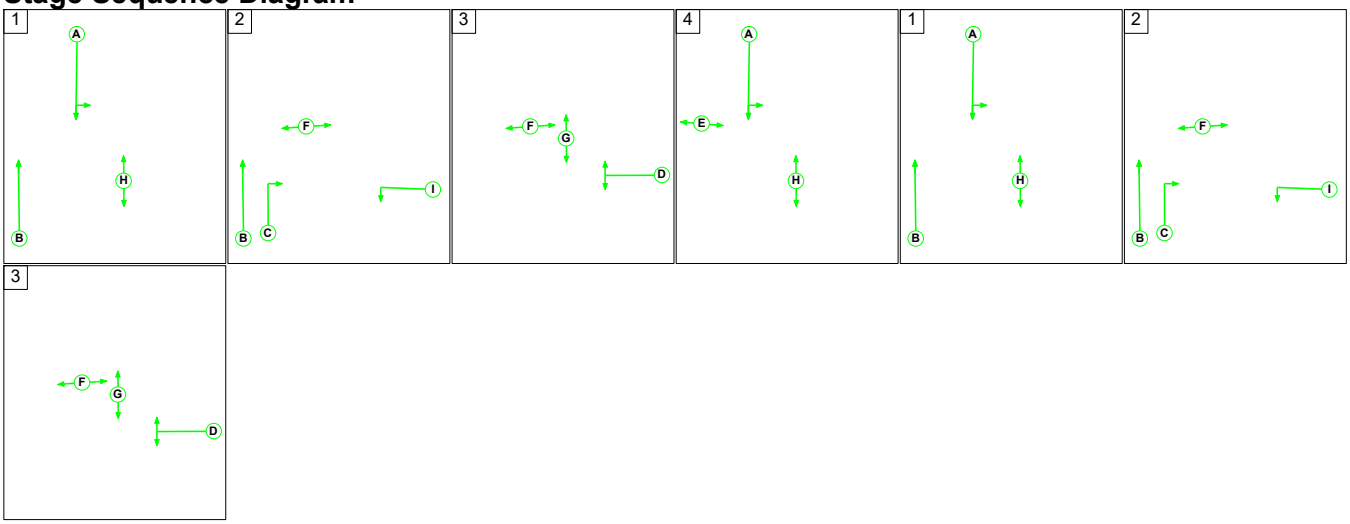
Total Delay for Signalled Lanes (pcuHr): 151.41
Total Delay Over All Lanes(pcuHr): 151.41

Cycle Time (s): 180

Full Input Data And Results

Scenario 24: '34RC 15:00-16:00' (FG24: '34RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

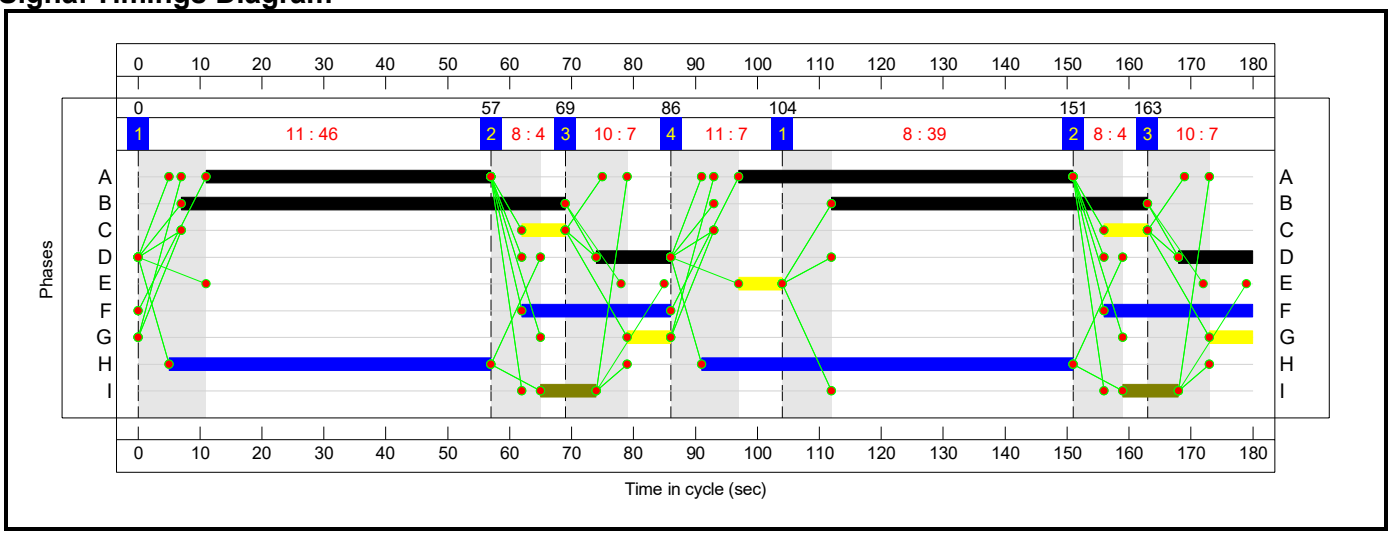
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	46	4	7	7	39	4	7
Change Point	0	57	69	86	104	151	163

Signal Timings Diagram

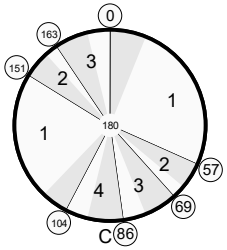


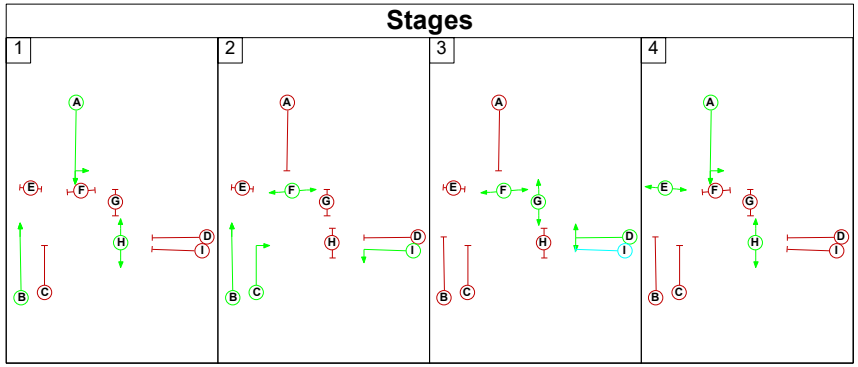
Full Input Data And Results

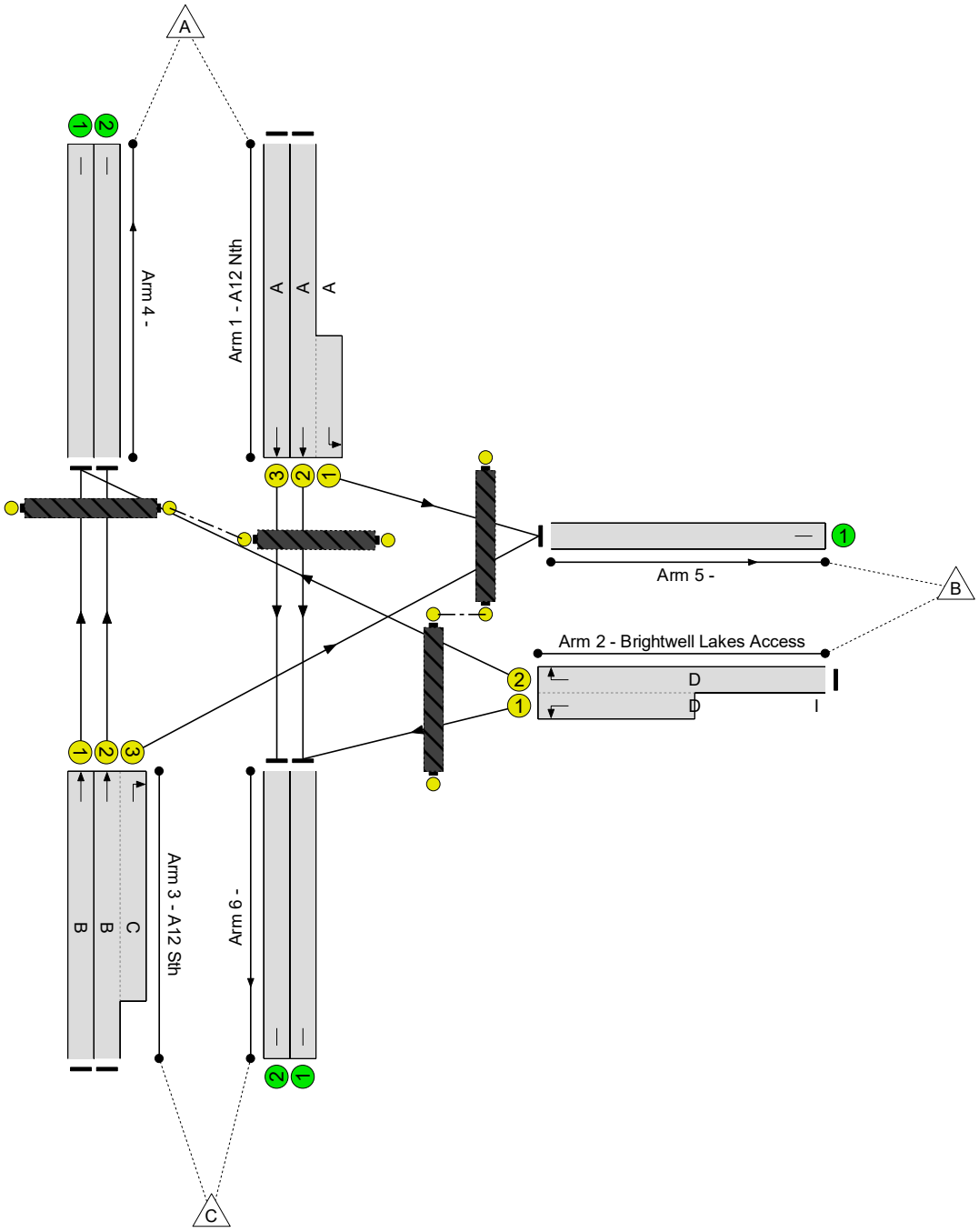
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -44.3 %
Total Traffic Delay: 103.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**129.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**129.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1211	2120:1819	1108+104	99.9 : 99.9%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1117	1980	1122	99.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	188	1786:1762	232+410	29.3 : 29.3%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1169	1980	1265	92.4%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1396	2120:1906	1306+169	90.1 : 129.9%
4/1		U	N/A	N/A	-		-	-	-	1237	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1176	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	324	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1227	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1117	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

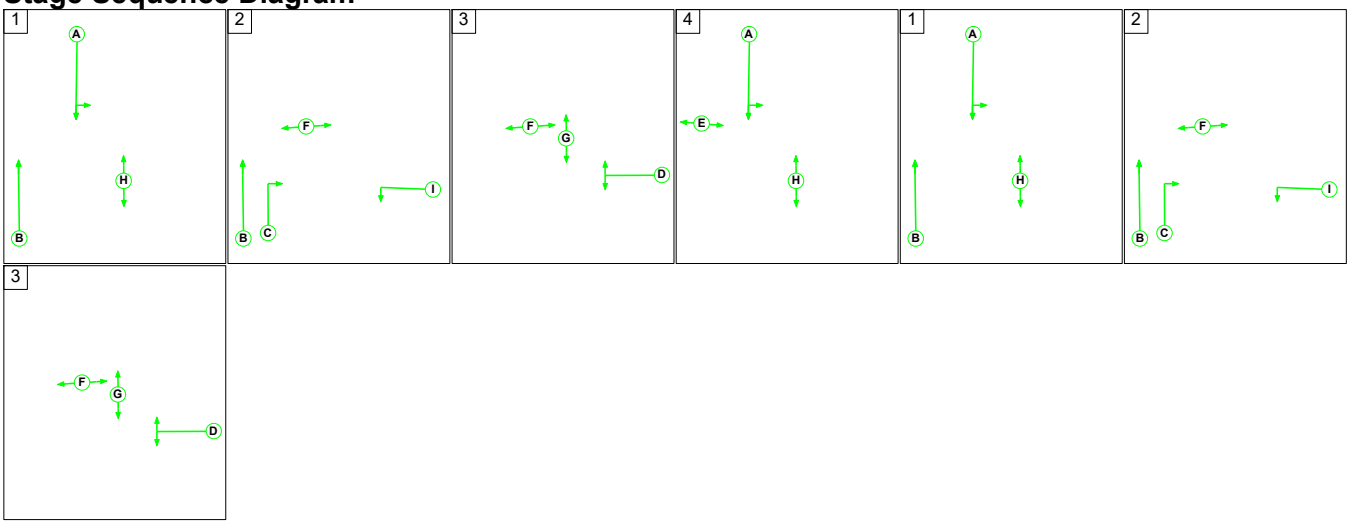
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**32.8**	**71.0**	**0.0**	**103.8**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**32.8**	**71.0**	**0.0**	**103.8**	**-**	**-**	**-**	**-**
1/2+1/1	1211	1211	-	-	-	6.9	17.1	-	24.0	71.3	31.6	17.1	48.7
1/3	1117	1117	-	-	-	6.4	15.5	-	21.9	70.7	29.4	15.5	44.9
2/2+2/1	188	188	-	-	-	1.6	0.2	-	1.8	34.0	2.6	0.2	2.8
3/1	1169	1169	-	-	-	5.6	5.5	-	11.1	34.2	30.5	5.5	36.0
3/2+3/3	1396	1345	-	-	-	12.2	32.7	-	45.0	116.0	33.5	32.7	66.2
4/1	1237	1237	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1176	1176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1227	1227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1117	1117	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -44.3 PRC Over All Lanes (%): -44.3 Total Delay for Signalled Lanes (pcuHr): 103.79 Total Delay Over All Lanes(pcuHr): 103.79 Cycle Time (s): 180

Full Input Data And Results

Scenario 25: '34RC 17:00-18:00' (FG25: '34RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

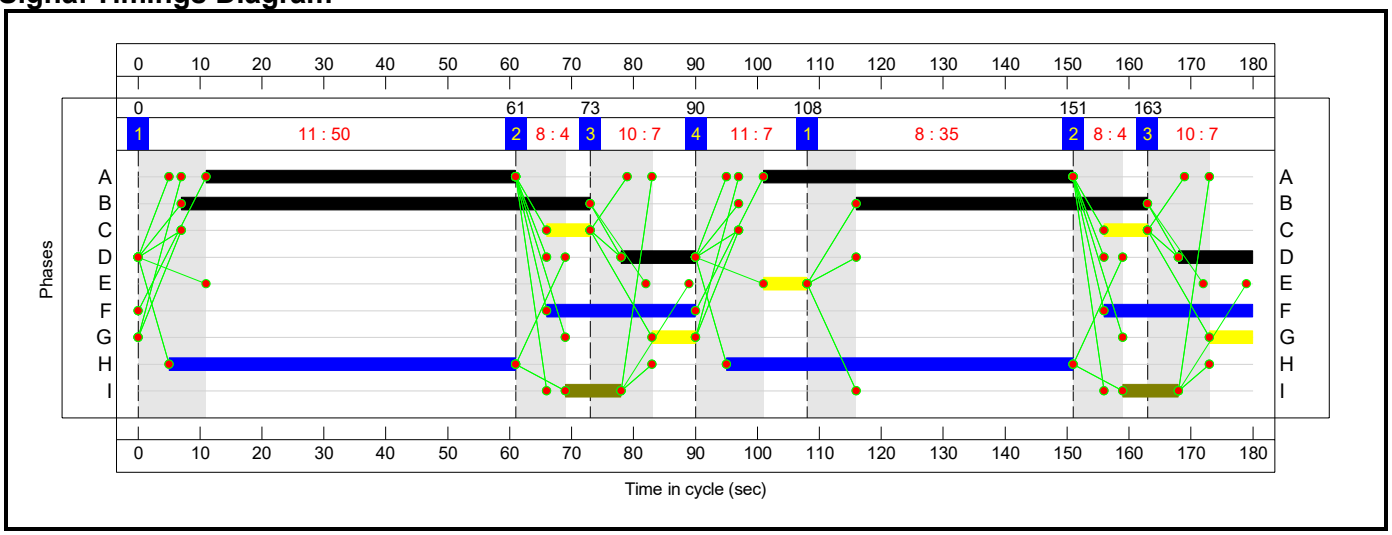
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

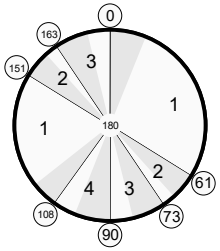


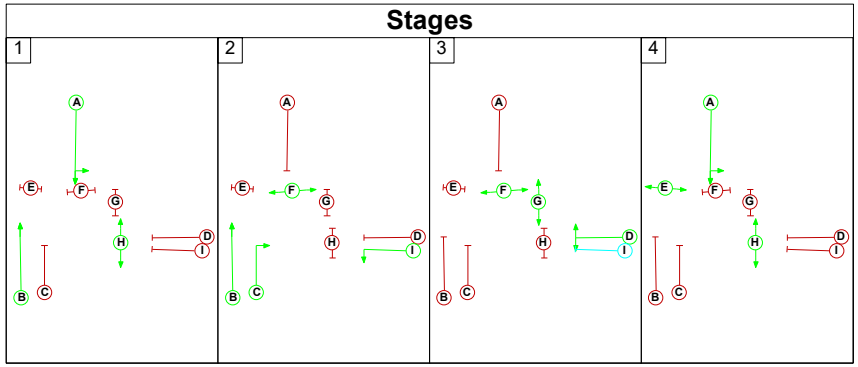
Full Input Data And Results

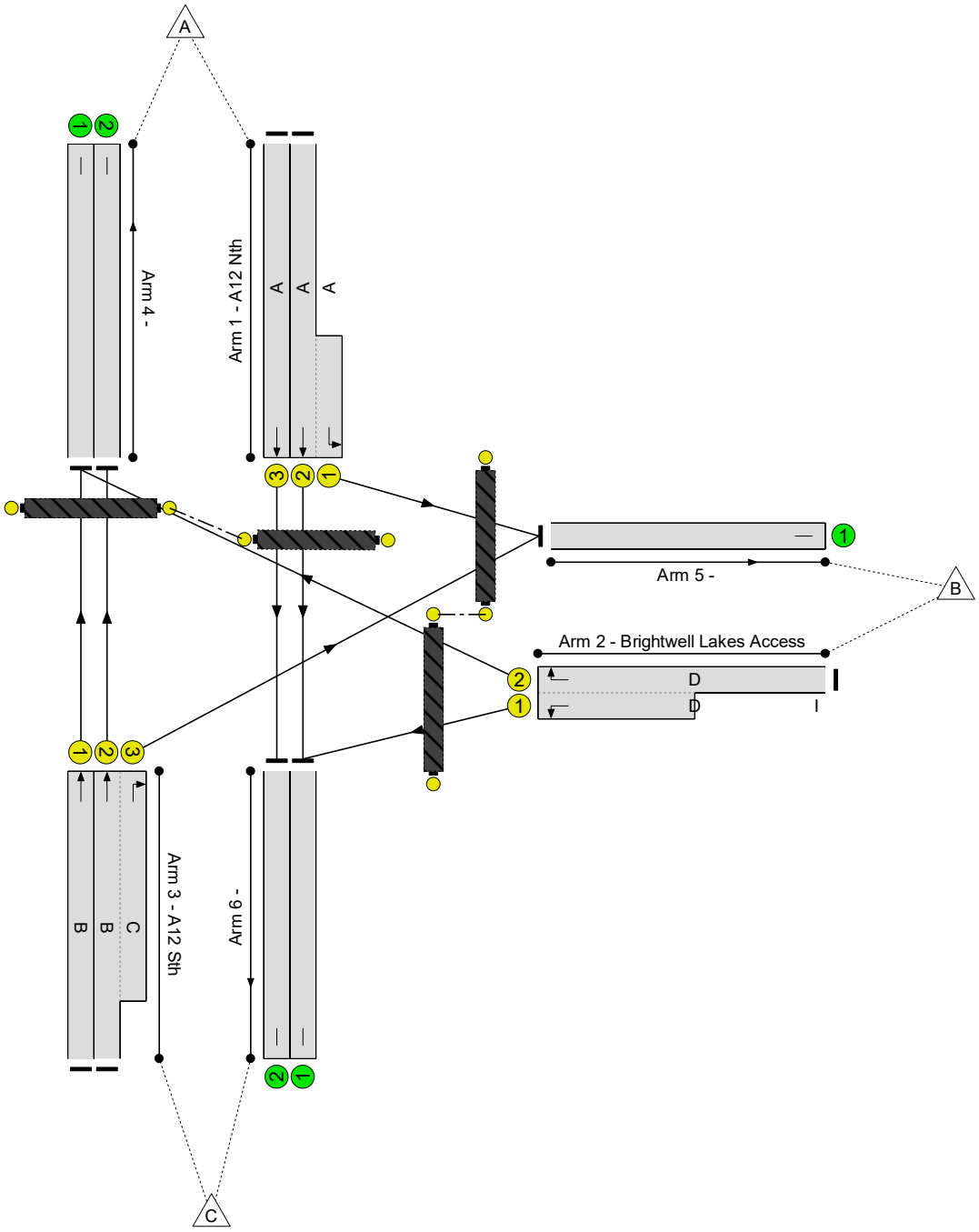
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -84.3 %
Total Traffic Delay: 564.7 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**165.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**165.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1219	2120:1819	1121+88	100.8 : 100.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1129	1980	1122	100.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	244	1786:1762	187+414	40.6 : 40.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1874	1980	1265	148.1%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	574	2120:1906	177+169	165.9 : 165.9%
4/1		U	N/A	N/A	-		-	-	-	1950	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1298	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1129	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**104.5**	**460.1**	**0.0**	**564.7**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**104.5**	**460.1**	**0.0**	**564.7**	**-**	**-**	**-**	**-**
1/2+1/1	1219	1210	-	-	-	7.4	19.9	-	27.3	80.7	32.2	19.9	52.1
1/3	1129	1122	-	-	-	6.8	18.6	-	25.5	81.2	28.9	18.6	47.6
2/2+2/1	244	244	-	-	-	2.1	0.3	-	2.4	35.3	3.5	0.3	3.8
3/1	1874	1265	-	-	-	74.1	306.0	-	380.1	730.3	110.5	306.0	416.5
3/2+3/3	574	462	-	-	-	14.1	115.2	-	129.3	811.2	18.2	115.2	133.4
4/1	1341	1341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	258	258	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1289	1289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1122	1122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -84.3
PRC Over All Lanes (%): -84.3

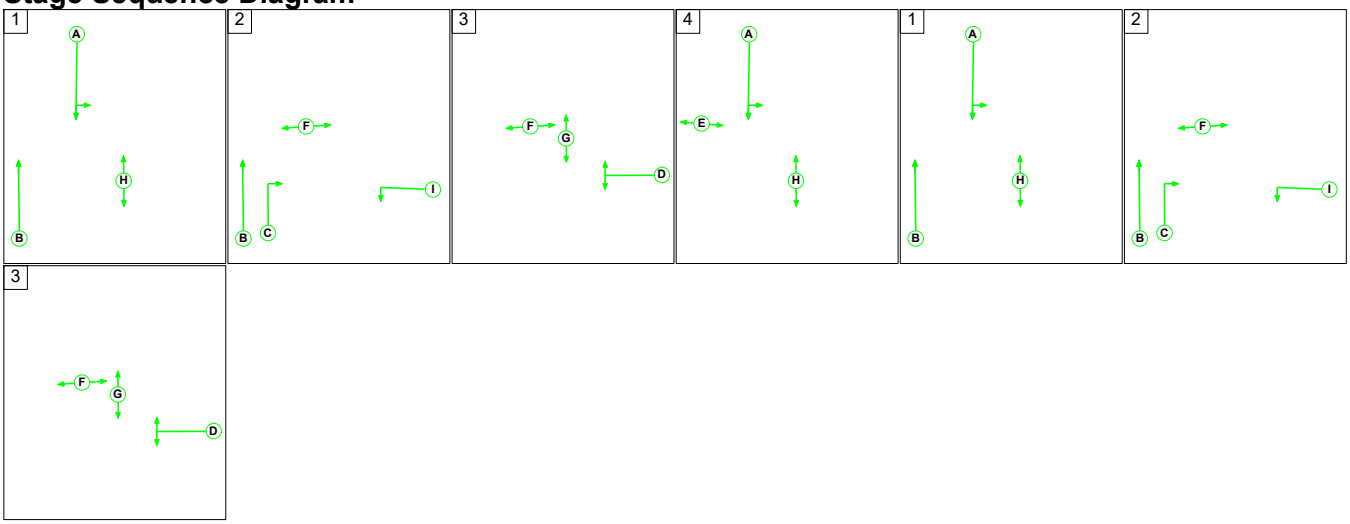
Total Delay for Signalled Lanes (pcuHr): 564.68
Total Delay Over All Lanes(pcuHr): 564.68

Cycle Time (s): 180

Full Input Data And Results

Scenario 26: '34OP 06:00-07:00' (FG26: '34OP 06:00-07:00', Plan 2: 'Network Control Plan 2')

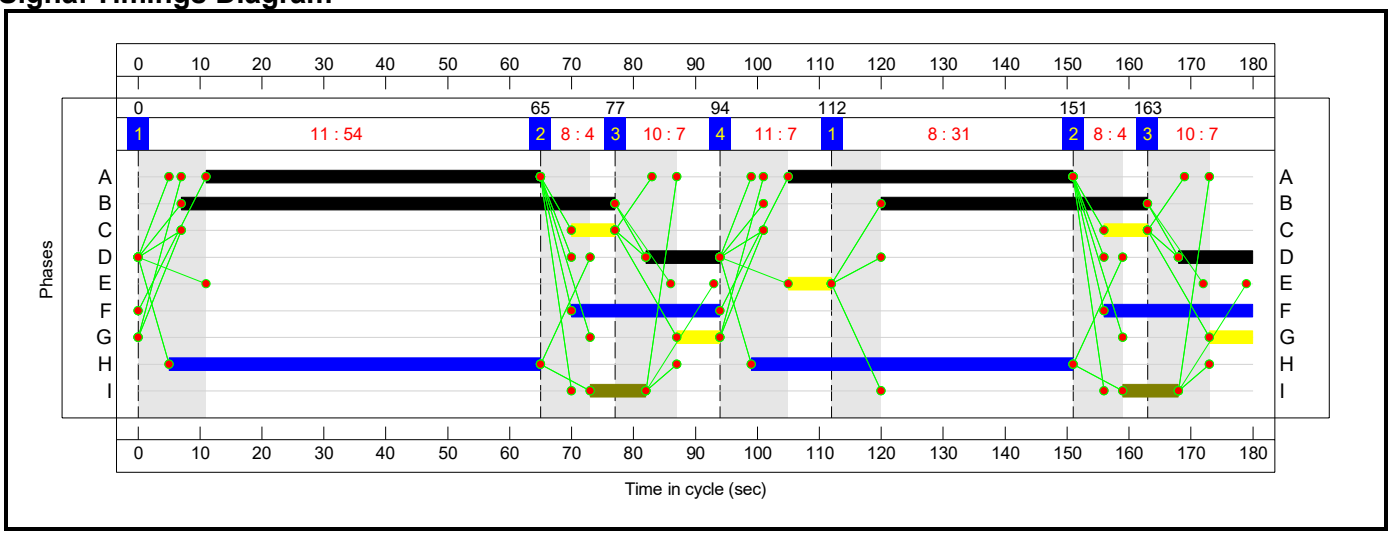
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	54	4	7	7	31	4	7
Change Point	0	65	77	94	112	151	163

Signal Timings Diagram

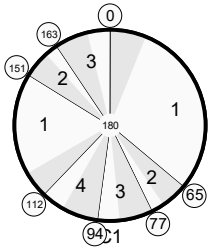


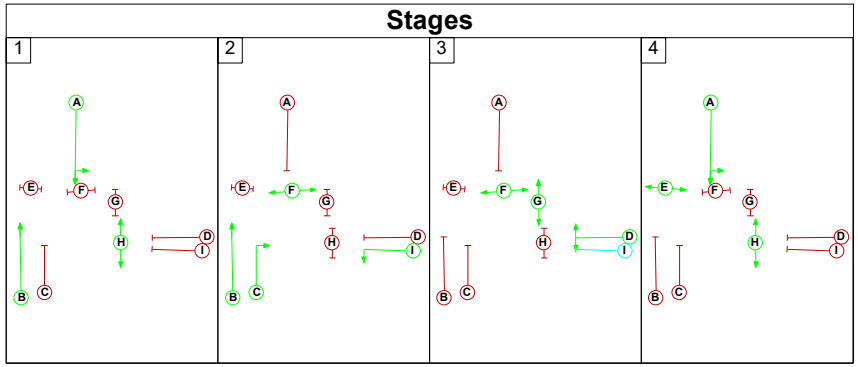
Full Input Data And Results

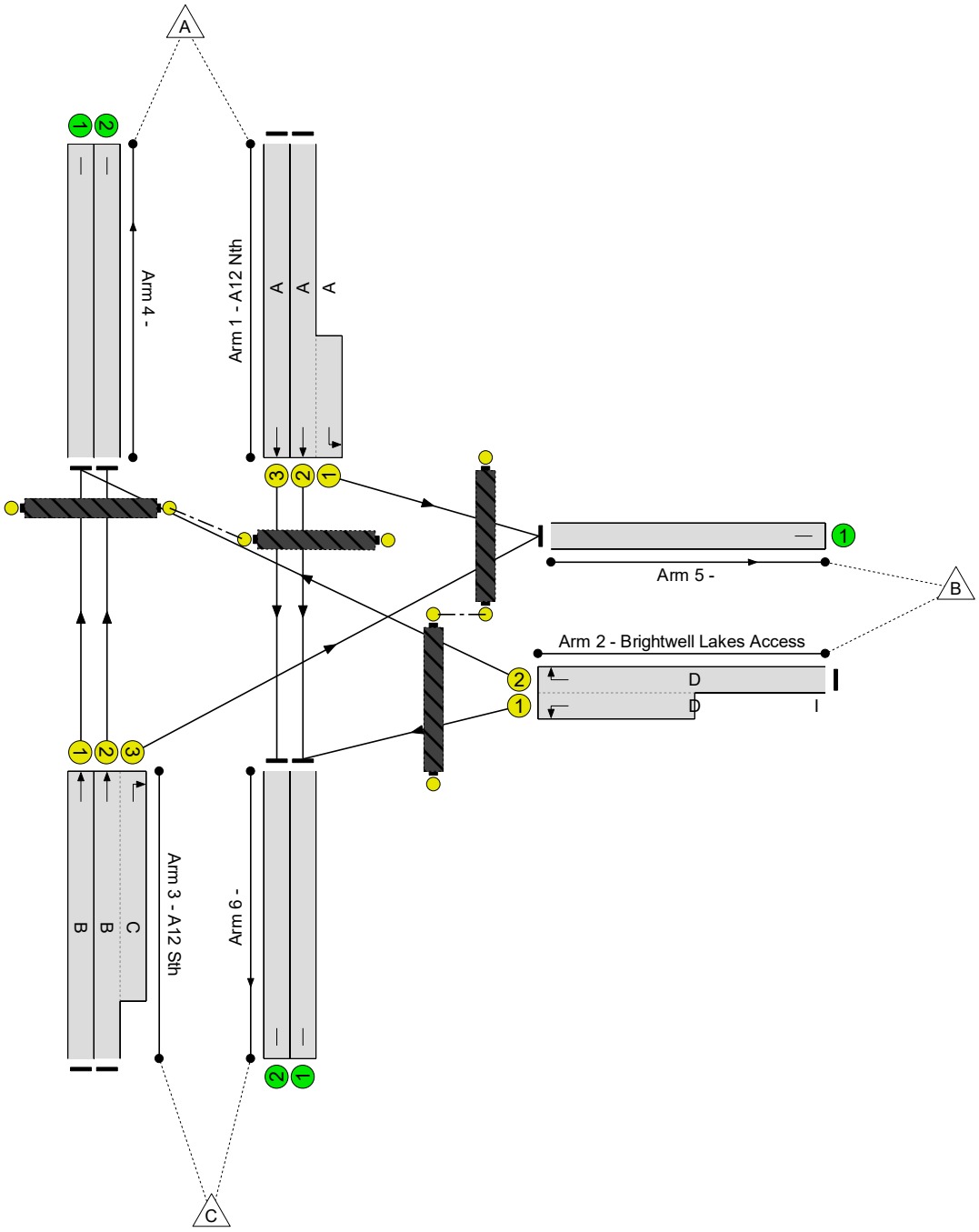
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 102.8 %
Total Traffic Delay: 6.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**44.4%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**44.4%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	532	2120:1980	1199+0	44.4 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	482	1980	1122	43.0%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	0	1965:1965	284+284	0.0 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	464	1980	1265	36.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	515	2120:2065	1354+0	38.0 : 0.0%
4/1		U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

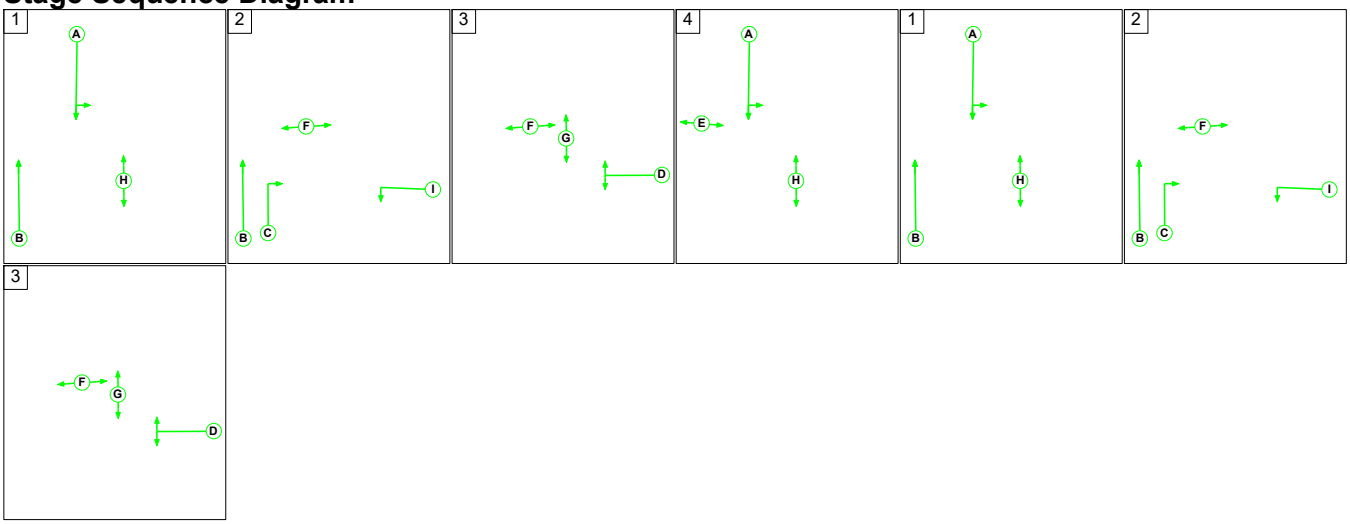
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**5.4**	**1.4**	**0.0**	**6.8**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**5.4**	**1.4**	**0.0**	**6.8**	**-**	**-**	**-**	**-**
1/2+1/1	532	532	-	-	-	1.7	0.4	-	2.1	14.0	7.7	0.4	8.1
1/3	482	482	-	-	-	1.5	0.4	-	1.9	14.0	6.8	0.4	7.2
2/2+2/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	464	464	-	-	-	1.1	0.3	-	1.4	10.6	7.0	0.3	7.2
3/2+3/3	515	515	-	-	-	1.2	0.3	-	1.5	10.6	7.9	0.3	8.2
4/1	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 102.8 Total Delay for Signalled Lanes (pcuHr): 6.81 Cycle Time (s): 180
PRC Over All Lanes (%): 102.8 Total Delay Over All Lanes(pcuHr): 6.81

Full Input Data And Results

Scenario 27: '34OP 07:00-08:00' (FG27: '34OP 07:00-08:00', Plan 2: 'Network Control Plan 2')

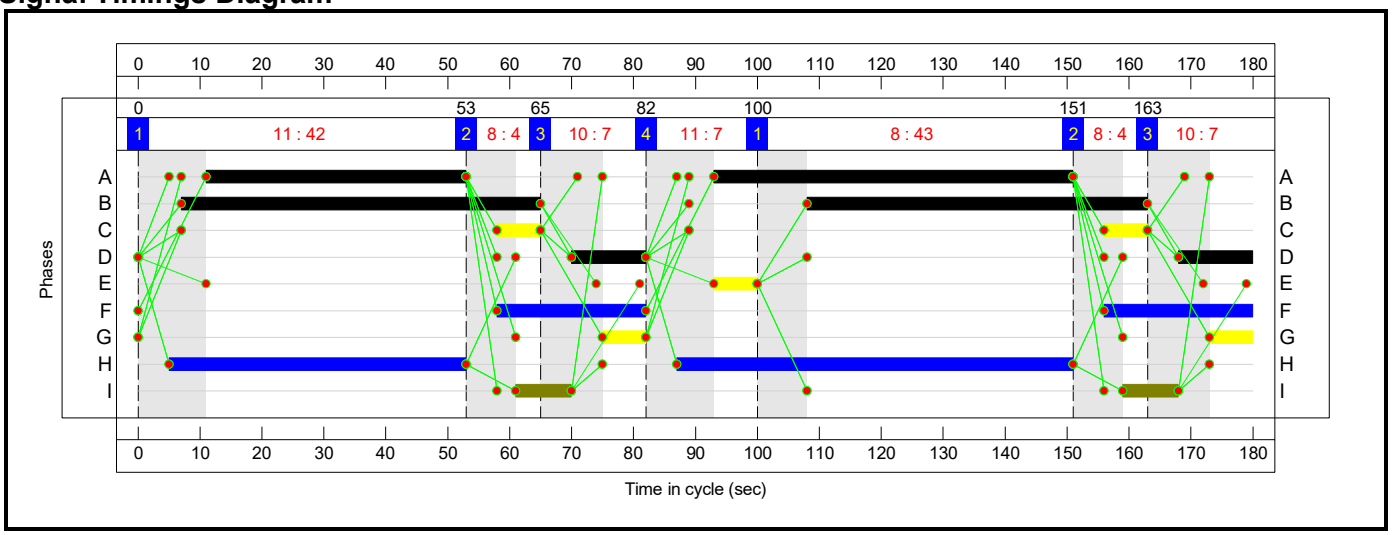
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	42	4	7	7	43	4	7
Change Point	0	53	65	82	100	151	163

Signal Timings Diagram

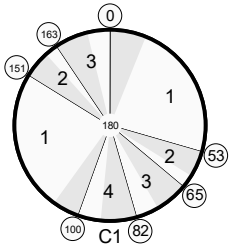


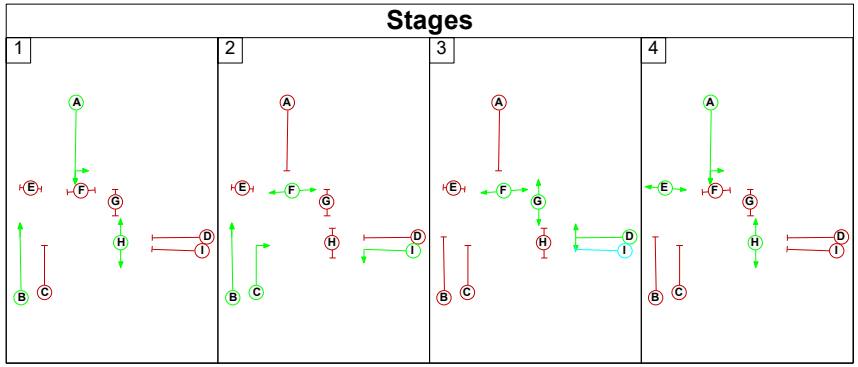
Full Input Data And Results

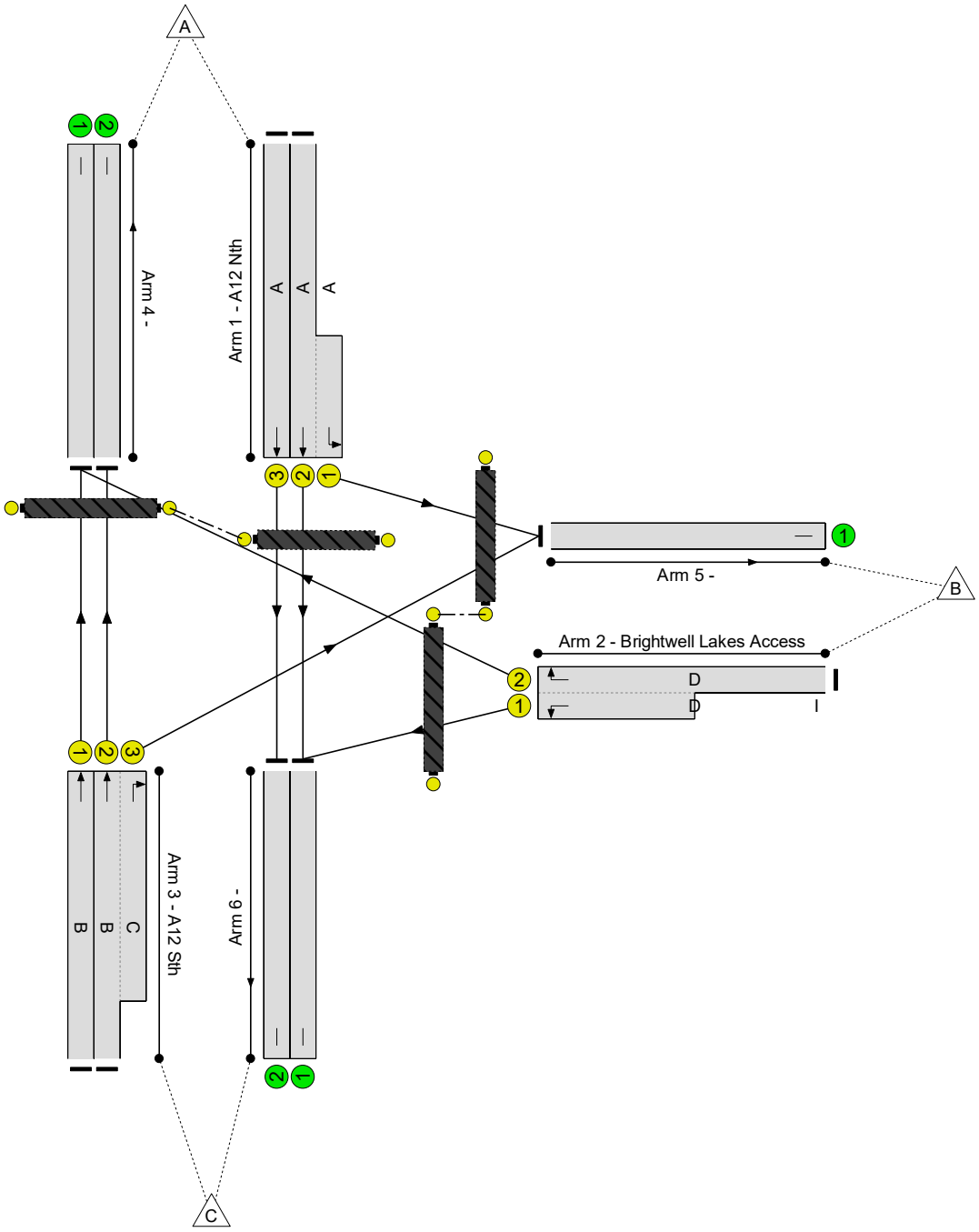
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: 3.8 %
Total Traffic Delay: 29.0 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.7%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.7%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	965	2120:1819	1186+14	80.4 : 80.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	890	1980	1122	79.3%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	195	1786:1762	220+411	30.9 : 30.9%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1084	1980	1265	85.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1204	2120:1906	1350+38	86.7 : 86.7%
4/1		U	N/A	N/A	-		-	-	-	1152	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1171	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	44	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1081	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	890	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

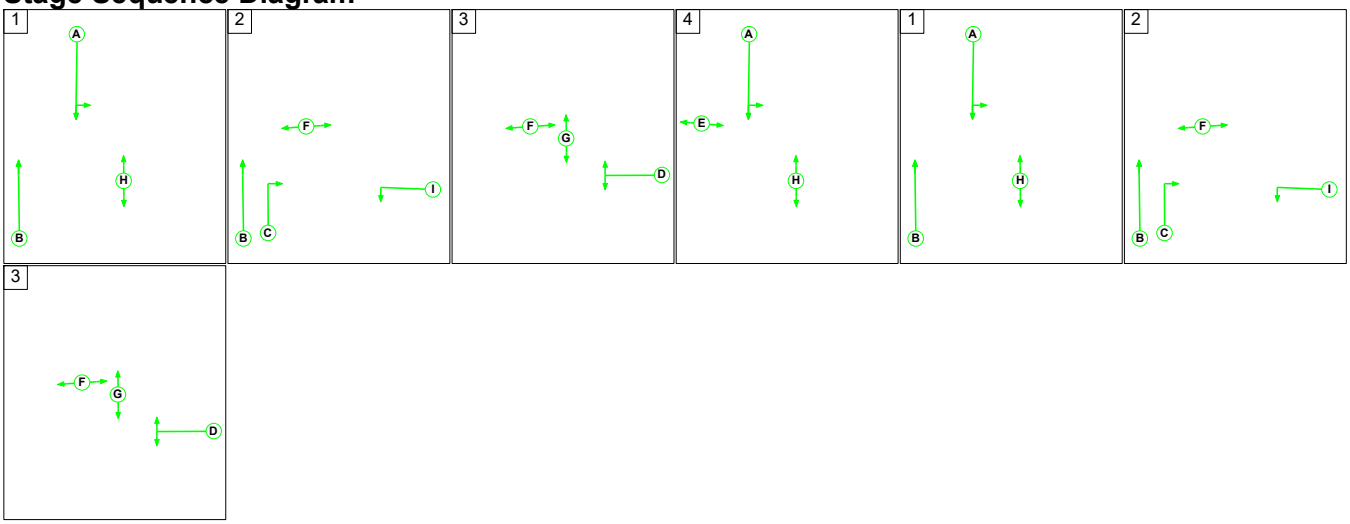
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**18.8**	**10.2**	**0.0**	**29.0**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**18.8**	**10.2**	**0.0**	**29.0**	**-**	**-**	**-**	**-**
1/2+1/1	965	965	-	-	-	4.1	2.0	-	6.2	23.0	19.0	2.0	21.0
1/3	890	890	-	-	-	3.8	1.9	-	5.7	23.0	17.3	1.9	19.2
2/2+2/1	195	195	-	-	-	1.6	0.2	-	1.9	34.5	2.9	0.2	3.1
3/1	1084	1084	-	-	-	4.2	2.9	-	7.1	23.7	27.7	2.9	30.6
3/2+3/3	1204	1204	-	-	-	5.0	3.2	-	8.1	24.4	30.4	3.2	33.6
4/1	1152	1152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1171	1171	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	44	44	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1081	1081	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 3.8 Total Delay for Signalled Lanes (pcuHr): 29.00 Cycle Time (s): 180
PRC Over All Lanes (%): 3.8 Total Delay Over All Lanes(pcuHr): 29.00

Full Input Data And Results

Scenario 28: '34OP 08:00-09:00' (FG28: '34OP 08:00-09:00', Plan 2: 'Network Control Plan 2')

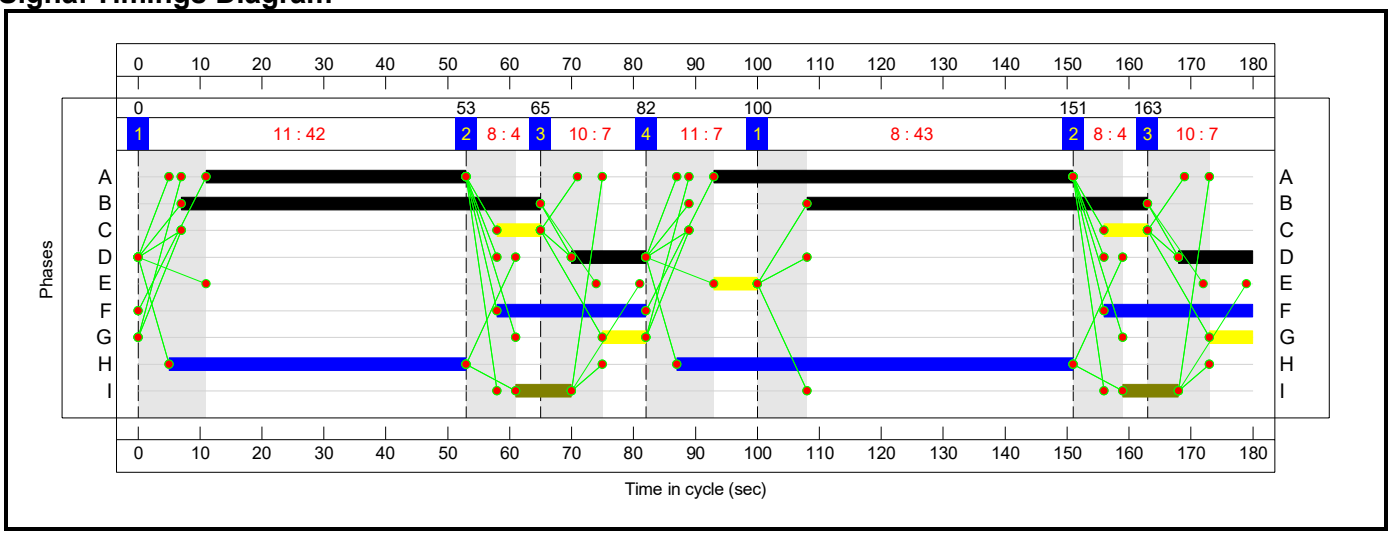
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	42	4	7	7	43	4	7
Change Point	0	53	65	82	100	151	163

Signal Timings Diagram

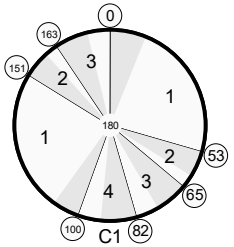


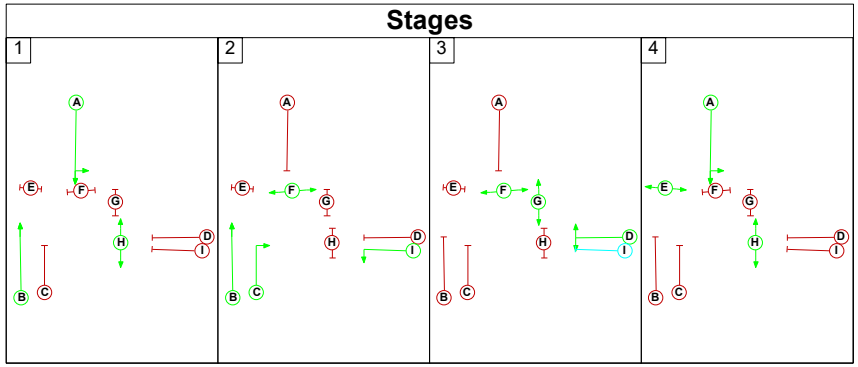
Full Input Data And Results

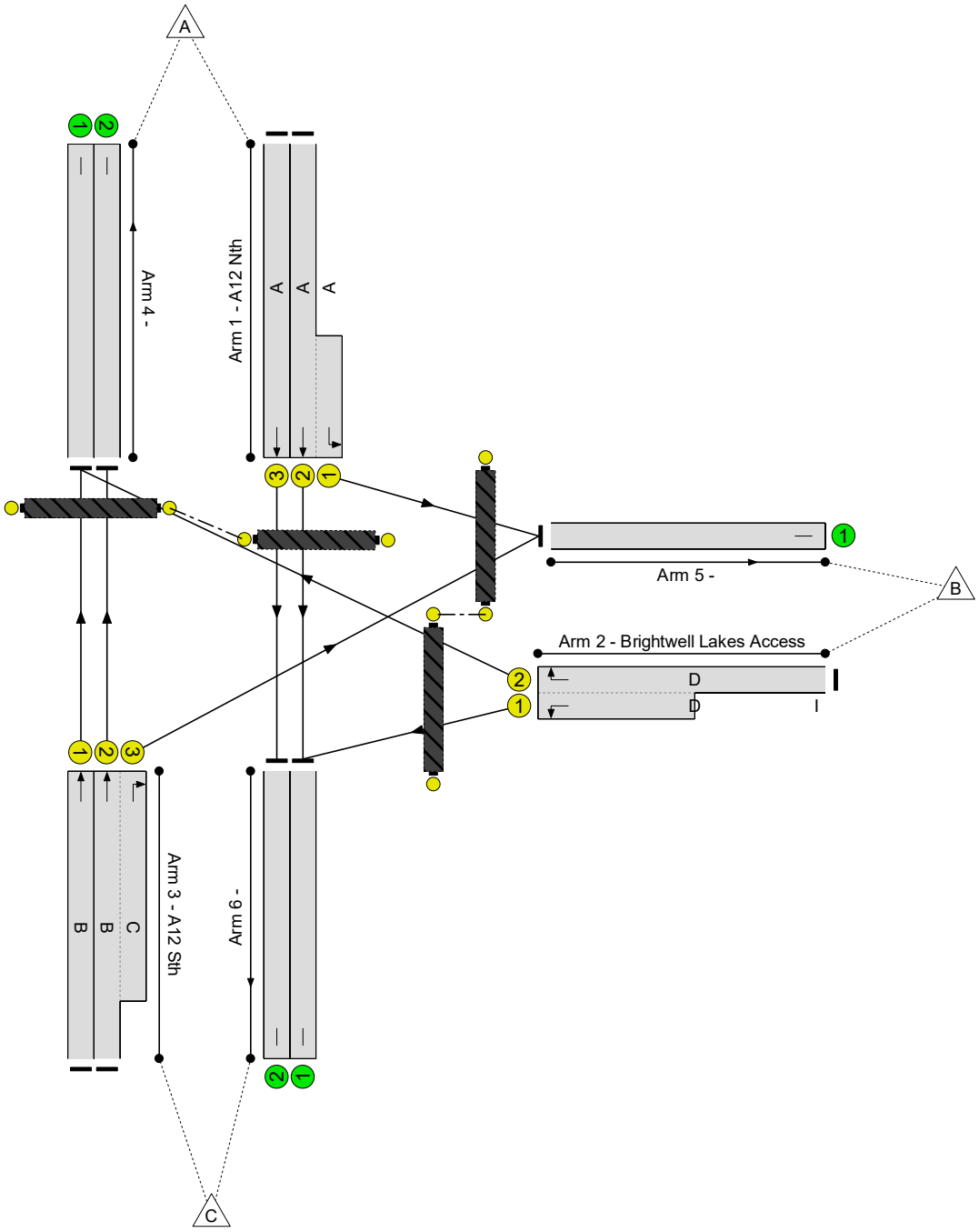
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -13.0 %
Total Traffic Delay: 90.2 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.7%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.7%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1096	2120:1980	1199+0	91.4 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1020	1980	1122	90.9%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	111	1965:1762	0+431	0.0 : 25.8%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1284	1980	1265	101.5%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1423	2120:1906	1346+53	101.7 : 101.7%
4/1		U	N/A	N/A	-		-	-	-	1284	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1369	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1207	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1020	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**31.7**	**58.5**	**0.0**	**90.2**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**31.7**	**58.5**	**0.0**	**90.2**	**-**	**-**	**-**	**-**
1/2+1/1	1096	1096	-	-	-	5.3	4.9	-	10.2	33.6	24.4	4.9	29.2
1/3	1020	1020	-	-	-	4.9	4.6	-	9.5	33.6	22.7	4.6	27.3
2/2+2/1	111	111	-	-	-	0.9	0.2	-	1.0	33.4	2.5	0.2	2.7
3/1	1284	1265	-	-	-	9.5	23.3	-	32.8	91.9	36.9	23.3	60.1
3/2+3/3	1423	1400	-	-	-	11.1	25.6	-	36.7	92.8	46.3	25.6	71.9
4/1	1265	1265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1346	1346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	53	53	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1207	1207	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1020	1020	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -13.0
PRC Over All Lanes (%): -13.0

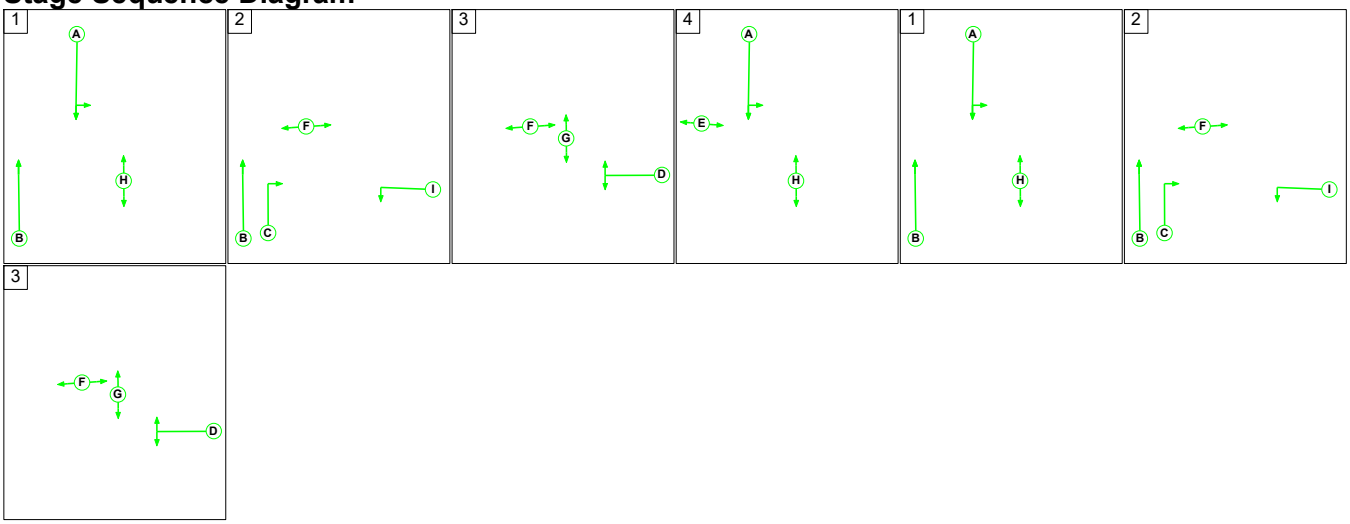
Total Delay for Signalled Lanes (pcuHr): 90.24
Total Delay Over All Lanes(pcuHr): 90.24

Cycle Time (s): 180

Full Input Data And Results

Scenario 29: '34OP 15:00-16:00' (FG29: '34OP 15:00-16:00', Plan 2: 'Network Control Plan 2')

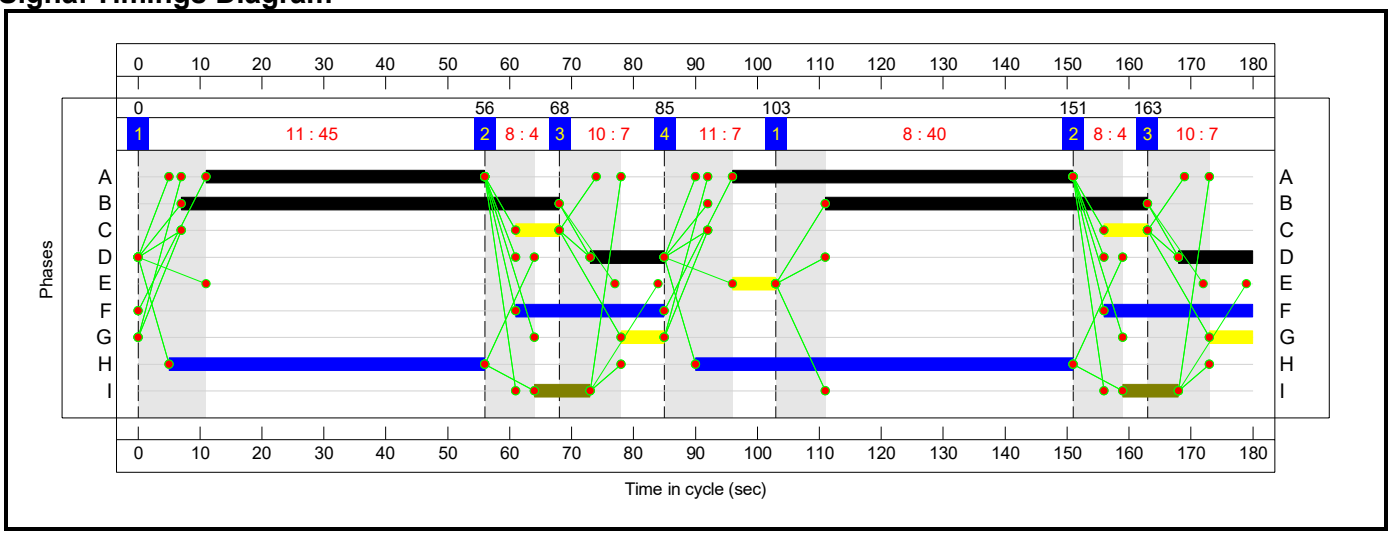
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	45	4	7	7	40	4	7
Change Point	0	56	68	85	103	151	163

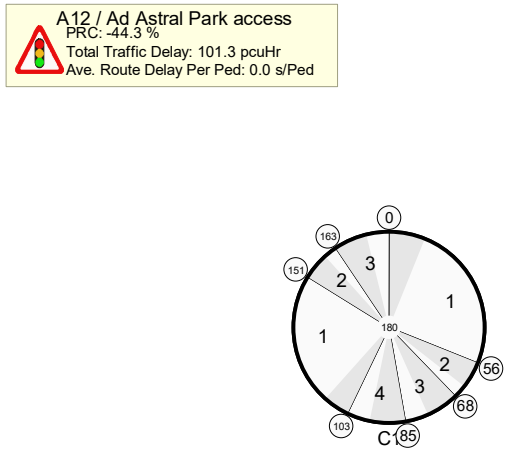
Signal Timings Diagram

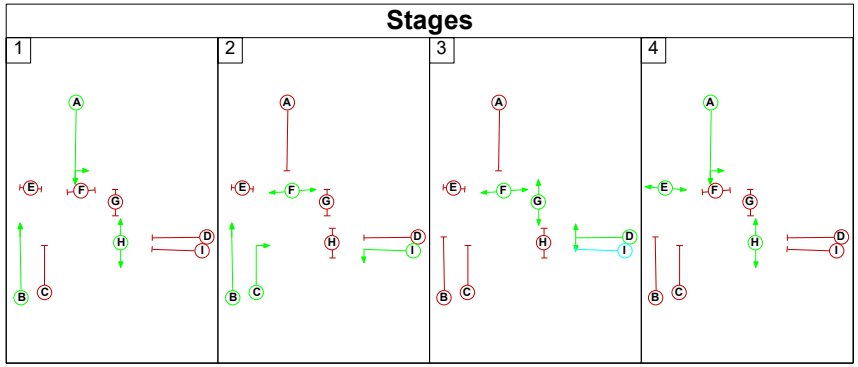


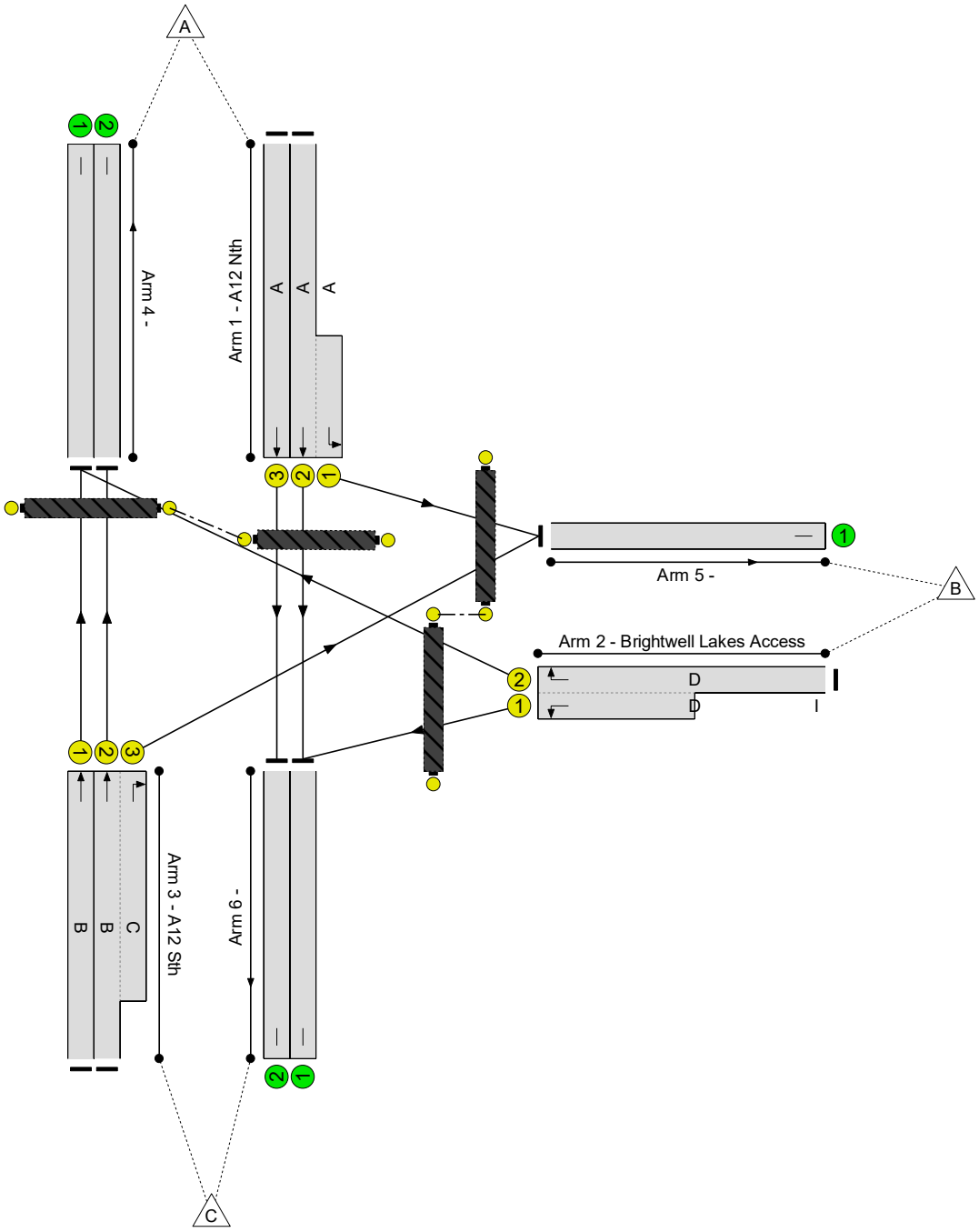
Full Input Data And Results

Network Layout Diagram

Full Input Data And Results







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**129.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**129.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1206	2120:1819	1108+105	99.5 : 99.5%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1113	1980	1122	99.2%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	188	1786:1762	232+410	29.3 : 29.3%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1168	1980	1265	92.3%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1394	2120:1906	1306+169	89.9 : 129.9%
4/1		U	N/A	N/A	-		-	-	-	1236	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1174	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	324	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1222	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1113	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

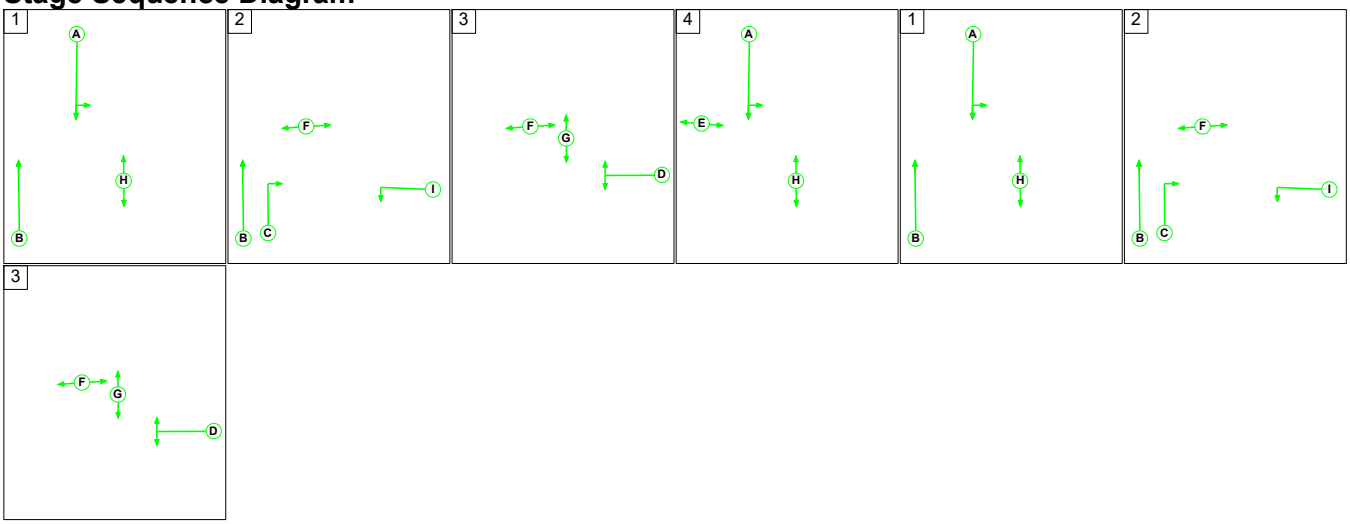
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**32.6**	**68.7**	**0.0**	**101.3**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**32.6**	**68.7**	**0.0**	**101.3**	**-**	**-**	**-**	**-**
1/2+1/1	1206	1206	-	-	-	6.9	15.9	-	22.7	67.9	31.6	15.9	47.5
1/3	1113	1113	-	-	-	6.5	14.6	-	21.0	68.0	29.7	14.6	44.3
2/2+2/1	188	188	-	-	-	1.6	0.2	-	1.8	34.1	2.6	0.2	2.8
3/1	1168	1168	-	-	-	5.6	5.4	-	11.0	33.8	30.8	5.4	36.2
3/2+3/3	1394	1343	-	-	-	12.2	32.6	-	44.8	115.7	33.5	32.6	66.0
4/1	1236	1236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1174	1174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1222	1222	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1113	1113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -44.3 Total Delay for Signalled Lanes (pcuHr): 101.32 Cycle Time (s): 180
PRC Over All Lanes (%): -44.3 Total Delay Over All Lanes(pcuHr): 101.32

Full Input Data And Results

Scenario 30: '34OP 17:00-18:00' (FG30: '34OP 17:00-18:00', Plan 2: 'Network Control Plan 2')

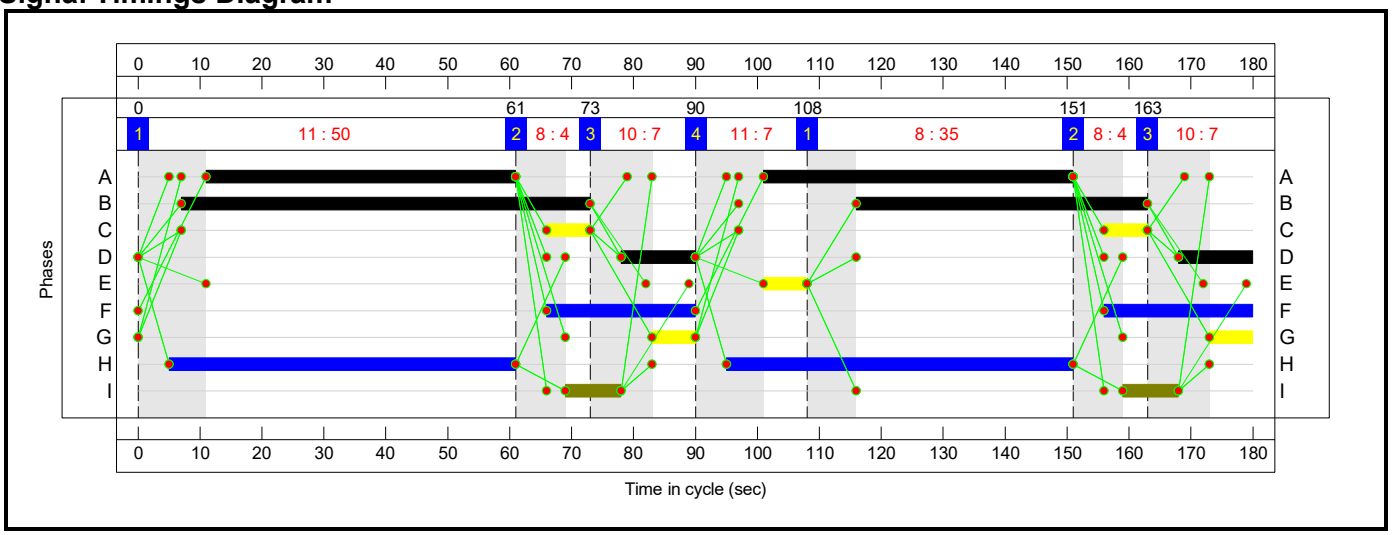
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

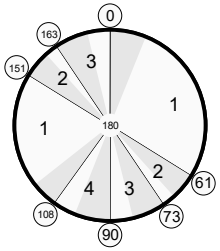


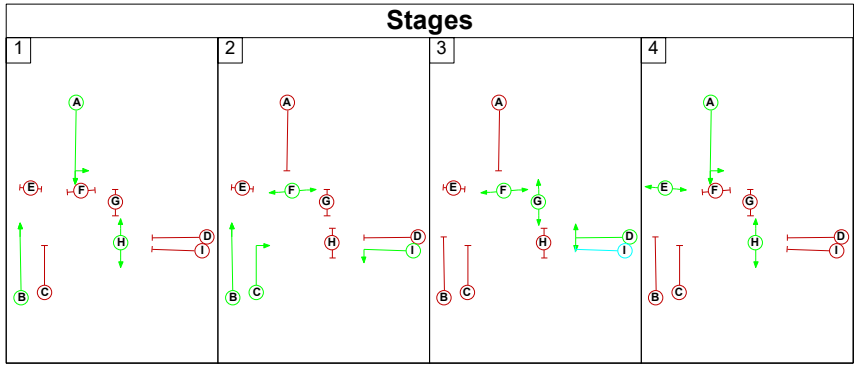
Full Input Data And Results

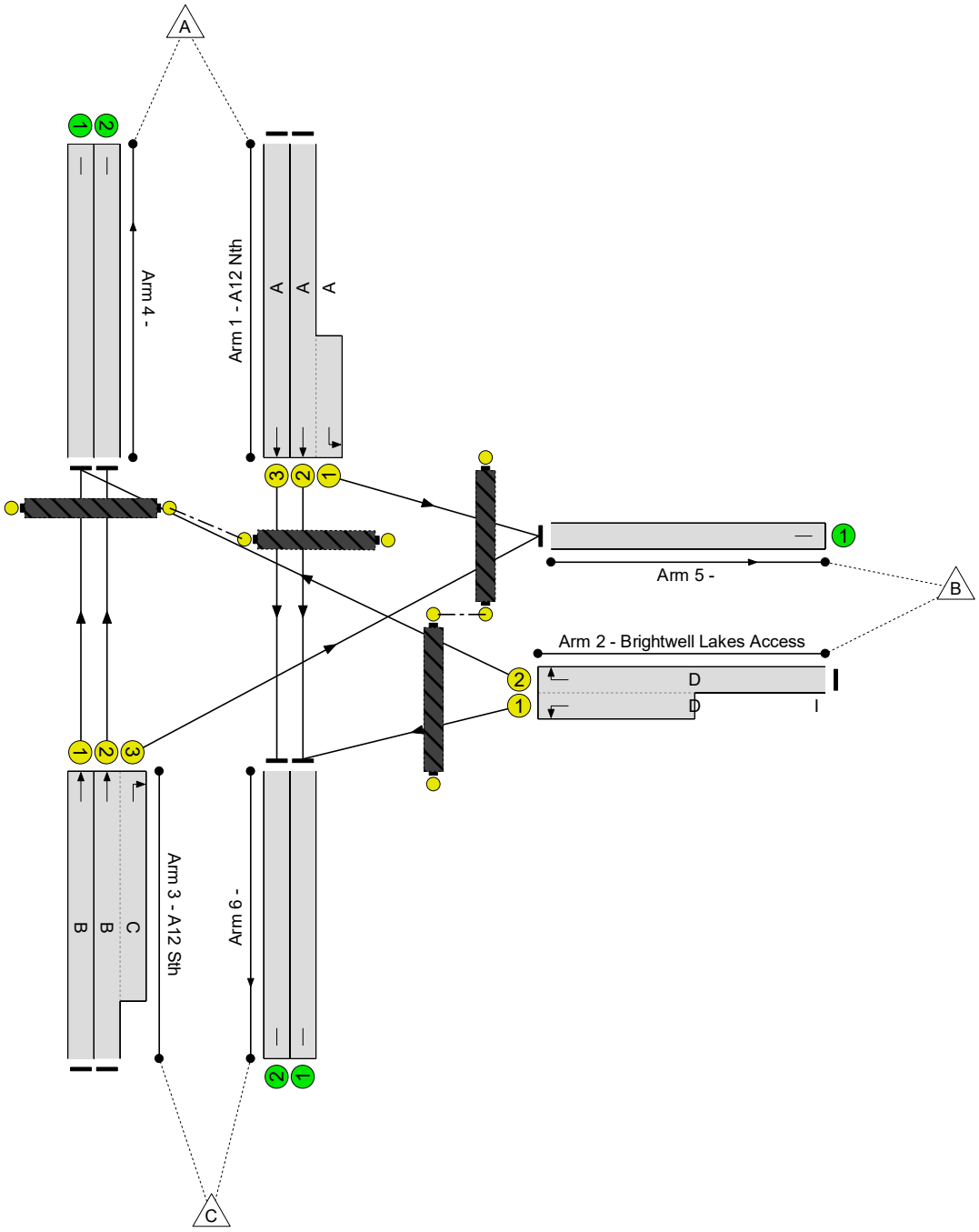
Network Layout Diagram

Full Input Data And Results

A12 / Ad Astral Park access
PRC: -84.3 %
Total Traffic Delay: 565.5 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**165.9%**
A12 / Ad Astral Park access	-	-	**N/A**	-	-		-	-	-	-	-	-	**165.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1221	2120:1819	1122+88	100.9 : 100.9%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1131	1980	1122	100.8%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	244	1786:1762	187+414	40.6 : 40.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1874	1980	1265	148.1%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	570	2120:1906	174+169	165.9 : 165.9%
4/1		U	N/A	N/A	-		-	-	-	1950	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1300	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1131	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	112	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**105.0**	**460.5**	**0.0**	**565.5**	**-**	**-**	**-**	**-**
A12 / Ad Astral Park access	**-**	**-**	**0**	**0**	**0**	**105.0**	**460.5**	**0.0**	**565.5**	**-**	**-**	**-**	**-**
1/2+1/1	1221	1210	-	-	-	7.6	20.5	-	28.1	83.0	32.8	20.5	53.3
1/3	1131	1122	-	-	-	7.0	19.2	-	26.3	83.6	29.2	19.2	48.4
2/2+2/1	244	244	-	-	-	2.1	0.3	-	2.4	35.3	3.5	0.3	3.8
3/1	1874	1265	-	-	-	74.1	306.0	-	380.1	730.3	110.5	306.0	416.5
3/2+3/3	570	458	-	-	-	14.1	114.4	-	128.5	811.8	18.2	114.4	132.6
4/1	1341	1341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	258	258	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1290	1290	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1122	1122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -84.3
PRC Over All Lanes (%): -84.3

Total Delay for Signalled Lanes (pcuHr): 565.48
Total Delay Over All Lanes(pcuHr): 565.48

Cycle Time (s): 180

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 2020.07.23_J23_Model_CV_v16 Adjusted.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J23\Model
Report generation date: 18/12/2020 10:30:56

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM
»2023 Reference Case [Adjusted flows], 6-7 AM
»2023 Reference Case [Adjusted flows], 7-8 AM
»2023 Reference Case [Adjusted flows], 8-9 AM
»2023 Reference Case [Adjusted flows], 3-4 PM
»2023 Reference Case [Adjusted flows], 5-6 PM
»2023 Early Years [Adjusted flows], 6-7 AM
»2023 Early Years [Adjusted flows], 7-8 AM
»2023 Early Years [Adjusted flows], 8-9 AM
»2023 Early Years [Adjusted flows], 3-4 PM
»2023 Early Years [Adjusted flows], 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
A - A12 North	0.7	2.7	2.84	0.40	A	3.5	12.4	9.00	0.78	A	7.6	38.4	19.65	0.89	C	2.7	5.4	6.83	0.73	A	2.7	5.5	6.30	0.73	A
B - Eagle Way West	0.1	0.5	3.49	0.07	A	0.5	2.0	9.42	0.33	A	1.7	9.0	30.31	0.64	D	0.5	1.9	9.71	0.33	A	0.3	1.3	7.70	0.24	A
C - A12 South	0.4	1.5	1.81	0.28	A	2.0	4.5	3.94	0.67	A	6.6	32.3	10.15	0.87	B	2.3	5.3	4.38	0.70	A	2.2	4.8	4.07	0.69	A
D - Barrack Square East	0.1	0.5	3.41	0.07	A	0.3	1.4	6.18	0.25	A	1.0	3.9	9.54	0.50	A	2.6	11.6	16.23	0.73	C	2.8	12.7	17.06	0.74	C
	2023 Reference Case																								
A - A12 North	0.7	2.3	2.95	0.43	A	4.9	23.3	11.95	0.84	B	8.9	48.2	22.87	0.91	C	3.3	10.0	8.08	0.77	A	3.1	7.1	7.14	0.76	A
B - Eagle Way West	0.1	0.5	3.61	0.07	A	0.7	3.5	12.51	0.42	B	12.4	35.1	178.75	1.06	F	0.7	3.4	12.76	0.42	B	0.4	1.3	8.96	0.29	A
C - A12 South	0.4	1.5	1.84	0.30	A	2.6	6.2	4.72	0.73	A	16.5	90.5	23.92	0.95	C	3.1	7.2	5.42	0.76	A	2.7	6.2	4.78	0.73	A
D - Barrack Square East	0.1	0.5	3.52	0.07	A	0.4	1.3	6.88	0.29	A	1.2	4.2	10.63	0.55	B	3.3	16.8	20.56	0.78	C	3.2	16.0	19.93	0.77	C
	2023 Early Years																								
A - A12 North	0.8	2.2	2.98	0.43	A	6.3	32.3	15.03	0.87	C	10.2	56.6	26.04	0.92	D	3.6	12.7	8.81	0.79	A	3.3	8.8	7.63	0.77	A
B - Eagle Way West	0.1	0.5	3.79	0.08	A	1.1	5.5	18.95	0.53	C	26.2	50.1	354.81	1.30	F	0.8	3.7	13.71	0.44	B	0.4	1.5	9.43	0.30	A
C - A12 South	0.5	2.2	1.98	0.33	A	3.9	10.2	6.58	0.80	A	33.0	129.8	44.36	0.99	E	3.4	7.7	5.88	0.77	A	2.9	6.7	5.08	0.75	A
D - Barrack Square East	0.1	0.5	3.54	0.07	A	0.4	1.5	7.30	0.30	A	1.2	4.2	10.94	0.56	B	3.6	18.3	22.36	0.79	C	3.4	17.1	21.09	0.78	C
	2028 Reference Case																								
A - A12 North	0.8	2.1	3.02	0.44	A	5.8	29.7	13.96	0.86	B	26.1	98.7	58.01	1.00	F	5.2	25.3	11.71	0.84	B	5.0	23.0	10.57	0.84	B
B - Eagle Way West	0.1	0.5	3.66	0.08	A	0.9	4.5	15.01	0.48	C	12.5	36.1	173.03	1.05	F	0.9	4.6	15.56	0.48	C	0.5	2.0	10.83	0.34	B
C - A12 South	0.4	1.6	1.86	0.31	A	3.0	7.0	5.19	0.75	A	12.5	69.0	18.86	0.94	C	3.6	8.2	6.19	0.79	A	3.2	7.3	5.58	0.76	A
D - Barrack Square East	0.1	0.5	3.57	0.07	A	0.5	2.0	7.46	0.33	A	2.1	7.8	16.17	0.69	C	6.2	33.5	36.98	0.88	E	14.1	57.5	74.79	0.97	F
	2028 Peak Construction																								
A - A12 North	0.8	2.1	3.02	0.44	A	6.0	30.9	14.46	0.86	B	29.9	103.0	64.99	1.01	F	7.3	37.5	16.07	0.89	C	5.9	29.5	12.43	0.86	B
B - Eagle Way West	0.1	0.5	4.01	0.09	A	1.4	7.0	22.74	0.59	C	16.4	40.3	216.87	1.11	F	1.0	5.2	17.64	0.51	C	0.5	2.0	10.89	0.34	B
C - A12 South	0.6	2.7	2.07	0.37	A	4.2	12.9	7.00	0.81	A	14.7	81.0	22.36	0.95	C	4.1	12.4	7.01	0.81	A	3.2	7.4	5.65	0.77	A
D - Barrack Square East	0.1	0.5	3.58	0.07	A	0.5	2.0	7.52	0.33	A	2.0	7.4	15.90	0.68	C	9.4	46.1	56.12	0.93	F	19.0	63.6	97.08	1.01	F
	2034 Reference Case																								
A - A12 North	0.8	1.7	3.12	0.46	A	8.9	47.5	20.48	0.91	C	65.0	138.3	119.47	1.06	F	21.6	98.5	41.66	0.98	E	24.4	105.7	43.68	0.98	E

B - Eagle Way West	0.1	0.5	3.86	0.09	A	1.3	6.4	20.38	0.57	C	16.6	41.2	212.86	1.11	F	1.7	8.6	27.65	0.63	D	0.7	3.0	13.28	0.40	B
C - A12 South	0.5	2.3	1.95	0.34	A	3.6	8.2	6.05	0.79	A	11.8	63.7	17.94	0.93	C	5.9	27.0	9.28	0.86	A	4.1	11.6	6.71	0.81	A
D - Barrack Square East	0.1	0.5	3.65	0.07	A	0.7	3.2	8.78	0.40	A	3.4	16.5	23.50	0.78	C	29.2	71.8	145.69	1.07	F	83.9	127.9	373.10	1.28	F
	2034 Operational Led																								
A - A12 North	0.8	1.7	3.12	0.46	A	8.9	47.5	20.48	0.91	C	74.8	147.9	134.66	1.08	F	20.2	95.3	39.39	0.97	E	25.1	107.0	44.69	0.99	E
B - Eagle Way West	0.1	0.5	3.86	0.09	A	1.3	6.3	20.06	0.56	C	16.2	40.8	209.13	1.10	F	1.6	8.5	27.27	0.63	D	0.6	3.0	13.15	0.40	B
C - A12 South	0.5	2.3	1.95	0.34	A	3.5	8.1	5.98	0.78	A	11.6	62.8	17.78	0.93	C	5.8	26.4	9.19	0.86	A	4.0	11.2	6.65	0.80	A
D - Barrack Square East	0.1	0.5	3.65	0.07	A	0.7	3.2	8.83	0.40	A	3.4	16.8	23.72	0.79	C	28.1	70.9	140.68	1.06	F	84.2	128.1	375.04	1.28	F
	2023 Reference Case [Adjusted flows]																								
A - A12 North	0.7	2.3	2.95	0.43	A	4.9	23.3	11.95	0.84	B	8.9	48.2	22.87	0.91	C	3.3	10.0	8.08	0.77	A	3.1	7.1	7.14	0.76	A
B - Eagle Way West	0.1	0.5	3.61	0.07	A	0.7	3.5	12.51	0.42	B	12.4	35.1	178.75	1.06	F	0.7	3.4	12.76	0.42	B	0.4	1.3	8.96	0.29	A
C - A12 South	0.4	1.5	1.84	0.30	A	2.6	6.2	4.72	0.73	A	16.5	90.5	23.92	0.95	C	3.1	7.2	5.42	0.76	A	2.7	6.2	4.78	0.73	A
D - Barrack Square East	0.1	0.5	3.52	0.07	A	0.4	1.3	6.88	0.29	A	1.2	4.2	10.63	0.55	B	3.3	16.8	20.56	0.78	C	3.2	16.0	19.93	0.77	C
	2023 Early Years [Adjusted flows]																								
A - A12 North	0.8	2.2	2.98	0.43	A	6.3	32.3	15.03	0.87	C	10.2	56.6	26.04	0.92	D	3.6	12.7	8.81	0.79	A	3.3	8.8	7.63	0.77	A
B - Eagle Way West	0.1	0.5	3.79	0.08	A	1.1	5.5	18.95	0.53	C	26.2	50.1	354.81	1.30	F	0.8	3.7	13.71	0.44	B	0.4	1.5	9.43	0.30	A
C - A12 South	0.5	2.2	1.98	0.33	A	3.9	10.2	6.58	0.80	A	33.0	129.8	44.36	0.99	E	3.4	7.7	5.88	0.77	A	2.9	6.7	5.08	0.75	A
D - Barrack Square East	0.1	0.5	3.54	0.07	A	0.4	1.5	7.30	0.30	A	1.2	4.2	10.94	0.56	B	3.6	18.3	22.36	0.79	C	3.4	17.1	21.09	0.78	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

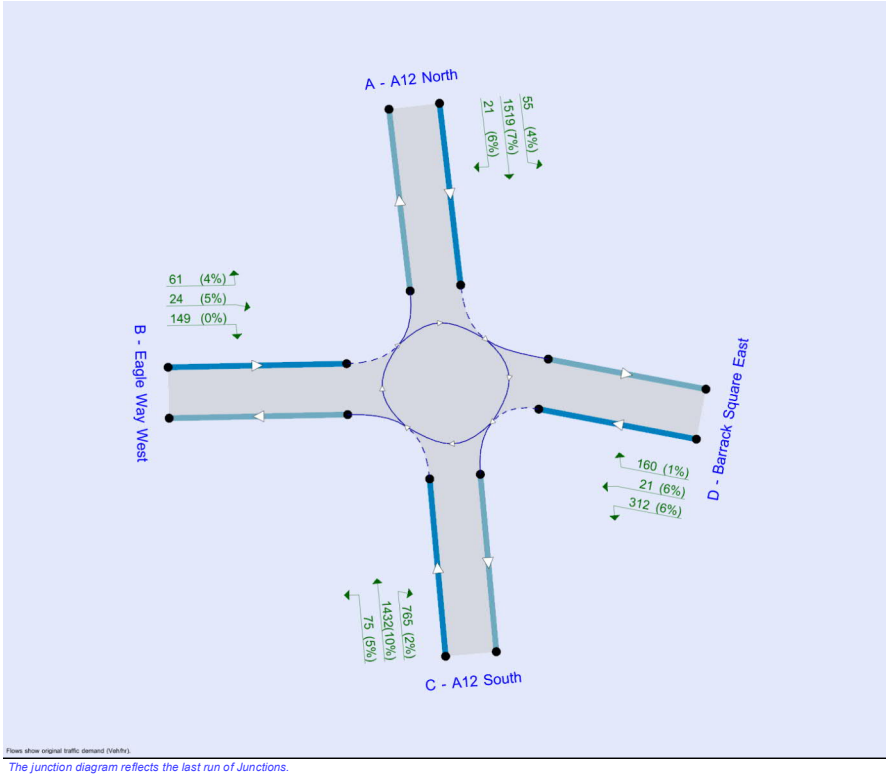
File summary

File Description

Title	A12 / Eagle Way / Barrack Square
Location	52° 3'36.26"N, 1°16'35.87"E
Site number	23
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Barrack Square East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.00	7.00	0.0	33.0	75.3	5.0	
B - Eagle Way West	3.50	5.63	12.7	29.9	75.3	26.0	
C - A12 South	7.60	7.60	0.0	27.3	75.3	6.5	
D - Barrack Square East	3.70	6.90	22.6	24.1	75.3	30.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	50
B - Eagle Way West	None		
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	500
D - Barrack Square East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-150

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.607	2396
B - Eagle Way West	0.466	1524
C - A12 South	0.631	3021
D - Barrack Square East	0.503	1653

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	768	100.000
B - Eagle Way West		ONE HOUR	✓	66	100.000
C - A12 South		ONE HOUR	✓	695	100.000
D - Barrack Square East		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	727	39
	B - Eagle Way West	14	0	47	5
	C - A12 South	524	8	0	163
	D - Barrack Square East	0	6	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	7	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.84	0.7	2.7	A	705	1057
B - Eagle Way West	0.07	3.49	0.1	0.5	A	61	91
C - A12 South	0.28	1.81	0.4	1.5	A	638	957
D - Barrack Square East	0.07	3.41	0.1	0.5	A	62	94

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	578	145	162	2155	0.268	577	404	0.0	0.4	2.278	A
B - Eagle Way West	50	12	516	1224	0.041	50	12	0.0	0.0	3.065	A
C - A12 South	523	131	6	2751	0.190	522	628	0.0	0.2	1.615	A
D - Barrack Square East	51	13	583	1267	0.040	51	156	0.0	0.0	2.959	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	690	173	193	2137	0.323	690	483	0.4	0.5	2.488	A
B - Eagle Way West	59	15	617	1174	0.051	59	14	0.0	0.1	3.229	A
C - A12 South	625	156	7	2750	0.227	625	751	0.2	0.3	1.693	A
D - Barrack Square East	61	15	697	1209	0.051	61	186	0.0	0.1	3.134	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	846	211	237	2111	0.400	845	592	0.5	0.7	2.841	A
B - Eagle Way West	73	18	756	1105	0.066	73	18	0.1	0.1	3.486	A
C - A12 South	765	191	9	2749	0.278	765	920	0.3	0.4	1.814	A
D - Barrack Square East	75	19	854	1130	0.066	75	228	0.1	0.1	3.409	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	846	211	237	2111	0.400	846	592	0.7	0.7	2.843	A
B - Eagle Way West	73	18	756	1105	0.066	73	18	0.1	0.1	3.487	A
C - A12 South	765	191	9	2749	0.278	765	920	0.4	0.4	1.814	A
D - Barrack Square East	75	19	854	1130	0.066	75	228	0.1	0.1	3.410	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	690	173	193	2137	0.323	691	484	0.7	0.5	2.493	A
B - Eagle Way West	59	15	618	1173	0.051	59	14	0.1	0.1	3.231	A
C - A12 South	625	156	7	2750	0.227	625	752	0.4	0.3	1.693	A
D - Barrack Square East	61	15	698	1209	0.051	61	186	0.1	0.1	3.136	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	578	145	162	2155	0.268	579	405	0.5	0.4	2.285	A
B - Eagle Way West	50	12	517	1223	0.041	50	12	0.1	0.0	3.069	A
C - A12 South	523	131	6	2751	0.190	523	630	0.3	0.2	1.618	A
D - Barrack Square East	51	13	585	1266	0.040	51	156	0.1	0.0	2.964	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.48	0.00	0.00	0.48	0.48			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.66	0.03	0.25	0.66	0.66			N/A	N/A
B - Eagle Way West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.38	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.67	0.03	0.28	0.89	2.66			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.39	0.03	0.34	1.24	1.47			N/A	N/A
D - Barrack Square East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.48	0.00	0.00	0.48	0.48			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	6.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1301	100.000
B - Eagle Way West		ONE HOUR	✓	173	100.000
C - A12 South		ONE HOUR	✓	1702	100.000
D - Barrack Square East		ONE HOUR	✓	181	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1259	41
	B - Eagle Way West	40	0	110	23
	C - A12 South	1161	26	0	515
	D - Barrack Square East	19	8	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	9.00	3.5	12.4	A	1194	1791
B - Eagle Way West	0.33	9.42	0.5	2.0	A	159	238
C - A12 South	0.67	3.94	2.0	4.5	A	1562	2343
D - Barrack Square East	0.25	6.18	0.3	1.4	A	166	249

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	979	245	487	1967	0.498	976	916	0.0	1.0	3.616	A
B - Eagle Way West	130	33	1273	862	0.151	130	26	0.0	0.2	4.913	A
C - A12 South	1281	320	22	2794	0.459	1278	1141	0.0	0.8	2.370	A
D - Barrack Square East	136	34	1027	1017	0.134	136	435	0.0	0.2	4.083	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	292	583	1910	0.612	1167	1096	1.0	1.6	4.833	A
B - Eagle Way West	156	39	1523	740	0.210	155	31	0.2	0.3	6.150	A
C - A12 South	1530	383	26	2791	0.548	1529	1366	0.8	1.2	2.850	A
D - Barrack Square East	163	41	1229	918	0.177	162	521	0.2	0.2	4.764	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1432	358	713	1832	0.782	1425	1341	1.6	3.4	8.678	A
B - Eagle Way West	190	48	1864	574	0.332	190	38	0.3	0.5	9.345	A
C - A12 South	1874	468	32	2787	0.672	1871	1668	1.2	2.0	3.915	A
D - Barrack Square East	199	50	1501	785	0.254	199	637	0.2	0.3	6.132	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1432	358	715	1831	0.782	1432	1343	3.4	3.5	8.997	A
B - Eagle Way West	190	48	1867	573	0.333	190	39	0.5	0.5	9.419	A
C - A12 South	1874	468	32	2787	0.672	1874	1675	2.0	2.0	3.943	A
D - Barrack Square East	199	50	1508	782	0.255	199	639	0.3	0.3	6.181	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	292	585	1909	0.613	1177	1099	3.5	1.6	4.973	A
B - Eagle Way West	156	39	1528	738	0.211	156	32	0.5	0.3	6.200	A
C - A12 South	1530	383	26	2791	0.548	1533	1377	2.0	1.2	2.871	A
D - Barrack Square East	163	41	1240	913	0.178	163	523	0.3	0.2	4.804	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	979	245	489	1966	0.498	982	920	1.6	1.0	3.670	A
B - Eagle Way West	130	33	1278	859	0.152	131	26	0.3	0.2	4.944	A
C - A12 South	1281	320	22	2794	0.459	1283	1149	1.2	0.9	2.384	A
D - Barrack Square East	136	34	1034	1013	0.134	137	437	0.2	0.2	4.107	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.84	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.05	0.46	4.04	6.57			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.21	0.05	0.48	2.90	4.48			N/A	N/A
D - Barrack Square East	0.21	0.00	0.00	0.21	0.21			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.03	0.29	3.43	12.36			N/A	N/A
B - Eagle Way West	0.49	0.03	0.26	0.49	0.49			N/A	N/A
C - A12 South	2.03	0.03	0.26	2.03	2.03			N/A	N/A
D - Barrack Square East	0.34	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.51	0.03	0.27	3.51	3.87			N/A	N/A
B - Eagle Way West	0.49	0.03	0.32	1.47	1.96			N/A	N/A
C - A12 South	2.04	0.03	0.26	2.04	2.04			N/A	N/A
D - Barrack Square East	0.34	0.03	0.32	1.14	1.40			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.06	0.90	3.76	5.42			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.22	0.30	1.15	1.74	1.95			N/A	N/A
D - Barrack Square East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.04	0.40	2.49	4.11			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.85	0.08	0.84	1.22	1.68			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	14.13	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1333	100.000
B - Eagle Way West		ONE HOUR	✓	193	100.000
C - A12 South		ONE HOUR	✓	2204	100.000
D - Barrack Square East		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	17	1283	33
	B - Eagle Way West	50	0	123	20
	C - A12 South	1376	62	1	765
	D - Barrack Square East	18	17	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	19.65	7.6	38.4	C	1223	1835
B - Eagle Way West	0.64	30.31	1.7	9.0	D	177	266
C - A12 South	0.87	10.15	6.6	32.3	B	2022	3034
D - Barrack Square East	0.50	9.54	1.0	3.9	A	319	479

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	682	1826	0.550	999	1083	0.0	1.2	4.327	A
B - Eagle Way West	145	36	1621	703	0.207	144	72	0.0	0.3	6.436	A
C - A12 South	1659	415	40	2789	0.595	1653	1288	0.0	1.5	3.155	A
D - Barrack Square East	262	65	1067	1013	0.259	261	614	0.0	0.3	4.774	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1198	300	816	1749	0.685	1195	1295	1.2	2.1	6.450	A
B - Eagle Way West	174	43	1939	546	0.318	173	86	0.3	0.5	9.622	A
C - A12 South	1981	495	48	2784	0.712	1977	1541	1.5	2.4	4.440	A
D - Barrack Square East	313	78	1276	907	0.345	312	735	0.3	0.5	6.044	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	993	1647	0.891	1448	1579	2.1	7.0	16.677	C
B - Eagle Way West	212	53	2364	337	0.631	208	105	0.5	1.6	27.078	D
C - A12 South	2427	607	58	2778	0.874	2411	1870	2.4	6.4	9.423	A
D - Barrack Square East	383	96	1546	770	0.498	381	895	0.5	1.0	9.224	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	1001	1643	0.893	1465	1589	7.0	7.6	19.646	C
B - Eagle Way West	212	53	2378	330	0.645	212	106	1.6	1.7	30.311	D
C - A12 South	2427	607	58	2778	0.874	2426	1890	6.4	6.6	10.153	B
D - Barrack Square East	383	96	1565	760	0.504	383	901	1.0	1.0	9.538	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1198	300	827	1743	0.688	1220	1310	7.6	2.3	7.154	A
B - Eagle Way West	174	43	1959	536	0.324	178	87	1.7	0.5	10.192	B
C - A12 South	1981	495	48	2784	0.712	1998	1571	6.6	2.5	4.671	A
D - Barrack Square East	313	78	1304	893	0.350	315	743	1.0	0.5	6.248	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	687	1823	0.550	1008	1090	2.3	1.2	4.435	A
B - Eagle Way West	145	36	1631	698	0.208	146	72	0.5	0.3	6.536	A
C - A12 South	1659	415	40	2789	0.595	1663	1299	2.5	1.5	3.209	A
D - Barrack Square East	262	65	1077	1008	0.260	263	618	0.5	0.4	4.835	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.55	1.12	1.50	1.76			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.46	0.58	1.36	1.83	1.96			N/A	N/A
D - Barrack Square East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.04	0.43	5.81	9.95			N/A	N/A
B - Eagle Way West	0.46	0.04	0.39	1.22	1.36			N/A	N/A
C - A12 South	2.43	0.04	0.39	6.49	12.26			N/A	N/A
D - Barrack Square East	0.52	0.06	0.60	1.32	1.41			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.96	0.04	0.41	18.23	37.87			N/A	N/A
B - Eagle Way West	1.58	0.03	0.29	1.58	7.06			N/A	N/A
C - A12 South	6.38	0.03	0.32	9.63	32.32			N/A	N/A
D - Barrack Square East	0.97	0.03	0.26	0.97	0.97			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.59	0.03	0.33	11.44	38.45			N/A	N/A
B - Eagle Way West	1.71	0.03	0.33	3.61	8.98			N/A	N/A
C - A12 South	6.63	0.03	0.29	6.63	17.68			N/A	N/A
D - Barrack Square East	1.00	0.03	0.28	1.07	3.92			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.25	0.04	0.44	6.18	10.58			N/A	N/A
B - Eagle Way West	0.49	0.04	0.40	1.30	1.45			N/A	N/A
C - A12 South	2.51	0.05	0.65	6.82	10.78			N/A	N/A
D - Barrack Square East	0.55	0.06	0.66	1.33	1.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.03	0.32	2.40	6.35			N/A	N/A
B - Eagle Way West	0.27	0.03	0.30	0.95	1.29			N/A	N/A
C - A12 South	1.48	0.04	0.35	3.68	7.49			N/A	N/A
D - Barrack Square East	0.35	0.03	0.29	0.74	1.12			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1318	100.000
B - Eagle Way West		ONE HOUR	✓	167	100.000
C - A12 South		ONE HOUR	✓	1761	100.000
D - Barrack Square East		ONE HOUR	✓	542	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	48	1255	14
	B - Eagle Way West	52	0	83	32
	C - A12 South	1367	89	0	305
	D - Barrack Square East	84	27	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	6.83	2.7	5.4	A	1209	1814
B - Eagle Way West	0.33	9.71	0.5	1.9	A	153	230
C - A12 South	0.70	4.38	2.3	5.3	A	1616	2424
D - Barrack Square East	0.73	16.23	2.6	11.6	C	497	746

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	992	248	316	2064	0.481	989	1129	0.0	0.9	3.337	A
B - Eagle Way West	126	31	1320	846	0.149	125	123	0.0	0.2	4.988	A
C - A12 South	1326	331	121	2795	0.474	1322	1325	0.0	0.9	2.437	A
D - Barrack Square East	408	102	1040	1071	0.381	406	264	0.0	0.6	5.388	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1185	296	378	2028	0.584	1183	1350	0.9	1.4	4.252	A
B - Eagle Way West	150	38	1579	724	0.208	150	147	0.2	0.3	6.270	A
C - A12 South	1583	396	144	2780	0.569	1581	1586	0.9	1.3	2.998	A
D - Barrack Square East	487	122	1245	964	0.505	486	316	0.6	1.0	7.495	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1451	363	462	1979	0.733	1446	1652	1.4	2.7	6.692	A
B - Eagle Way West	184	46	1931	557	0.330	183	180	0.3	0.5	9.611	A
C - A12 South	1939	485	176	2761	0.702	1935	1936	1.3	2.3	4.337	A
D - Barrack Square East	597	149	1522	820	0.728	591	387	1.0	2.5	15.312	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1451	363	463	1978	0.734	1451	1656	2.7	2.7	6.827	A
B - Eagle Way West	184	46	1935	554	0.332	184	181	0.5	0.5	9.712	A
C - A12 South	1939	485	177	2760	0.703	1939	1946	2.3	2.3	4.384	A
D - Barrack Square East	597	149	1527	817	0.730	596	388	2.5	2.6	16.233	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1185	296	380	2027	0.585	1190	1356	2.7	1.4	4.330	A
B - Eagle Way West	150	38	1585	720	0.208	151	148	0.5	0.3	6.332	A
C - A12 South	1583	396	146	2779	0.570	1587	1600	2.3	1.3	3.031	A
D - Barrack Square East	487	122	1252	961	0.507	494	317	2.6	1.0	7.809	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	992	248	317	2063	0.481	994	1134	1.4	0.9	3.376	A
B - Eagle Way West	126	31	1325	843	0.149	126	124	0.3	0.2	5.020	A
C - A12 South	1326	331	122	2795	0.474	1327	1334	1.3	0.9	2.458	A
D - Barrack Square East	408	102	1046	1068	0.382	410	265	1.0	0.6	5.480	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.90	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.61	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.05	0.48	3.50	5.43			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.31	0.04	0.45	3.33	5.32			N/A	N/A
D - Barrack Square East	1.00	0.06	0.75	1.92	2.72			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.68	0.03	0.27	2.68	4.71			N/A	N/A
B - Eagle Way West	0.49	0.03	0.26	0.49	0.49			N/A	N/A
C - A12 South	2.32	0.03	0.26	2.32	2.32			N/A	N/A
D - Barrack Square East	2.52	0.03	0.30	2.63	11.55			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.72	0.03	0.27	2.72	2.72			N/A	N/A
B - Eagle Way West	0.49	0.03	0.33	1.46	1.94			N/A	N/A
C - A12 South	2.34	0.03	0.26	2.34	2.34			N/A	N/A
D - Barrack Square East	2.61	0.03	0.29	2.61	9.20			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.09	1.09	2.81	3.77			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.33	0.18	1.20	1.99	2.63			N/A	N/A
D - Barrack Square East	1.05	0.05	0.61	2.24	3.24			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.05	0.48	1.98	2.96			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.91	0.07	0.79	1.60	1.98			N/A	N/A
D - Barrack Square East	0.62	0.04	0.36	1.41	2.42			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	6.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1400	100.000
B - Eagle Way West		ONE HOUR	✓	134	100.000
C - A12 South		ONE HOUR	✓	1754	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	60	1319	21
	B - Eagle Way West	38	0	80	16
	C - A12 South	1386	124	1	243
	D - Barrack Square East	82	39	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	6.30	2.7	5.5	A	1285	1927
B - Eagle Way West	0.24	7.70	0.3	1.3	A	123	184
C - A12 South	0.69	4.07	2.2	4.8	A	1609	2414
D - Barrack Square East	0.74	17.06	2.8	12.7	C	500	750

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1054	263	255	2186	0.482	1050	1131	0.0	0.9	3.160	A
B - Eagle Way West	101	25	1285	897	0.112	100	167	0.0	0.1	4.516	A
C - A12 South	1320	330	136	2856	0.462	1317	1367	0.0	0.9	2.334	A
D - Barrack Square East	410	103	1095	1067	0.385	408	210	0.0	0.6	5.442	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1259	315	305	2155	0.584	1257	1352	0.9	1.4	4.001	A
B - Eagle Way West	120	30	1537	778	0.155	120	200	0.1	0.2	5.468	A
C - A12 South	1577	394	162	2839	0.555	1575	1637	0.9	1.2	2.843	A
D - Barrack Square East	490	122	1311	959	0.511	488	251	0.6	1.0	7.626	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	385	373	2113	0.730	1536	1654	1.4	2.6	6.193	A
B - Eagle Way West	148	37	1881	617	0.239	147	245	0.2	0.3	7.654	A
C - A12 South	1931	483	198	2817	0.686	1928	1998	1.2	2.1	4.031	A
D - Barrack Square East	600	150	1602	812	0.739	594	308	1.0	2.7	16.019	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	385	374	2112	0.730	1541	1658	2.6	2.7	6.300	A
B - Eagle Way West	148	37	1885	615	0.240	148	245	0.3	0.3	7.702	A
C - A12 South	1931	483	199	2816	0.686	1931	2008	2.1	2.2	4.067	A
D - Barrack Square East	600	150	1607	810	0.741	600	308	2.7	2.8	17.063	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1259	315	307	2154	0.584	1264	1358	2.7	1.4	4.064	A
B - Eagle Way West	120	30	1543	776	0.155	121	201	0.3	0.2	5.505	A
C - A12 South	1577	394	164	2838	0.556	1580	1650	2.2	1.3	2.872	A
D - Barrack Square East	490	122	1318	955	0.513	497	252	2.8	1.1	7.965	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1054	263	256	2185	0.482	1056	1135	1.4	0.9	3.193	A
B - Eagle Way West	101	25	1291	895	0.113	101	168	0.2	0.1	4.539	A
C - A12 South	1320	330	137	2856	0.462	1322	1377	1.3	0.9	2.351	A
D - Barrack Square East	410	103	1101	1064	0.386	412	211	1.1	0.6	5.538	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.86	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.62	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.05	0.47	3.52	5.49			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	1.24	0.05	0.46	3.04	4.81			N/A	N/A
D - Barrack Square East	1.03	0.06	0.73	1.99	2.85			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.63	0.03	0.27	2.63	3.68			N/A	N/A
B - Eagle Way West	0.31	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.15	0.03	0.26	2.15	2.15			N/A	N/A
D - Barrack Square East	2.65	0.03	0.31	3.25	12.66			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.67	0.03	0.26	2.67	2.67			N/A	N/A
B - Eagle Way West	0.31	0.03	0.32	1.05	1.31			N/A	N/A
C - A12 South	2.17	0.03	0.26	2.17	2.17			N/A	N/A
D - Barrack Square East	2.76	0.03	0.29	2.76	10.23			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.10	1.12	2.73	3.63			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	1.26	0.25	1.17	1.82	2.13			N/A	N/A
D - Barrack Square East	1.07	0.05	0.56	2.39	3.50			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.05	0.51	1.94	2.88			N/A	N/A
B - Eagle Way West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.86	0.07	0.82	1.37	1.78			N/A	N/A
D - Barrack Square East	0.63	0.03	0.35	1.45	2.56			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	821	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	753	100.000
D - Barrack Square East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	780	40
	B - Eagle Way West	16	0	52	6
	C - A12 South	581	9	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.95	0.7	2.3	A	754	1131
B - Eagle Way West	0.07	3.61	0.1	0.5	A	67	101
C - A12 South	0.30	1.84	0.4	1.5	A	691	1036
D - Barrack Square East	0.07	3.52	0.1	0.5	A	64	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	618	155	166	2169	0.285	617	449	0.0	0.4	2.318	A
B - Eagle Way West	55	14	560	1205	0.046	55	13	0.0	0.0	3.129	A
C - A12 South	567	142	8	2782	0.204	566	671	0.0	0.3	1.624	A
D - Barrack Square East	53	13	626	1246	0.042	53	156	0.0	0.0	3.016	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	738	185	198	2149	0.344	738	537	0.4	0.5	2.550	A
B - Eagle Way West	66	16	670	1152	0.057	66	16	0.0	0.1	3.314	A
C - A12 South	677	169	9	2781	0.243	676	803	0.3	0.3	1.710	A
D - Barrack Square East	63	16	749	1184	0.053	63	187	0.0	0.1	3.209	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	904	226	243	2123	0.426	904	658	0.5	0.7	2.950	A
B - Eagle Way West	81	20	820	1078	0.075	81	20	0.1	0.1	3.608	A
C - A12 South	829	207	11	2779	0.298	828	983	0.3	0.4	1.844	A
D - Barrack Square East	77	19	918	1100	0.070	77	229	0.1	0.1	3.518	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	904	226	243	2123	0.426	904	658	0.7	0.7	2.953	A
B - Eagle Way West	81	20	821	1078	0.075	81	20	0.1	0.1	3.609	A
C - A12 South	829	207	11	2779	0.298	829	984	0.4	0.4	1.844	A
D - Barrack Square East	77	19	918	1100	0.070	77	229	0.1	0.1	3.519	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	738	185	199	2149	0.344	739	538	0.7	0.5	2.554	A
B - Eagle Way West	66	16	670	1151	0.057	66	16	0.1	0.1	3.316	A
C - A12 South	677	169	9	2781	0.243	677	805	0.4	0.3	1.713	A
D - Barrack Square East	63	16	751	1184	0.053	63	187	0.1	0.1	3.214	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	618	155	166	2168	0.285	619	450	0.5	0.4	2.325	A
B - Eagle Way West	55	14	561	1205	0.046	55	13	0.1	0.0	3.133	A
C - A12 South	567	142	8	2782	0.204	567	674	0.3	0.3	1.624	A
D - Barrack Square East	53	13	628	1245	0.042	53	157	0.1	0.0	3.019	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.06	0.62	1.32	1.41			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.25	0.74	0.74			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.28	0.74	2.34			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.42	0.03	0.33	1.34	1.47			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1375	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1835	100.000
D - Barrack Square East		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1332	42
	B - Eagle Way West	44	0	122	26
	C - A12 South	1291	29	0	515
	D - Barrack Square East	29	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	8	8	0	5
	D - Barrack Square East	3	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	11.95	4.9	23.3	B	1262	1893
B - Eagle Way West	0.42	12.51	0.7	3.5	B	176	264
C - A12 South	0.73	4.72	2.6	6.2	A	1683	2525
D - Barrack Square East	0.29	6.88	0.4	1.3	A	176	264

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1035	259	498	1951	0.531	1031	1024	0.0	1.1	3.895	A
B - Eagle Way West	145	36	1378	812	0.178	144	29	0.0	0.2	5.383	A
C - A12 South	1381	345	30	2792	0.495	1377	1205	0.0	1.0	2.539	A
D - Barrack Square East	144	36	1091	986	0.146	144	438	0.0	0.2	4.269	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1236	309	596	1893	0.653	1233	1225	1.1	1.9	5.436	A
B - Eagle Way West	173	43	1648	680	0.254	172	35	0.2	0.3	7.080	A
C - A12 South	1649	412	36	2788	0.592	1647	1442	1.0	1.4	3.151	A
D - Barrack Square East	172	43	1305	881	0.196	172	524	0.2	0.2	5.079	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1514	379	728	1814	0.835	1503	1498	1.9	4.7	11.169	B
B - Eagle Way West	212	53	2017	501	0.422	210	43	0.3	0.7	12.291	B
C - A12 South	2020	505	44	2782	0.726	2015	1757	1.4	2.6	4.664	A
D - Barrack Square East	211	53	1590	740	0.285	211	641	0.2	0.4	6.795	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1514	379	731	1813	0.835	1513	1502	4.7	4.9	11.949	B
B - Eagle Way West	212	53	2021	499	0.424	211	43	0.7	0.7	12.506	B
C - A12 South	2020	505	44	2782	0.726	2020	1769	2.6	2.6	4.720	A
D - Barrack Square East	211	53	1602	734	0.288	211	642	0.4	0.4	6.879	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1236	309	599	1891	0.654	1248	1230	4.9	1.9	5.702	A
B - Eagle Way West	173	43	1655	677	0.255	174	35	0.7	0.3	7.181	A
C - A12 South	1649	412	36	2788	0.592	1654	1458	2.6	1.5	3.189	A
D - Barrack Square East	172	43	1321	873	0.198	173	526	0.4	0.2	5.150	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1035	259	501	1949	0.531	1038	1029	1.9	1.1	3.966	A
B - Eagle Way West	145	36	1384	809	0.179	145	29	0.3	0.2	5.427	A
C - A12 South	1381	345	30	2792	0.495	1383	1214	1.5	1.0	2.560	A
D - Barrack Square East	144	36	1099	982	0.147	145	440	0.2	0.2	4.302	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.02	1.44	1.49			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	0.97	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.85	0.04	0.44	4.97	8.39			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.44	0.04	0.43	3.75	6.16			N/A	N/A
D - Barrack Square East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.70	0.03	0.32	6.61	23.29			N/A	N/A
B - Eagle Way West	0.71	0.03	0.26	0.71	0.71			N/A	N/A
C - A12 South	2.60	0.03	0.27	2.60	2.60			N/A	N/A
D - Barrack Square East	0.40	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.87	0.03	0.28	4.87	13.13			N/A	N/A
B - Eagle Way West	0.73	0.03	0.31	1.37	3.52			N/A	N/A
C - A12 South	2.62	0.03	0.26	2.62	2.62			N/A	N/A
D - Barrack Square East	0.40	0.03	0.33	1.30	1.35			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.92	0.05	0.58	5.02	7.85			N/A	N/A
B - Eagle Way West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A12 South	1.46	0.14	1.23	2.58	3.25			N/A	N/A
D - Barrack Square East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.04	0.35	2.80	5.52			N/A	N/A
B - Eagle Way West	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.98	0.06	0.73	1.88	2.67			N/A	N/A
D - Barrack Square East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	29.71	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1345	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2401	100.000
D - Barrack Square East		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1292	35
	B - Eagle Way West	56	0	137	22
	C - A12 South	1566	69	1	765
	D - Barrack Square East	42	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	22.87	8.9	48.2	C	1234	1851
B - Eagle Way West	1.06	178.75	12.4	35.1	F	197	295
C - A12 South	0.95	23.92	16.5	90.5	C	2203	3305
D - Barrack Square East	0.55	10.63	1.2	4.2	B	343	514

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1013	253	694	1801	0.562	1007	1247	0.0	1.3	4.509	A
B - Eagle Way West	161	40	1780	628	0.257	160	80	0.0	0.3	7.676	A
C - A12 South	1807	452	60	2786	0.649	1800	1304	0.0	1.8	3.625	A
D - Barrack Square East	281	70	1084	1003	0.280	280	617	0.0	0.4	4.966	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1209	302	829	1724	0.701	1205	1491	1.3	2.3	6.883	A
B - Eagle Way West	193	48	2128	457	0.422	191	96	0.3	0.7	13.476	B
C - A12 South	2158	540	72	2779	0.777	2152	1560	1.8	3.4	5.687	A
D - Barrack Square East	336	84	1297	894	0.376	335	737	0.4	0.6	6.432	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	987	1634	0.906	1458	1796	2.3	7.9	18.541	C
B - Eagle Way West	236	59	2572	239	0.986	211	116	0.7	6.9	93.017	F
C - A12 South	2643	661	88	2769	0.955	2600	1878	3.4	14.3	17.915	C
D - Barrack Square East	411	103	1557	760	0.541	409	889	0.6	1.2	10.201	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	1000	1627	0.910	1477	1819	7.9	8.9	22.871	C
B - Eagle Way West	236	59	2606	223	1.059	214	117	6.9	12.4	178.752	F
C - A12 South	2643	661	88	2769	0.955	2634	1899	14.3	16.5	23.923	C
D - Barrack Square East	411	103	1576	749	0.549	411	901	1.2	1.2	10.625	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1209	302	883	1694	0.714	1234	1541	8.9	2.6	8.244	A
B - Eagle Way West	193	48	2185	429	0.449	239	98	12.4	0.8	23.716	C
C - A12 South	2158	540	73	2778	0.777	2210	1621	16.5	3.6	6.892	A
D - Barrack Square East	336	84	1356	865	0.388	338	762	1.2	0.6	6.862	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1013	253	701	1797	0.563	1018	1257	2.6	1.3	4.648	A
B - Eagle Way West	161	40	1794	621	0.260	163	81	0.8	0.4	7.902	A
C - A12 South	1807	452	61	2786	0.649	1814	1318	3.6	1.9	3.730	A
D - Barrack Square East	281	70	1096	997	0.282	282	622	0.6	0.4	5.044	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.55	1.18	1.66	1.85			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.83	0.36	1.12	2.91	3.65			N/A	N/A
D - Barrack Square East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.29	0.04	0.44	6.30	10.77			N/A	N/A
B - Eagle Way West	0.71	0.04	0.39	1.61	2.56			N/A	N/A
C - A12 South	3.38	0.04	0.41	9.24	17.33			N/A	N/A
D - Barrack Square East	0.59	0.08	0.76	1.35	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.89	0.05	0.45	22.03	41.84			N/A	N/A
B - Eagle Way West	6.88	0.24	3.84	16.22	21.78			N/A	N/A
C - A12 South	14.27	0.07	1.50	42.04	69.54			N/A	N/A
D - Barrack Square East	1.15	0.03	0.26	1.15	1.15			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.86	0.04	0.35	17.95	48.21			N/A	N/A
B - Eagle Way West	12.40	0.85	8.53	27.22	35.11			N/A	N/A
C - A12 South	16.51	0.05	0.46	45.15	90.49			N/A	N/A
D - Barrack Square East	1.19	0.03	0.28	1.19	4.20			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.57	0.05	0.45	7.11	12.11			N/A	N/A
B - Eagle Way West	0.85	0.03	0.31	1.64	4.16			N/A	N/A
C - A12 South	3.59	0.04	0.44	10.04	17.96			N/A	N/A
D - Barrack Square East	0.64	0.08	0.79	1.36	1.43			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.03	0.31	2.29	6.66			N/A	N/A
B - Eagle Way West	0.36	0.03	0.26	0.48	0.80			N/A	N/A
C - A12 South	1.87	0.03	0.31	3.07	9.56			N/A	N/A
D - Barrack Square East	0.40	0.03	0.34	1.13	1.32			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1376	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1891	100.000
D - Barrack Square East		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1293	29
	B - Eagle Way West	58	0	92	36
	C - A12 South	1487	99	0	305
	D - Barrack Square East	93	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	3
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	4	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	8.08	3.3	10.0	A	1263	1894
B - Eagle Way West	0.42	12.76	0.7	3.4	B	171	256
C - A12 South	0.76	5.42	3.1	7.2	A	1735	2603
D - Barrack Square East	0.78	20.56	3.3	16.8	C	508	763

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1036	259	325	2048	0.506	1032	1230	0.0	1.0	3.529	A
B - Eagle Way West	140	35	1416	800	0.175	139	137	0.0	0.2	5.440	A
C - A12 South	1424	356	134	2785	0.511	1419	1360	0.0	1.0	2.629	A
D - Barrack Square East	417	104	1079	1048	0.398	414	278	0.0	0.7	5.660	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1237	309	389	2011	0.615	1235	1471	1.0	1.6	4.628	A
B - Eagle Way West	167	42	1694	668	0.250	167	164	0.2	0.3	7.170	A
C - A12 South	1700	425	160	2768	0.614	1698	1628	1.0	1.6	3.355	A
D - Barrack Square East	498	125	1292	937	0.532	496	333	0.7	1.1	8.142	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1515	379	476	1961	0.773	1508	1798	1.6	3.3	7.842	A
B - Eagle Way West	205	51	2071	490	0.418	203	200	0.3	0.7	12.497	B
C - A12 South	2082	521	194	2747	0.758	2076	1985	1.6	3.1	5.320	A
D - Barrack Square East	610	153	1577	786	0.776	602	407	1.1	3.2	18.727	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1515	379	478	1959	0.773	1515	1804	3.3	3.3	8.082	A
B - Eagle Way West	205	51	2077	487	0.421	205	201	0.7	0.7	12.761	B
C - A12 South	2082	521	196	2746	0.758	2082	1997	3.1	3.1	5.419	A
D - Barrack Square East	610	153	1584	783	0.779	609	408	3.2	3.3	20.555	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1237	309	392	2009	0.616	1244	1480	3.3	1.6	4.746	A
B - Eagle Way West	167	42	1703	664	0.252	169	165	0.7	0.3	7.292	A
C - A12 South	1700	425	163	2767	0.614	1706	1646	3.1	1.6	3.411	A
D - Barrack Square East	498	125	1301	931	0.535	507	335	3.3	1.2	8.647	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1036	259	327	2046	0.506	1038	1236	1.6	1.0	3.578	A
B - Eagle Way West	140	35	1423	797	0.176	140	138	0.3	0.2	5.490	A
C - A12 South	1424	356	135	2784	0.511	1426	1370	1.6	1.1	2.656	A
D - Barrack Square East	417	104	1086	1044	0.399	419	280	1.2	0.7	5.777	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.04	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.05	0.46	4.11	6.66			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.58	0.04	0.42	4.17	7.16			N/A	N/A
D - Barrack Square East	1.11	0.06	0.68	2.42	3.47			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.28	0.03	0.28	3.28	10.01			N/A	N/A
B - Eagle Way West	0.70	0.03	0.26	0.70	0.70			N/A	N/A
C - A12 South	3.06	0.03	0.27	3.06	3.82			N/A	N/A
D - Barrack Square East	3.17	0.03	0.33	5.92	16.77			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.34	0.03	0.27	3.34	3.34			N/A	N/A
B - Eagle Way West	0.72	0.03	0.31	1.38	3.44			N/A	N/A
C - A12 South	3.10	0.03	0.26	3.10	3.10			N/A	N/A
D - Barrack Square East	3.35	0.03	0.30	3.35	14.72			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.07	0.99	3.70	5.22			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.61	0.10	1.21	3.19	4.28			N/A	N/A
D - Barrack Square East	1.17	0.05	0.47	2.82	4.35			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.04	0.42	2.54	4.02			N/A	N/A
B - Eagle Way West	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.05	0.05	0.53	2.35	3.46			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.52	2.98			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1437	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1852	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1336	35
	B - Eagle Way West	42	0	89	18
	C - A12 South	1470	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	3
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	7.14	3.1	7.1	A	1319	1978
B - Eagle Way West	0.29	8.96	0.4	1.3	A	137	205
C - A12 South	0.73	4.78	2.7	6.2	A	1699	2548
D - Barrack Square East	0.77	19.93	3.2	16.0	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1082	270	263	2160	0.501	1078	1196	0.0	1.0	3.314	A
B - Eagle Way West	112	28	1348	864	0.130	112	186	0.0	0.1	4.779	A
C - A12 South	1394	348	144	2834	0.492	1390	1387	0.0	1.0	2.486	A
D - Barrack Square East	414	103	1119	1049	0.394	411	222	0.0	0.6	5.621	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1292	323	315	2129	0.607	1290	1431	1.0	1.5	4.279	A
B - Eagle Way West	134	34	1612	739	0.181	134	223	0.1	0.2	5.949	A
C - A12 South	1664	416	172	2817	0.591	1663	1659	1.0	1.4	3.114	A
D - Barrack Square East	494	123	1340	937	0.527	492	265	0.6	1.1	8.053	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	396	385	2086	0.758	1576	1750	1.5	3.0	6.976	A
B - Eagle Way West	164	41	1971	569	0.289	163	272	0.2	0.4	8.870	A
C - A12 South	2039	510	209	2793	0.730	2034	2025	1.4	2.7	4.710	A
D - Barrack Square East	605	151	1637	786	0.769	597	324	1.1	3.1	18.292	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	396	386	2085	0.759	1582	1755	3.0	3.1	7.144	A
B - Eagle Way West	164	41	1977	566	0.290	164	273	0.4	0.4	8.958	A
C - A12 South	2039	510	211	2792	0.730	2038	2036	2.7	2.7	4.775	A
D - Barrack Square East	605	151	1643	783	0.772	604	325	3.1	3.2	19.928	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1292	323	317	2128	0.607	1298	1438	3.1	1.6	4.369	A
B - Eagle Way West	134	34	1620	735	0.182	135	224	0.4	0.2	6.004	A
C - A12 South	1664	416	175	2815	0.591	1669	1676	2.7	1.5	3.155	A
D - Barrack Square East	494	123	1348	933	0.529	502	266	3.2	1.1	8.512	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1082	270	265	2159	0.501	1084	1202	1.6	1.0	3.356	A
B - Eagle Way West	112	28	1354	861	0.130	113	187	0.2	0.2	4.813	A
C - A12 South	1394	348	145	2834	0.492	1396	1396	1.5	1.0	2.508	A
D - Barrack Square East	414	103	1126	1046	0.396	416	223	1.1	0.7	5.732	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.96	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.64	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.05	0.46	3.94	6.38			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.43	0.04	0.43	3.74	6.20			N/A	N/A
D - Barrack Square East	1.09	0.06	0.69	2.34	3.33			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.04	0.03	0.28	3.04	7.09			N/A	N/A
B - Eagle Way West	0.40	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.65	0.03	0.27	2.65	2.65			N/A	N/A
D - Barrack Square East	3.06	0.03	0.32	5.43	16.04			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.09	0.03	0.27	3.09	3.09			N/A	N/A
B - Eagle Way West	0.41	0.03	0.33	1.30	1.31			N/A	N/A
C - A12 South	2.68	0.03	0.26	2.68	2.68			N/A	N/A
D - Barrack Square East	3.22	0.03	0.30	3.22	13.83			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.08	1.07	3.36	4.63			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.46	0.13	1.23	2.59	3.28			N/A	N/A
D - Barrack Square East	1.15	0.05	0.48	2.74	4.15			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.05	0.45	2.38	3.67			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.97	0.06	0.70	1.88	2.68			N/A	N/A
D - Barrack Square East	0.66	0.03	0.33	1.51	2.90			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	834	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	827	100.000
D - Barrack Square East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	792	40
	B - Eagle Way West	16	0	52	6
	C - A12 South	656	9	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.98	0.8	2.2	A	765	1148
B - Eagle Way West	0.08	3.79	0.1	0.5	A	67	101
C - A12 South	0.33	1.98	0.5	2.2	A	759	1139
D - Barrack Square East	0.07	3.54	0.1	0.5	A	64	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	628	157	166	2170	0.289	626	505	0.0	0.4	2.329	A
B - Eagle Way West	55	14	616	1172	0.047	55	13	0.0	0.0	3.222	A
C - A12 South	623	156	8	2731	0.228	622	681	0.0	0.3	1.707	A
D - Barrack Square East	53	13	636	1242	0.043	53	156	0.0	0.0	3.027	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	750	187	198	2151	0.348	749	604	0.4	0.5	2.568	A
B - Eagle Way West	66	16	737	1112	0.059	66	16	0.0	0.1	3.440	A
C - A12 South	744	186	9	2730	0.273	744	814	0.3	0.4	1.812	A
D - Barrack Square East	63	16	761	1179	0.054	63	187	0.0	0.1	3.225	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	918	230	243	2125	0.432	917	740	0.5	0.8	2.979	A
B - Eagle Way West	81	20	902	1029	0.078	81	20	0.1	0.1	3.793	A
C - A12 South	911	228	11	2728	0.334	911	997	0.4	0.5	1.980	A
D - Barrack Square East	77	19	931	1094	0.071	77	229	0.1	0.1	3.540	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	918	230	243	2125	0.432	918	741	0.8	0.8	2.982	A
B - Eagle Way West	81	20	903	1029	0.078	81	20	0.1	0.1	3.794	A
C - A12 South	911	228	11	2728	0.334	911	998	0.5	0.5	1.980	A
D - Barrack Square East	77	19	932	1093	0.071	77	229	0.1	0.1	3.542	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	750	187	199	2151	0.349	751	605	0.8	0.5	2.571	A
B - Eagle Way West	66	16	738	1112	0.059	66	16	0.1	0.1	3.445	A
C - A12 South	744	186	9	2730	0.273	744	816	0.5	0.4	1.812	A
D - Barrack Square East	63	16	762	1178	0.054	63	187	0.1	0.1	3.227	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	628	157	166	2170	0.289	628	507	0.5	0.4	2.335	A
B - Eagle Way West	55	14	618	1171	0.047	55	13	0.1	0.0	3.224	A
C - A12 South	623	156	8	2731	0.228	623	683	0.4	0.3	1.710	A
D - Barrack Square East	53	13	638	1240	0.043	53	157	0.1	0.0	3.033	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.06	0.67	1.33	1.42			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.03	0.25	0.76	0.76			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.50	0.03	0.25	0.50	0.50			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.03	0.28	0.76	2.22			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.50	0.03	0.31	1.45	2.18			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.54	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	10.36	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1418	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1969	100.000
D - Barrack Square East		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1375	42
	B - Eagle Way West	44	0	122	26
	C - A12 South	1425	29	0	515
	D - Barrack Square East	29	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	8	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	12	8	0	5
	D - Barrack Square East	3	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	15.03	6.3	32.3	C	1301	1952
B - Eagle Way West	0.53	18.95	1.1	5.5	C	176	264
C - A12 South	0.80	6.58	3.9	10.2	A	1807	2710
D - Barrack Square East	0.30	7.30	0.4	1.5	A	176	264

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1068	267	498	1933	0.552	1063	1124	0.0	1.2	4.115	A
B - Eagle Way West	145	36	1478	745	0.194	144	29	0.0	0.2	5.977	A
C - A12 South	1482	371	30	2724	0.544	1478	1236	0.0	1.2	2.879	A
D - Barrack Square East	144	36	1123	966	0.150	144	438	0.0	0.2	4.377	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1275	319	595	1875	0.680	1271	1345	1.2	2.1	5.925	A
B - Eagle Way West	173	43	1768	600	0.288	172	35	0.2	0.4	8.390	A
C - A12 South	1770	442	36	2720	0.651	1767	1479	1.2	1.8	3.769	A
D - Barrack Square East	172	43	1343	856	0.202	172	524	0.2	0.3	5.262	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1561	390	727	1798	0.868	1546	1643	2.1	5.9	13.512	B
B - Eagle Way West	212	53	2161	405	0.523	209	43	0.4	1.1	18.144	C
C - A12 South	2168	542	44	2714	0.799	2160	1800	1.8	3.8	6.401	A
D - Barrack Square East	211	53	1633	712	0.297	211	640	0.3	0.4	7.174	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1561	390	731	1796	0.869	1560	1650	5.9	6.3	15.029	C
B - Eagle Way West	212	53	2169	401	0.528	211	43	1.1	1.1	18.953	C
C - A12 South	2168	542	44	2714	0.799	2168	1815	3.8	3.9	6.577	A
D - Barrack Square East	211	53	1648	704	0.300	211	642	0.4	0.4	7.300	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1275	319	601	1872	0.681	1291	1354	6.3	2.2	6.362	A
B - Eagle Way West	173	43	1779	595	0.290	175	35	1.1	0.4	8.631	A
C - A12 South	1770	442	36	2719	0.651	1778	1501	3.9	1.9	3.855	A
D - Barrack Square East	172	43	1364	845	0.204	173	528	0.4	0.3	5.360	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1068	267	501	1931	0.553	1071	1130	2.2	1.2	4.207	A
B - Eagle Way West	145	36	1486	741	0.195	145	29	0.4	0.2	6.047	A
C - A12 South	1482	371	30	2723	0.544	1485	1247	1.9	1.2	2.912	A
D - Barrack Square East	144	36	1132	961	0.150	145	440	0.3	0.2	4.412	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.11	1.45	1.73			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.19	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.08	0.04	0.43	5.68	9.71			N/A	N/A
B - Eagle Way West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A12 South	1.84	0.04	0.41	4.93	8.80			N/A	N/A
D - Barrack Square East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.91	0.04	0.35	12.67	32.27			N/A	N/A
B - Eagle Way West	1.05	0.03	0.27	1.05	1.24			N/A	N/A
C - A12 South	3.83	0.03	0.28	3.83	10.21			N/A	N/A
D - Barrack Square East	0.42	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.25	0.03	0.30	6.25	25.51			N/A	N/A
B - Eagle Way West	1.09	0.03	0.31	1.90	5.50			N/A	N/A
C - A12 South	3.90	0.03	0.27	3.90	3.90			N/A	N/A
D - Barrack Square East	0.43	0.03	0.33	1.35	1.55			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.05	0.47	5.91	9.72			N/A	N/A
B - Eagle Way West	0.41	0.03	0.35	1.14	1.32			N/A	N/A
C - A12 South	1.89	0.07	1.11	4.41	6.23			N/A	N/A
D - Barrack Square East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.03	0.33	2.81	6.36			N/A	N/A
B - Eagle Way West	0.24	0.03	0.27	0.49	0.86			N/A	N/A
C - A12 South	1.20	0.04	0.43	2.98	4.85			N/A	N/A
D - Barrack Square East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	49.94	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1370	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2445	100.000
D - Barrack Square East		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1317	35
	B - Eagle Way West	56	0	137	22
	C - A12 South	1610	69	1	765
	D - Barrack Square East	42	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	10	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	13	5	0	2
	D - Barrack Square East	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	26.04	10.2	56.6	D	1257	1886
B - Eagle Way West	1.30	354.81	26.2	50.1	F	197	295
C - A12 South	0.99	44.36	33.0	129.8	E	2244	3366
D - Barrack Square East	0.56	10.94	1.2	4.2	B	343	514

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	693	1787	0.577	1026	1280	0.0	1.3	4.698	A
B - Eagle Way West	161	40	1813	591	0.273	160	80	0.0	0.4	8.321	A
C - A12 South	1841	460	60	2724	0.676	1833	1322	0.0	2.1	4.004	A
D - Barrack Square East	281	70	1103	989	0.284	280	617	0.0	0.4	5.060	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	828	1711	0.720	1227	1529	1.3	2.5	7.369	A
B - Eagle Way West	193	48	2167	414	0.466	191	95	0.4	0.8	16.025	C
C - A12 South	2198	550	72	2717	0.809	2190	1582	2.1	4.1	6.734	A
D - Barrack Square East	336	84	1319	877	0.383	335	737	0.4	0.6	6.622	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1508	377	960	1636	0.922	1482	1815	2.5	9.0	20.607	C
B - Eagle Way West	236	59	2586	203	1.160	190	115	0.8	12.3	158.982	F
C - A12 South	2692	673	88	2707	0.994	2613	1888	4.1	24.0	26.694	D
D - Barrack Square East	411	103	1567	747	0.550	409	875	0.6	1.2	10.556	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1508	377	967	1633	0.924	1504	1842	9.0	10.2	26.041	D
B - Eagle Way West	236	59	2629	182	1.298	180	116	12.3	26.2	354.814	F
C - A12 South	2692	673	88	2707	0.995	2657	1904	24.0	33.0	44.363	E
D - Barrack Square East	411	103	1582	740	0.556	411	889	1.2	1.2	10.941	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	942	1648	0.748	1260	1636	10.2	3.1	9.935	A
B - Eagle Way West	193	48	2286	354	0.545	292	100	26.2	1.3	112.888	F
C - A12 South	2198	550	73	2716	0.809	2312	1681	33.0	4.4	11.432	B
D - Barrack Square East	336	84	1416	830	0.405	338	786	1.2	0.7	7.350	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	703	1782	0.579	1038	1293	3.1	1.4	4.883	A
B - Eagle Way West	161	40	1830	582	0.277	165	81	1.3	0.4	8.706	A
C - A12 South	1841	460	61	2723	0.676	1850	1340	4.4	2.1	4.167	A
D - Barrack Square East	281	70	1118	982	0.286	282	623	0.7	0.4	5.157	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.54	1.25	1.78	1.94			N/A	N/A
B - Eagle Way West	0.37	0.03	0.32	1.04	1.27			N/A	N/A
C - A12 South	2.06	0.22	1.20	3.75	4.75			N/A	N/A
D - Barrack Square East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.50	0.05	0.45	6.90	11.76			N/A	N/A
B - Eagle Way West	0.84	0.03	0.35	1.98	3.81			N/A	N/A
C - A12 South	4.08	0.04	0.45	11.48	20.73			N/A	N/A
D - Barrack Square East	0.61	0.08	0.77	1.36	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.04	0.05	0.74	26.24	46.19			N/A	N/A
B - Eagle Way West	12.27	2.02	10.02	22.72	27.56			N/A	N/A
C - A12 South	24.04	0.31	12.12	62.04	86.05			N/A	N/A
D - Barrack Square East	1.19	0.03	0.27	1.19	1.19			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.24	0.04	0.39	24.60	56.55			N/A	N/A
B - Eagle Way West	26.23	8.57	23.63	43.16	50.13			N/A	N/A
C - A12 South	32.99	0.22	13.44	90.16	129.77			N/A	N/A
D - Barrack Square East	1.23	0.03	0.28	1.23	4.22			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.07	0.05	0.49	8.61	14.27			N/A	N/A
B - Eagle Way West	1.35	0.03	0.32	2.56	6.92			N/A	N/A
C - A12 South	4.45	0.04	0.43	12.38	22.91			N/A	N/A
D - Barrack Square East	0.69	0.10	0.83	1.37	1.44			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.03	0.31	2.16	6.97			N/A	N/A
B - Eagle Way West	0.39	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.11	0.03	0.30	2.47	9.94			N/A	N/A
D - Barrack Square East	0.40	0.04	0.35	1.16	1.33			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	9.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1370	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1895	100.000
D - Barrack Square East		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1287	29
	B - Eagle Way West	58	0	92	36
	C - A12 South	1491	99	0	305
	D - Barrack Square East	93	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	10	3
	B - Eagle Way West	8	0	2	0
	C - A12 South	8	2	0	2
	D - Barrack Square East	4	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	8.81	3.6	12.7	A	1257	1886
B - Eagle Way West	0.44	13.71	0.8	3.7	B	171	256
C - A12 South	0.77	5.88	3.4	7.7	A	1739	2609
D - Barrack Square East	0.79	22.36	3.6	18.3	C	508	763

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	325	2002	0.515	1027	1233	0.0	1.1	3.679	A
B - Eagle Way West	140	35	1419	787	0.178	139	137	0.0	0.2	5.552	A
C - A12 South	1427	357	134	2737	0.521	1423	1356	0.0	1.1	2.730	A
D - Barrack Square East	417	104	1075	1038	0.402	414	278	0.0	0.7	5.748	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	389	1966	0.627	1229	1475	1.1	1.7	4.872	A
B - Eagle Way West	167	42	1698	652	0.256	167	164	0.2	0.3	7.401	A
C - A12 South	1704	426	160	2721	0.626	1702	1622	1.1	1.7	3.524	A
D - Barrack Square East	498	125	1286	925	0.539	496	333	0.7	1.1	8.361	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	377	476	1917	0.787	1501	1802	1.7	3.5	8.500	A
B - Eagle Way West	205	51	2075	471	0.435	203	200	0.3	0.7	13.373	B
C - A12 South	2087	522	194	2700	0.773	2080	1977	1.7	3.3	5.747	A
D - Barrack Square East	610	153	1570	772	0.790	601	406	1.1	3.4	20.052	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	377	478	1916	0.787	1508	1809	3.5	3.6	8.812	A
B - Eagle Way West	205	51	2082	467	0.438	205	201	0.7	0.8	13.707	B
C - A12 South	2087	522	196	2699	0.773	2087	1991	3.3	3.4	5.876	A
D - Barrack Square East	610	153	1578	768	0.794	609	408	3.4	3.6	22.355	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	392	1964	0.627	1239	1485	3.6	1.7	5.017	A
B - Eagle Way West	167	42	1708	647	0.258	169	165	0.8	0.4	7.548	A
C - A12 South	1704	426	163	2719	0.627	1711	1642	3.4	1.7	3.594	A
D - Barrack Square East	498	125	1297	919	0.542	508	335	3.6	1.2	8.954	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	327	2001	0.516	1034	1240	1.7	1.1	3.735	A
B - Eagle Way West	140	35	1427	783	0.179	140	138	0.4	0.2	5.606	A
C - A12 South	1427	357	135	2736	0.522	1429	1366	1.7	1.1	2.759	A
D - Barrack Square East	417	104	1082	1034	0.403	419	280	1.2	0.7	5.875	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.08	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.66	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.65	0.05	0.45	4.38	7.09			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.66	0.04	0.41	4.43	7.67			N/A	N/A
D - Barrack Square East	1.14	0.05	0.65	2.55	3.68			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.54	0.03	0.29	3.54	12.74			N/A	N/A
B - Eagle Way West	0.75	0.03	0.26	0.75	0.75			N/A	N/A
C - A12 South	3.31	0.03	0.28	3.31	5.88			N/A	N/A
D - Barrack Square East	3.40	0.03	0.34	7.15	18.32			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.62	0.03	0.27	3.62	3.67			N/A	N/A
B - Eagle Way West	0.77	0.03	0.31	1.46	3.74			N/A	N/A
C - A12 South	3.36	0.03	0.26	3.36	3.36			N/A	N/A
D - Barrack Square East	3.63	0.03	0.31	3.99	16.90			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.06	0.92	4.03	5.87			N/A	N/A
B - Eagle Way West	0.35	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.70	0.09	1.18	3.62	4.89			N/A	N/A
D - Barrack Square East	1.21	0.05	0.45	2.95	4.69			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.04	0.40	2.69	4.50			N/A	N/A
B - Eagle Way West	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.10	0.05	0.47	2.60	3.90			N/A	N/A
D - Barrack Square East	0.68	0.03	0.32	1.50	3.14			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1420	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1883	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1319	35
	B - Eagle Way West	42	0	89	18
	C - A12 South	1501	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	6	3
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	7.63	3.3	8.8	A	1303	1955
B - Eagle Way West	0.30	9.43	0.4	1.5	A	137	205
C - A12 South	0.75	5.08	2.9	6.7	A	1728	2592
D - Barrack Square East	0.78	21.09	3.4	17.1	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	263	2108	0.507	1065	1220	0.0	1.0	3.440	A
B - Eagle Way West	112	28	1371	850	0.132	112	186	0.0	0.2	4.872	A
C - A12 South	1417	354	144	2823	0.502	1413	1374	0.0	1.0	2.547	A
D - Barrack Square East	414	103	1107	1042	0.397	411	222	0.0	0.7	5.683	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1277	319	315	2077	0.615	1274	1459	1.0	1.6	4.472	A
B - Eagle Way West	134	34	1640	722	0.186	134	223	0.2	0.2	6.116	A
C - A12 South	1693	423	172	2805	0.603	1691	1644	1.0	1.5	3.224	A
D - Barrack Square East	494	123	1324	929	0.532	492	265	0.7	1.1	8.204	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	391	385	2035	0.768	1557	1783	1.6	3.2	7.425	A
B - Eagle Way West	164	41	2005	549	0.299	163	272	0.2	0.4	9.328	A
C - A12 South	2073	518	209	2782	0.745	2068	2005	1.5	2.9	5.002	A
D - Barrack Square East	605	151	1618	777	0.779	596	324	1.1	3.2	19.173	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	391	386	2035	0.768	1563	1789	3.2	3.3	7.627	A
B - Eagle Way West	164	41	2011	546	0.301	164	273	0.4	0.4	9.435	A
C - A12 South	2073	518	211	2781	0.746	2073	2017	2.9	2.9	5.084	A
D - Barrack Square East	605	151	1624	773	0.782	604	325	3.2	3.4	21.090	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1277	319	317	2076	0.615	1283	1467	3.3	1.6	4.579	A
B - Eagle Way West	134	34	1649	718	0.187	135	224	0.4	0.2	6.182	A
C - A12 South	1693	423	175	2803	0.604	1698	1661	2.9	1.5	3.274	A
D - Barrack Square East	494	123	1333	924	0.534	503	266	3.4	1.2	8.718	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	265	2107	0.507	1071	1225	1.6	1.0	3.483	A
B - Eagle Way West	112	28	1378	847	0.133	113	187	0.2	0.2	4.905	A
C - A12 South	1417	354	145	2822	0.502	1420	1384	1.5	1.0	2.570	A
D - Barrack Square East	414	103	1113	1038	0.398	416	223	1.2	0.7	5.797	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	1.00	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.05	0.45	4.11	6.67			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.51	0.04	0.42	3.95	6.73			N/A	N/A
D - Barrack Square East	1.11	0.06	0.67	2.43	3.49			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.20	0.03	0.28	3.20	8.82			N/A	N/A
B - Eagle Way West	0.42	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.86	0.03	0.27	2.86	2.86			N/A	N/A
D - Barrack Square East	3.22	0.03	0.33	6.25	17.14			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.26	0.03	0.27	3.26	3.26			N/A	N/A
B - Eagle Way West	0.43	0.03	0.33	1.35	1.49			N/A	N/A
C - A12 South	2.90	0.03	0.26	2.90	2.90			N/A	N/A
D - Barrack Square East	3.40	0.03	0.30	3.40	15.25			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.07	1.03	3.62	5.01			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.54	0.11	1.23	2.87	3.78			N/A	N/A
D - Barrack Square East	1.17	0.05	0.46	2.83	4.40			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.04	0.43	2.52	3.93			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	1.01	0.05	0.62	2.09	2.99			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.50	2.98			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	845	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	774	100.000
D - Barrack Square East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	803	39
	B - Eagle Way West	16	0	55	6
	C - A12 South	601	9	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.02	0.8	2.1	A	775	1162
B - Eagle Way West	0.08	3.66	0.1	0.5	A	71	106
C - A12 South	0.31	1.86	0.4	1.6	A	710	1065
D - Barrack Square East	0.07	3.57	0.1	0.5	A	65	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	636	159	168	2168	0.293	634	466	0.0	0.4	2.344	A
B - Eagle Way West	58	14	576	1198	0.048	58	14	0.0	0.1	3.157	A
C - A12 South	583	146	8	2784	0.209	582	691	0.0	0.3	1.634	A
D - Barrack Square East	53	13	646	1235	0.043	53	156	0.0	0.0	3.045	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	759	190	201	2149	0.353	759	557	0.4	0.5	2.589	A
B - Eagle Way West	69	17	689	1143	0.061	69	17	0.1	0.1	3.352	A
C - A12 South	696	174	10	2783	0.250	695	826	0.3	0.3	1.723	A
D - Barrack Square East	64	16	773	1172	0.054	64	187	0.0	0.1	3.247	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	930	232	246	2123	0.438	929	682	0.5	0.8	3.016	A
B - Eagle Way West	85	21	843	1067	0.079	85	21	0.1	0.1	3.664	A
C - A12 South	852	213	12	2781	0.306	852	1012	0.3	0.4	1.865	A
D - Barrack Square East	78	20	946	1085	0.072	78	229	0.1	0.1	3.573	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	930	232	246	2122	0.438	930	682	0.8	0.8	3.017	A
B - Eagle Way West	85	21	844	1067	0.079	85	21	0.1	0.1	3.664	A
C - A12 South	852	213	12	2781	0.306	852	1013	0.4	0.4	1.865	A
D - Barrack Square East	78	20	947	1085	0.072	78	229	0.1	0.1	3.575	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	759	190	201	2149	0.353	760	557	0.8	0.5	2.593	A
B - Eagle Way West	69	17	689	1142	0.061	69	17	0.1	0.1	3.354	A
C - A12 South	696	174	10	2783	0.250	696	828	0.4	0.3	1.727	A
D - Barrack Square East	64	16	774	1171	0.054	64	187	0.1	0.1	3.253	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	636	159	168	2168	0.293	636	467	0.5	0.4	2.352	A
B - Eagle Way West	58	14	577	1197	0.048	58	14	0.1	0.1	3.162	A
C - A12 South	583	146	8	2784	0.209	583	693	0.3	0.3	1.637	A
D - Barrack Square East	53	13	648	1234	0.043	53	157	0.1	0.0	3.048	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.07	0.71	1.34	1.42			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.03	0.25	0.78	0.78			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.44	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.03	0.27	0.78	2.08			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.44	0.03	0.33	1.38	1.64			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	9.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1413	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	1885	100.000
D - Barrack Square East		ONE HOUR	✓	216	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1363	49
	B - Eagle Way West	47	0	128	27
	C - A12 South	1340	30	0	515
	D - Barrack Square East	53	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	8	8	0	5
	D - Barrack Square East	2	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	13.96	5.8	29.7	B	1296	1944
B - Eagle Way West	0.48	15.01	0.9	4.5	C	185	278
C - A12 South	0.75	5.19	3.0	7.0	A	1730	2595
D - Barrack Square East	0.33	7.46	0.5	2.0	A	199	298

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1064	266	503	1949	0.546	1059	1080	0.0	1.2	4.025	A
B - Eagle Way West	152	38	1433	786	0.193	151	31	0.0	0.2	5.659	A
C - A12 South	1419	355	48	2783	0.510	1415	1232	0.0	1.0	2.624	A
D - Barrack Square East	163	41	1118	981	0.166	162	444	0.0	0.2	4.393	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1270	317	602	1890	0.672	1267	1293	1.2	2.0	5.744	A
B - Eagle Way West	181	45	1714	650	0.279	181	37	0.2	0.4	7.667	A
C - A12 South	1695	424	58	2777	0.610	1693	1474	1.0	1.6	3.314	A
D - Barrack Square East	194	49	1338	872	0.223	194	531	0.2	0.3	5.310	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1555	389	736	1811	0.859	1541	1580	2.0	5.5	12.729	B
B - Eagle Way West	222	56	2096	464	0.479	220	45	0.4	0.9	14.624	B
C - A12 South	2076	519	71	2769	0.750	2070	1795	1.6	2.9	5.112	A
D - Barrack Square East	238	60	1628	728	0.327	237	649	0.3	0.5	7.330	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1555	389	739	1809	0.860	1554	1585	5.5	5.8	13.963	B
B - Eagle Way West	222	56	2102	462	0.481	222	45	0.9	0.9	15.011	C
C - A12 South	2076	519	71	2769	0.750	2076	1809	2.9	3.0	5.192	A
D - Barrack Square East	238	60	1642	721	0.330	238	651	0.5	0.5	7.457	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1270	317	606	1888	0.673	1285	1299	5.8	2.1	6.113	A
B - Eagle Way West	181	45	1722	646	0.281	184	37	0.9	0.4	7.816	A
C - A12 South	1695	424	58	2777	0.610	1700	1494	3.0	1.6	3.362	A
D - Barrack Square East	194	49	1357	862	0.226	195	534	0.5	0.3	5.403	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1064	266	506	1947	0.546	1067	1086	2.1	1.2	4.108	A
B - Eagle Way West	152	38	1439	783	0.194	153	31	0.4	0.2	5.716	A
C - A12 South	1419	355	49	2783	0.510	1421	1242	1.6	1.0	2.649	A
D - Barrack Square East	163	41	1127	976	0.167	163	446	0.3	0.2	4.428	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.19	0.56	1.08	1.27	1.63			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.03	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.04	0.43	5.47	9.33			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.55	0.04	0.42	4.09	6.95			N/A	N/A
D - Barrack Square East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.53	0.03	0.34	10.74	29.73			N/A	N/A
B - Eagle Way West	0.89	0.03	0.26	0.89	0.89			N/A	N/A
C - A12 South	2.93	0.03	0.27	2.93	2.93			N/A	N/A
D - Barrack Square East	0.48	0.03	0.25	0.48	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.81	0.03	0.29	5.81	21.36			N/A	N/A
B - Eagle Way West	0.91	0.03	0.31	1.54	4.53			N/A	N/A
C - A12 South	2.96	0.03	0.26	2.96	2.96			N/A	N/A
D - Barrack Square East	0.49	0.03	0.32	1.46	1.98			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.10	0.05	0.48	5.67	9.16			N/A	N/A
B - Eagle Way West	0.40	0.03	0.30	0.92	1.21			N/A	N/A
C - A12 South	1.58	0.11	1.23	2.99	3.98			N/A	N/A
D - Barrack Square East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.03	0.34	2.82	6.13			N/A	N/A
B - Eagle Way West	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.05	0.05	0.61	2.25	3.26			N/A	N/A
D - Barrack Square East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	39.14	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1476	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2308	100.000
D - Barrack Square East		ONE HOUR	✓	438	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1406	50
	B - Eagle Way West	58	0	144	23
	C - A12 South	1469	72	1	765
	D - Barrack Square East	105	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	4
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	58.01	26.1	98.7	F	1354	2031
B - Eagle Way West	1.05	173.03	12.5	36.1	F	207	310
C - A12 South	0.94	18.86	12.5	69.0	C	2118	3177
D - Barrack Square East	0.69	16.17	2.1	7.8	C	402	603

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1111	278	700	1809	0.614	1105	1224	0.0	1.6	5.068	A
B - Eagle Way West	170	42	1756	638	0.266	168	84	0.0	0.4	7.639	A
C - A12 South	1737	434	109	2747	0.632	1731	1394	0.0	1.7	3.520	A
D - Barrack Square East	330	82	1175	967	0.341	328	629	0.0	0.5	5.614	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1326	332	837	1731	0.766	1320	1464	1.6	3.2	8.638	A
B - Eagle Way West	202	51	2100	469	0.432	201	100	0.4	0.7	13.351	B
C - A12 South	2075	519	131	2734	0.759	2069	1666	1.7	3.1	5.367	A
D - Barrack Square East	394	99	1405	849	0.464	393	752	0.5	0.9	7.869	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1625	406	998	1638	0.992	1564	1769	3.2	18.4	34.270	D
B - Eagle Way West	248	62	2545	250	0.992	222	121	0.7	7.2	92.257	F
C - A12 South	2541	635	159	2717	0.935	2508	1973	3.1	11.3	15.254	C
D - Barrack Square East	483	121	1654	720	0.670	478	908	0.9	1.9	14.639	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1625	406	1011	1631	0.996	1593	1789	18.4	26.1	58.013	F
B - Eagle Way West	248	62	2574	236	1.050	227	123	7.2	12.5	173.030	F
C - A12 South	2541	635	160	2716	0.935	2536	2007	11.3	12.5	18.862	C
D - Barrack Square East	483	121	1686	704	0.686	482	919	1.9	2.1	16.167	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1326	332	886	1702	0.779	1416	1505	26.1	3.7	16.327	C
B - Eagle Way West	202	51	2142	448	0.452	249	103	12.5	0.9	22.518	C
C - A12 South	2075	519	134	2732	0.759	2112	1793	12.5	3.2	6.136	A
D - Barrack Square East	394	99	1528	786	0.501	398	774	2.1	1.0	9.390	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1111	278	706	1805	0.615	1119	1234	3.7	1.6	5.314	A
B - Eagle Way West	170	42	1769	631	0.269	171	85	0.9	0.4	7.858	A
C - A12 South	1737	434	111	2746	0.633	1743	1413	3.2	1.7	3.609	A
D - Barrack Square East	330	82	1192	959	0.344	332	634	1.0	0.5	5.763	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.57	0.26	1.38	2.53	2.98			N/A	N/A
B - Eagle Way West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.70	0.50	1.05	2.60	2.99			N/A	N/A
D - Barrack Square East	0.51	0.51	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.16	0.05	0.46	8.84	15.14			N/A	N/A
B - Eagle Way West	0.74	0.04	0.39	1.69	2.72			N/A	N/A
C - A12 South	3.07	0.04	0.41	8.32	15.70			N/A	N/A
D - Barrack Square East	0.85	0.07	0.80	1.35	1.78			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	18.36	0.29	9.53	46.72	64.40			N/A	N/A
B - Eagle Way West	7.23	0.27	4.16	16.87	22.55			N/A	N/A
C - A12 South	11.32	0.05	0.49	32.20	59.54			N/A	N/A
D - Barrack Square East	1.94	0.03	0.29	1.94	7.28			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	26.14	0.24	11.76	69.73	98.72			N/A	N/A
B - Eagle Way West	12.52	0.78	8.46	27.84	36.10			N/A	N/A
C - A12 South	12.54	0.04	0.37	26.71	68.99			N/A	N/A
D - Barrack Square East	2.10	0.03	0.29	2.10	7.79			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.73	0.04	0.42	10.31	19.10			N/A	N/A
B - Eagle Way West	0.85	0.03	0.31	1.58	4.23			N/A	N/A
C - A12 South	3.24	0.05	0.45	9.05	15.79			N/A	N/A
D - Barrack Square East	1.03	0.08	0.89	1.79	2.35			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.03	0.29	1.62	6.85			N/A	N/A
B - Eagle Way West	0.37	0.03	0.26	0.48	0.83			N/A	N/A
C - A12 South	1.74	0.03	0.32	3.26	9.06			N/A	N/A
D - Barrack Square East	0.53	0.04	0.37	1.47	1.70			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	12.72	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1507	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1950	100.000
D - Barrack Square East		ONE HOUR	✓	582	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1384	66
	B - Eagle Way West	61	0	97	37
	C - A12 South	1541	104	0	305
	D - Barrack Square East	119	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	2
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	11.71	5.2	25.3	B	1383	2075
B - Eagle Way West	0.48	15.56	0.9	4.6	C	179	269
C - A12 South	0.79	6.19	3.6	8.2	A	1789	2684
D - Barrack Square East	0.88	36.98	6.2	33.5	E	534	801

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	330	2054	0.552	1130	1292	0.0	1.2	3.876	A
B - Eagle Way West	147	37	1476	773	0.191	146	144	0.0	0.2	5.740	A
C - A12 South	1468	367	156	2773	0.529	1464	1432	0.0	1.1	2.741	A
D - Barrack Square East	438	109	1153	1012	0.433	435	307	0.0	0.8	6.208	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1355	339	395	2016	0.672	1352	1545	1.2	2.0	5.392	A
B - Eagle Way West	176	44	1765	635	0.277	175	172	0.2	0.4	7.812	A
C - A12 South	1753	438	187	2754	0.637	1750	1713	1.1	1.7	3.579	A
D - Barrack Square East	523	131	1380	893	0.586	520	367	0.8	1.4	9.596	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1660	415	483	1966	0.844	1648	1886	2.0	5.0	10.922	B
B - Eagle Way West	215	54	2155	451	0.478	213	210	0.4	0.9	15.030	C
C - A12 South	2147	537	225	2730	0.786	2140	2081	1.7	3.6	6.024	A
D - Barrack Square East	640	160	1681	735	0.871	625	449	1.4	5.4	29.214	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1660	415	485	1964	0.845	1659	1895	5.0	5.2	11.710	B
B - Eagle Way West	215	54	2165	446	0.482	215	211	0.9	0.9	15.557	C
C - A12 South	2147	537	229	2728	0.787	2147	2101	3.6	3.6	6.189	A
D - Barrack Square East	640	160	1693	729	0.879	637	451	5.4	6.2	36.981	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1355	339	399	2014	0.673	1368	1558	5.2	2.1	5.672	A
B - Eagle Way West	176	44	1779	629	0.280	178	175	0.9	0.4	8.015	A
C - A12 South	1753	438	193	2750	0.637	1760	1745	3.6	1.8	3.664	A
D - Barrack Square East	523	131	1396	884	0.591	542	370	6.2	1.5	11.043	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	333	2053	0.553	1138	1299	2.1	1.2	3.951	A
B - Eagle Way West	147	37	1484	769	0.192	148	145	0.4	0.2	5.804	A
C - A12 South	1468	367	158	2772	0.530	1471	1445	1.8	1.1	2.771	A
D - Barrack Square East	438	109	1162	1007	0.435	441	309	1.5	0.8	6.387	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.09	1.32	1.66			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.12	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.75	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.04	0.43	5.48	9.35			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.73	0.04	0.40	4.63	8.17			N/A	N/A
D - Barrack Square East	1.38	0.05	0.49	3.42	5.21			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.04	0.03	0.32	7.36	25.25			N/A	N/A
B - Eagle Way West	0.89	0.03	0.26	0.89	0.89			N/A	N/A
C - A12 South	3.57	0.03	0.28	3.57	7.85			N/A	N/A
D - Barrack Square East	5.37	0.05	0.48	15.33	27.15			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.23	0.03	0.28	5.23	14.21			N/A	N/A
B - Eagle Way West	0.91	0.03	0.31	1.60	4.56			N/A	N/A
C - A12 South	3.64	0.03	0.27	3.64	3.64			N/A	N/A
D - Barrack Square East	6.15	0.04	0.38	15.13	33.51			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.09	0.05	0.58	5.59	8.76			N/A	N/A
B - Eagle Way West	0.39	0.03	0.30	0.90	1.20			N/A	N/A
C - A12 South	1.78	0.08	1.15	3.92	5.48			N/A	N/A
D - Barrack Square East	1.49	0.04	0.39	3.88	6.92			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.04	0.35	3.05	6.10			N/A	N/A
B - Eagle Way West	0.24	0.03	0.26	0.46	0.48			N/A	N/A
C - A12 South	1.13	0.05	0.45	2.76	4.32			N/A	N/A
D - Barrack Square East	0.78	0.03	0.30	1.05	3.74			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	17.80	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1588	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1899	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1453	65
	B - Eagle Way West	45	0	94	19
	C - A12 South	1510	145	1	243
	D - Barrack Square East	165	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	2
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.57	5.0	23.0	B	1457	2185
B - Eagle Way West	0.34	10.83	0.5	2.0	B	144	216
C - A12 South	0.76	5.58	3.2	7.3	A	1743	2614
D - Barrack Square East	0.97	74.79	14.1	57.5	F	582	874

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1195	299	267	2163	0.553	1190	1290	0.0	1.2	3.686	A
B - Eagle Way West	118	30	1440	821	0.144	117	196	0.0	0.2	5.112	A
C - A12 South	1430	357	210	2794	0.512	1426	1477	0.0	1.0	2.622	A
D - Barrack Square East	478	119	1213	1005	0.475	474	245	0.0	0.9	6.737	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1427	357	320	2131	0.670	1424	1543	1.2	2.0	5.074	A
B - Eagle Way West	141	35	1722	688	0.205	141	234	0.2	0.3	6.576	A
C - A12 South	1707	427	251	2769	0.617	1705	1767	1.0	1.6	3.377	A
D - Barrack Square East	571	143	1451	884	0.645	567	293	0.9	1.8	11.231	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1748	437	391	2087	0.838	1737	1879	2.0	4.8	9.961	A
B - Eagle Way West	173	43	2098	510	0.339	172	284	0.3	0.5	10.618	B
C - A12 South	2091	523	298	2740	0.763	2085	2137	1.6	3.1	5.444	A
D - Barrack Square East	699	175	1769	723	0.967	665	358	1.8	10.3	46.852	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1748	437	392	2086	0.838	1747	1889	4.8	5.0	10.569	B
B - Eagle Way West	173	43	2109	505	0.342	173	286	0.5	0.5	10.835	B
C - A12 South	2091	523	304	2736	0.764	2091	2160	3.1	3.2	5.576	A
D - Barrack Square East	699	175	1780	717	0.975	684	360	10.3	14.1	74.792	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1427	357	322	2129	0.670	1439	1564	5.0	2.1	5.300	A
B - Eagle Way West	141	35	1743	678	0.208	142	239	0.5	0.3	6.733	A
C - A12 South	1707	427	269	2758	0.619	1713	1816	3.2	1.6	3.467	A
D - Barrack Square East	571	143	1466	877	0.651	619	295	14.1	1.9	16.541	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1195	299	269	2162	0.553	1199	1298	2.1	1.2	3.752	A
B - Eagle Way West	118	30	1448	817	0.145	119	197	0.3	0.2	5.155	A
C - A12 South	1430	357	213	2793	0.512	1432	1490	1.6	1.1	2.652	A
D - Barrack Square East	478	119	1221	1001	0.477	482	246	1.9	0.9	6.988	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.08	1.29	1.65			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	1.04	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.89	0.34	0.98	1.43	1.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.00	0.04	0.43	5.42	9.33			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.59	0.04	0.41	4.23	7.30			N/A	N/A
D - Barrack Square East	1.76	0.05	0.46	4.68	7.56			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.83	0.03	0.31	5.78	22.98			N/A	N/A
B - Eagle Way West	0.50	0.03	0.26	0.50	0.50			N/A	N/A
C - A12 South	3.14	0.03	0.27	3.14	4.44			N/A	N/A
D - Barrack Square East	10.33	0.17	4.63	26.82	37.71			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.99	0.03	0.28	4.99	10.89			N/A	N/A
B - Eagle Way West	0.51	0.03	0.33	1.00	2.02			N/A	N/A
C - A12 South	3.20	0.03	0.26	3.20	3.20			N/A	N/A
D - Barrack Square East	14.07	0.12	4.67	39.04	57.48			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.07	0.05	0.68	5.44	8.39			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.64	0.10	1.22	3.33	4.47			N/A	N/A
D - Barrack Square East	1.94	0.04	0.36	4.82	10.10			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.04	0.36	3.13	5.98			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	1.06	0.05	0.49	2.40	3.57			N/A	N/A
D - Barrack Square East	0.93	0.03	0.28	0.93	3.34			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	846	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	922	100.000
D - Barrack Square East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	804	39
	B - Eagle Way West	16	0	55	6
	C - A12 South	750	9	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	11	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.02	0.8	2.1	A	776	1164
B - Eagle Way West	0.09	4.01	0.1	0.5	A	71	106
C - A12 South	0.37	2.07	0.6	2.7	A	846	1269
D - Barrack Square East	0.07	3.58	0.1	0.5	A	65	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	637	159	168	2169	0.294	635	577	0.0	0.4	2.346	A
B - Eagle Way West	58	14	687	1140	0.051	58	14	0.0	0.1	3.325	A
C - A12 South	694	174	8	2758	0.252	693	691	0.0	0.3	1.743	A
D - Barrack Square East	53	13	647	1235	0.043	53	156	0.0	0.0	3.046	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	760	190	201	2149	0.354	760	690	0.4	0.5	2.591	A
B - Eagle Way West	69	17	822	1074	0.064	69	17	0.1	0.1	3.582	A
C - A12 South	829	207	10	2757	0.301	828	827	0.3	0.4	1.865	A
D - Barrack Square East	64	16	774	1171	0.054	64	187	0.0	0.1	3.249	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	931	233	246	2123	0.439	930	845	0.5	0.8	3.015	A
B - Eagle Way West	85	21	1006	983	0.086	85	21	0.1	0.1	4.008	A
C - A12 South	1015	254	12	2756	0.368	1014	1013	0.4	0.6	2.068	A
D - Barrack Square East	78	20	947	1085	0.072	78	229	0.1	0.1	3.575	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	931	233	246	2123	0.439	931	845	0.8	0.8	3.021	A
B - Eagle Way West	85	21	1007	982	0.086	85	21	0.1	0.1	4.010	A
C - A12 South	1015	254	12	2756	0.368	1015	1014	0.6	0.6	2.068	A
D - Barrack Square East	78	20	948	1084	0.072	78	229	0.1	0.1	3.577	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	760	190	201	2149	0.354	761	691	0.8	0.5	2.595	A
B - Eagle Way West	69	17	823	1073	0.065	69	17	0.1	0.1	3.584	A
C - A12 South	829	207	10	2757	0.301	829	829	0.6	0.4	1.869	A
D - Barrack Square East	64	16	775	1171	0.054	64	187	0.1	0.1	3.254	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	637	159	169	2168	0.294	637	578	0.5	0.4	2.351	A
B - Eagle Way West	58	14	689	1139	0.051	58	14	0.1	0.1	3.328	A
C - A12 South	694	174	8	2758	0.252	694	694	0.4	0.3	1.746	A
D - Barrack Square East	53	13	649	1234	0.043	53	157	0.1	0.0	3.052	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.07	0.71	1.34	1.42			N/A	N/A
B - Eagle Way West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.03	0.25	0.78	0.78			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.58	0.03	0.25	0.58	0.58			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.03	0.27	0.78	2.07			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.58	0.03	0.29	1.32	2.72			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	10.55	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1418	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	1996	100.000
D - Barrack Square East		ONE HOUR	✓	216	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1368	49
	B - Eagle Way West	47	0	128	27
	C - A12 South	1451	30	0	515
	D - Barrack Square East	53	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	11	8	0	5
	D - Barrack Square East	2	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	14.46	6.0	30.9	B	1301	1952
B - Eagle Way West	0.59	22.74	1.4	7.0	C	185	278
C - A12 South	0.81	7.00	4.2	12.9	A	1832	2748
D - Barrack Square East	0.33	7.52	0.5	2.0	A	199	298

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1068	267	503	1945	0.549	1063	1163	0.0	1.2	4.058	A
B - Eagle Way West	152	38	1516	731	0.208	151	31	0.0	0.3	6.199	A
C - A12 South	1503	376	48	2725	0.551	1498	1236	0.0	1.2	2.921	A
D - Barrack Square East	163	41	1122	978	0.167	162	444	0.0	0.2	4.409	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1275	319	602	1887	0.676	1272	1392	1.2	2.0	5.819	A
B - Eagle Way West	181	45	1813	583	0.311	181	37	0.3	0.4	8.928	A
C - A12 South	1795	449	58	2719	0.660	1792	1479	1.2	1.9	3.870	A
D - Barrack Square East	194	49	1343	868	0.224	194	531	0.2	0.3	5.338	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1561	390	734	1809	0.863	1547	1700	2.0	5.7	13.066	B
B - Eagle Way West	222	56	2215	384	0.579	219	45	0.4	1.3	21.374	C
C - A12 South	2198	549	71	2711	0.811	2189	1800	1.9	4.1	6.784	A
D - Barrack Square East	238	60	1633	724	0.329	237	648	0.3	0.5	7.386	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1561	390	739	1806	0.865	1560	1707	5.7	6.0	14.458	B
B - Eagle Way West	222	56	2224	380	0.585	222	45	1.3	1.4	22.742	C
C - A12 South	2198	549	71	2711	0.811	2198	1815	4.1	4.2	7.004	A
D - Barrack Square East	238	60	1648	717	0.332	238	651	0.5	0.5	7.524	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1275	319	608	1883	0.677	1290	1401	6.0	2.1	6.228	A
B - Eagle Way West	181	45	1825	577	0.314	185	37	1.4	0.5	9.259	A
C - A12 South	1795	449	58	2719	0.660	1803	1501	4.2	2.0	3.969	A
D - Barrack Square East	194	49	1364	858	0.227	195	535	0.5	0.3	5.439	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1068	267	507	1943	0.549	1071	1170	2.1	1.2	4.145	A
B - Eagle Way West	152	38	1524	727	0.209	153	31	0.5	0.3	6.281	A
C - A12 South	1503	376	49	2725	0.551	1506	1246	2.0	1.2	2.961	A
D - Barrack Square East	163	41	1132	973	0.167	163	446	0.3	0.2	4.447	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.56	1.09	1.37	1.69			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.22	0.56	1.06	1.22	1.54			N/A	N/A
D - Barrack Square East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.04	0.43	5.57	9.52			N/A	N/A
B - Eagle Way West	0.45	0.04	0.35	1.15	1.33			N/A	N/A
C - A12 South	1.92	0.04	0.40	5.14	9.28			N/A	N/A
D - Barrack Square East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.71	0.03	0.35	11.62	30.93			N/A	N/A
B - Eagle Way West	1.30	0.03	0.28	1.30	3.90			N/A	N/A
C - A12 South	4.12	0.03	0.29	4.12	12.88			N/A	N/A
D - Barrack Square East	0.48	0.03	0.25	0.48	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.02	0.03	0.30	6.02	23.35			N/A	N/A
B - Eagle Way West	1.36	0.03	0.31	2.40	6.96			N/A	N/A
C - A12 South	4.20	0.03	0.27	4.20	4.20			N/A	N/A
D - Barrack Square East	0.49	0.03	0.32	1.46	2.01			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.14	0.05	0.48	5.80	9.45			N/A	N/A
B - Eagle Way West	0.47	0.04	0.40	1.25	1.38			N/A	N/A
C - A12 South	1.97	0.07	1.05	4.75	6.83			N/A	N/A
D - Barrack Square East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.03	0.33	2.82	6.24			N/A	N/A
B - Eagle Way West	0.27	0.03	0.30	0.87	1.20			N/A	N/A
C - A12 South	1.24	0.04	0.42	3.15	5.26			N/A	N/A
D - Barrack Square East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	45.33	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1481	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2288	100.000
D - Barrack Square East		ONE HOUR	✓	431	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1411	50
	B - Eagle Way West	58	0	144	23
	C - A12 South	1450	72	1	765
	D - Barrack Square East	98	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	10	4
	B - Eagle Way West	4	0	0	5
	C - A12 South	14	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	64.99	29.9	103.0	F	1359	2038
B - Eagle Way West	1.11	216.87	16.4	40.3	F	207	310
C - A12 South	0.95	22.36	14.7	81.0	C	2100	3150
D - Barrack Square East	0.68	15.90	2.0	7.4	C	396	594

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1115	279	700	1794	0.621	1108	1204	0.0	1.6	5.202	A
B - Eagle Way West	170	42	1736	628	0.270	168	84	0.0	0.4	7.775	A
C - A12 South	1723	431	104	2688	0.641	1716	1398	0.0	1.8	3.676	A
D - Barrack Square East	325	81	1179	960	0.338	323	629	0.0	0.5	5.633	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1331	333	836	1716	0.776	1324	1440	1.6	3.3	9.028	A
B - Eagle Way West	202	51	2076	457	0.443	201	100	0.4	0.8	13.939	B
C - A12 South	2057	514	125	2676	0.769	2051	1671	1.8	3.2	5.707	A
D - Barrack Square East	388	97	1409	840	0.461	386	752	0.5	0.8	7.909	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1630	408	992	1628	1.001	1562	1735	3.3	20.3	37.031	E
B - Eagle Way West	248	62	2511	239	1.039	216	121	0.8	8.7	108.299	F
C - A12 South	2520	630	151	2660	0.947	2481	1968	3.2	12.9	17.232	C
D - Barrack Square East	475	119	1649	715	0.664	471	905	0.8	1.9	14.495	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1630	408	1003	1622	1.005	1592	1756	20.3	29.9	64.993	F
B - Eagle Way West	248	62	2542	223	1.113	217	123	8.7	16.4	216.872	F
C - A12 South	2520	630	153	2660	0.947	2512	2000	12.9	14.7	22.361	C
D - Barrack Square East	475	119	1678	700	0.679	474	917	1.9	2.0	15.903	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1331	333	900	1680	0.792	1435	1490	29.9	4.1	20.276	C
B - Eagle Way West	202	51	2126	432	0.469	264	104	16.4	0.9	30.097	D
C - A12 South	2057	514	128	2674	0.769	2102	1820	14.7	3.4	6.769	A
D - Barrack Square East	388	97	1556	765	0.507	392	779	2.0	1.0	9.740	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1115	279	707	1790	0.623	1124	1215	4.1	1.7	5.487	A
B - Eagle Way West	170	42	1750	621	0.273	172	85	0.9	0.4	8.046	A
C - A12 South	1723	431	105	2687	0.641	1729	1418	3.4	1.8	3.784	A
D - Barrack Square East	325	81	1197	950	0.342	327	634	1.0	0.5	5.791	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.23	1.40	2.68	3.30			N/A	N/A
B - Eagle Way West	0.37	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	1.76	0.42	1.09	2.76	3.36			N/A	N/A
D - Barrack Square East	0.51	0.51	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.31	0.05	0.47	9.32	15.84			N/A	N/A
B - Eagle Way West	0.77	0.04	0.38	1.81	3.01			N/A	N/A
C - A12 South	3.24	0.04	0.41	8.85	16.52			N/A	N/A
D - Barrack Square East	0.84	0.07	0.81	1.28	1.73			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.33	0.48	11.94	49.53	66.64			N/A	N/A
B - Eagle Way West	8.68	0.64	5.90	18.74	24.13			N/A	N/A
C - A12 South	12.91	0.06	1.31	37.83	64.73			N/A	N/A
D - Barrack Square East	1.89	0.03	0.29	1.89	6.85			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	29.93	0.46	16.51	75.42	103.03			N/A	N/A
B - Eagle Way West	16.35	1.84	12.81	32.53	40.32			N/A	N/A
C - A12 South	14.70	0.04	0.42	37.52	80.99			N/A	N/A
D - Barrack Square East	2.04	0.03	0.29	2.04	7.42			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.08	0.04	0.44	11.41	20.78			N/A	N/A
B - Eagle Way West	0.92	0.03	0.30	1.50	4.56			N/A	N/A
C - A12 South	3.43	0.04	0.44	9.61	17.06			N/A	N/A
D - Barrack Square East	1.05	0.09	0.94	1.78	2.28			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.03	0.29	1.68	6.87			N/A	N/A
B - Eagle Way West	0.38	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	1.81	0.03	0.31	3.09	9.30			N/A	N/A
D - Barrack Square East	0.52	0.04	0.37	1.46	1.65			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	17.17	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1555	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1963	100.000
D - Barrack Square East		ONE HOUR	✓	582	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1431	66
	B - Eagle Way West	61	0	97	37
	C - A12 South	1554	104	0	305
	D - Barrack Square East	119	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	9	2
	B - Eagle Way West	8	0	2	0
	C - A12 South	9	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	16.07	7.3	37.5	C	1427	2140
B - Eagle Way West	0.51	17.64	1.0	5.2	C	179	269
C - A12 South	0.81	7.01	4.1	12.4	A	1802	2702
D - Barrack Square East	0.93	56.12	9.4	46.1	F	534	801

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	293	330	2018	0.580	1165	1302	0.0	1.4	4.194	A
B - Eagle Way West	147	37	1486	754	0.195	146	144	0.0	0.2	5.909	A
C - A12 South	1478	370	156	2717	0.544	1473	1467	0.0	1.2	2.884	A
D - Barrack Square East	438	109	1188	983	0.446	435	307	0.0	0.8	6.534	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1398	349	395	1981	0.706	1394	1557	1.4	2.3	6.089	A
B - Eagle Way West	176	44	1777	613	0.287	175	172	0.2	0.4	8.214	A
C - A12 South	1765	441	187	2698	0.654	1762	1755	1.2	1.9	3.833	A
D - Barrack Square East	523	131	1422	858	0.609	520	367	0.8	1.5	10.561	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1712	428	482	1931	0.886	1694	1898	2.3	6.8	14.189	B
B - Eagle Way West	215	54	2167	424	0.508	213	209	0.4	1.0	16.851	C
C - A12 South	2162	540	223	2676	0.808	2153	2121	1.9	4.0	6.766	A
D - Barrack Square East	640	160	1728	695	0.922	617	448	1.5	7.4	38.450	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1712	428	485	1930	0.887	1710	1908	6.8	7.3	16.066	C
B - Eagle Way West	215	54	2178	419	0.514	215	211	1.0	1.0	17.639	C
C - A12 South	2162	540	228	2674	0.809	2161	2149	4.0	4.1	7.015	A
D - Barrack Square East	640	160	1744	686	0.934	632	451	7.4	9.4	56.122	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1398	349	399	1979	0.706	1417	1574	7.3	2.5	6.619	A
B - Eagle Way West	176	44	1795	604	0.291	178	175	1.0	0.4	8.498	A
C - A12 South	1765	441	197	2693	0.656	1774	1802	4.1	1.9	3.955	A
D - Barrack Square East	523	131	1445	845	0.619	554	371	9.4	1.7	13.582	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	293	333	2017	0.580	1175	1309	2.5	1.4	4.297	A
B - Eagle Way West	147	37	1494	749	0.196	148	145	0.4	0.2	5.992	A
C - A12 South	1478	370	158	2716	0.544	1481	1481	1.9	1.2	2.921	A
D - Barrack Square East	438	109	1198	977	0.448	441	309	1.7	0.8	6.760	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.37	0.57	1.26	1.74	1.89			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.18	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.79	0.52	0.98	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.34	0.04	0.44	6.44	11.12			N/A	N/A
B - Eagle Way West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A12 South	1.87	0.04	0.40	4.99	8.99			N/A	N/A
D - Barrack Square East	1.52	0.05	0.48	3.88	6.12			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.84	0.04	0.38	16.31	37.54			N/A	N/A
B - Eagle Way West	0.99	0.03	0.27	0.99	1.25			N/A	N/A
C - A12 South	4.04	0.03	0.29	4.04	12.39			N/A	N/A
D - Barrack Square East	7.37	0.08	1.55	20.87	32.07			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.29	0.03	0.31	7.36	33.13			N/A	N/A
B - Eagle Way West	1.03	0.03	0.31	1.78	5.18			N/A	N/A
C - A12 South	4.14	0.03	0.27	4.14	4.14			N/A	N/A
D - Barrack Square East	9.36	0.06	1.17	27.33	46.06			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.46	0.05	0.46	6.80	11.42			N/A	N/A
B - Eagle Way West	0.42	0.03	0.34	1.12	1.31			N/A	N/A
C - A12 South	1.93	0.07	1.07	4.61	6.59			N/A	N/A
D - Barrack Square East	1.68	0.04	0.37	4.32	8.32			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.40	0.03	0.33	3.00	7.19			N/A	N/A
B - Eagle Way West	0.25	0.03	0.27	0.48	0.67			N/A	N/A
C - A12 South	1.20	0.04	0.42	3.02	5.03			N/A	N/A
D - Barrack Square East	0.82	0.03	0.29	1.15	3.47			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	21.69	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1597	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1893	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1462	65
	B - Eagle Way West	45	0	94	19
	C - A12 South	1503	145	1	243
	D - Barrack Square East	165	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	5	2
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.43	5.9	29.5	B	1466	2198
B - Eagle Way West	0.34	10.89	0.5	2.0	B	144	216
C - A12 South	0.77	5.65	3.2	7.4	A	1737	2605
D - Barrack Square East	1.01	97.08	19.0	63.6	F	582	874

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1202	301	267	2119	0.567	1197	1285	0.0	1.3	3.883	A
B - Eagle Way West	118	30	1435	819	0.144	117	196	0.0	0.2	5.126	A
C - A12 South	1425	356	210	2777	0.513	1421	1484	0.0	1.0	2.648	A
D - Barrack Square East	478	119	1219	989	0.483	474	245	0.0	0.9	6.941	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1436	359	320	2088	0.688	1432	1537	1.3	2.2	5.461	A
B - Eagle Way West	141	35	1716	685	0.206	141	234	0.2	0.3	6.605	A
C - A12 South	1701	425	251	2751	0.618	1699	1775	1.0	1.6	3.415	A
D - Barrack Square East	571	143	1459	865	0.659	567	293	0.9	1.9	11.913	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1758	440	391	2046	0.860	1745	1870	2.2	5.6	11.470	B
B - Eagle Way West	173	43	2089	508	0.340	172	283	0.3	0.5	10.673	B
C - A12 South	2084	521	294	2724	0.765	2078	2138	1.6	3.2	5.511	A
D - Barrack Square East	699	175	1777	700	0.998	655	358	1.9	12.7	55.466	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1758	440	392	2045	0.860	1757	1879	5.6	5.9	12.429	B
B - Eagle Way West	173	43	2099	503	0.343	173	286	0.5	0.5	10.892	B
C - A12 South	2084	521	301	2720	0.766	2084	2163	3.2	3.2	5.648	A
D - Barrack Square East	699	175	1790	694	1.007	674	360	12.7	19.0	97.083	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1436	359	322	2087	0.688	1450	1563	5.9	2.2	5.781	A
B - Eagle Way West	141	35	1743	673	0.210	142	241	0.5	0.3	6.790	A
C - A12 South	1701	425	276	2736	0.622	1708	1840	3.2	1.7	3.523	A
D - Barrack Square East	571	143	1477	856	0.667	638	295	19.0	2.1	21.656	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1202	301	269	2118	0.568	1206	1293	2.2	1.3	3.963	A
B - Eagle Way West	118	30	1443	815	0.145	119	197	0.3	0.2	5.171	A
C - A12 South	1425	356	213	2775	0.514	1427	1498	1.7	1.1	2.675	A
D - Barrack Square East	478	119	1229	985	0.485	482	246	2.1	1.0	7.231	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.57	1.17	1.61	1.81			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	1.05	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.92	0.21	0.98	1.38	1.38			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.16	0.04	0.43	5.88	10.21			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.61	0.04	0.41	4.27	7.37			N/A	N/A
D - Barrack Square East	1.87	0.05	0.46	4.98	8.18			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.62	0.03	0.33	9.78	29.52			N/A	N/A
B - Eagle Way West	0.51	0.03	0.26	0.51	0.51			N/A	N/A
C - A12 South	3.17	0.03	0.27	3.17	4.71			N/A	N/A
D - Barrack Square East	12.74	0.40	7.60	30.32	40.52			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.86	0.03	0.29	5.86	18.80			N/A	N/A
B - Eagle Way West	0.52	0.03	0.33	1.01	2.05			N/A	N/A
C - A12 South	3.23	0.03	0.26	3.23	3.23			N/A	N/A
D - Barrack Square East	19.04	0.41	10.81	46.96	63.64			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.25	0.05	0.50	6.08	9.77			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.66	0.10	1.22	3.39	4.55			N/A	N/A
D - Barrack Square East	2.10	0.04	0.35	5.05	11.03			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.33	0.03	0.35	3.20	6.68			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	1.06	0.05	0.49	2.44	3.64			N/A	N/A
D - Barrack Square East	0.96	0.03	0.28	0.96	2.86			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	880	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	866	100.000
D - Barrack Square East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	838	39
	B - Eagle Way West	17	0	57	6
	C - A12 South	694	10	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.12	0.8	1.7	A	807	1211
B - Eagle Way West	0.09	3.86	0.1	0.5	A	73	110
C - A12 South	0.34	1.95	0.5	2.3	A	795	1192
D - Barrack Square East	0.07	3.65	0.1	0.5	A	65	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	662	166	170	2168	0.305	660	535	0.0	0.4	2.385	A
B - Eagle Way West	60	15	645	1166	0.052	60	15	0.0	0.1	3.254	A
C - A12 South	652	163	9	2802	0.233	651	718	0.0	0.3	1.673	A
D - Barrack Square East	54	13	674	1220	0.044	53	157	0.0	0.0	3.084	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	791	198	203	2149	0.368	790	640	0.4	0.6	2.648	A
B - Eagle Way West	72	18	771	1105	0.065	72	17	0.1	0.1	3.484	A
C - A12 South	779	195	10	2801	0.278	778	859	0.3	0.4	1.779	A
D - Barrack Square East	64	16	806	1154	0.055	64	187	0.0	0.1	3.300	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	968	242	249	2122	0.456	967	784	0.6	0.8	3.114	A
B - Eagle Way West	88	22	945	1020	0.086	88	21	0.1	0.1	3.860	A
C - A12 South	954	238	13	2799	0.341	953	1052	0.4	0.5	1.950	A
D - Barrack Square East	78	20	987	1064	0.074	78	229	0.1	0.1	3.651	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	968	242	249	2122	0.456	968	784	0.8	0.8	3.120	A
B - Eagle Way West	88	22	945	1020	0.086	88	21	0.1	0.1	3.861	A
C - A12 South	954	238	13	2799	0.341	954	1053	0.5	0.5	1.950	A
D - Barrack Square East	78	20	988	1064	0.074	78	229	0.1	0.1	3.652	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	791	198	203	2149	0.368	792	641	0.8	0.6	2.656	A
B - Eagle Way West	72	18	772	1104	0.065	72	17	0.1	0.1	3.486	A
C - A12 South	779	195	10	2801	0.278	779	861	0.5	0.4	1.783	A
D - Barrack Square East	64	16	807	1154	0.055	64	188	0.1	0.1	3.303	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	662	166	170	2168	0.305	663	537	0.6	0.4	2.393	A
B - Eagle Way West	60	15	647	1165	0.052	60	15	0.1	0.1	3.257	A
C - A12 South	652	163	9	2802	0.233	653	721	0.4	0.3	1.677	A
D - Barrack Square East	54	13	676	1219	0.044	54	157	0.1	0.0	3.090	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.08	0.77	1.35	1.43			N/A	N/A
B - Eagle Way West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.03	0.25	0.83	0.83			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.52	0.03	0.25	0.52	0.52			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.03	0.27	0.84	1.72			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.52	0.03	0.31	1.45	2.33			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.39	0.00	0.00	0.39	0.39			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	12.46	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1507	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	1976	100.000
D - Barrack Square East		ONE HOUR	✓	249	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1455	51
	B - Eagle Way West	48	0	133	28
	C - A12 South	1429	31	0	515
	D - Barrack Square East	85	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	20.48	8.9	47.5	C	1383	2075
B - Eagle Way West	0.57	20.38	1.3	6.4	C	192	288
C - A12 South	0.79	6.05	3.6	8.2	A	1813	2720
D - Barrack Square East	0.40	8.78	0.7	3.2	A	228	342

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	508	1968	0.577	1130	1173	0.0	1.3	4.268	A
B - Eagle Way West	158	39	1524	749	0.211	157	32	0.0	0.3	6.068	A
C - A12 South	1487	372	73	2792	0.533	1483	1305	0.0	1.1	2.742	A
D - Barrack Square East	187	47	1191	959	0.195	186	446	0.0	0.2	4.651	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1355	339	607	1908	0.710	1351	1403	1.3	2.4	6.414	A
B - Eagle Way West	188	47	1823	605	0.311	188	38	0.3	0.4	8.609	A
C - A12 South	1776	444	87	2782	0.638	1774	1561	1.1	1.7	3.559	A
D - Barrack Square East	223	56	1425	843	0.265	223	534	0.2	0.4	5.799	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1660	415	741	1828	0.908	1637	1714	2.4	8.1	17.101	C
B - Eagle Way West	231	58	2228	410	0.562	228	46	0.4	1.2	19.395	C
C - A12 South	2175	544	106	2770	0.785	2168	1893	1.7	3.6	5.909	A
D - Barrack Square East	274	68	1726	694	0.394	273	652	0.4	0.6	8.521	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1660	415	745	1826	0.909	1657	1720	8.1	8.9	20.484	C
B - Eagle Way West	231	58	2235	407	0.567	230	47	1.2	1.3	20.383	C
C - A12 South	2175	544	107	2770	0.785	2175	1914	3.6	3.6	6.046	A
D - Barrack Square East	274	68	1747	684	0.400	274	655	0.6	0.7	8.781	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1355	339	613	1905	0.711	1381	1411	8.9	2.5	7.193	A
B - Eagle Way West	188	47	1833	600	0.314	192	38	1.3	0.5	8.877	A
C - A12 South	1776	444	88	2782	0.638	1783	1593	3.6	1.8	3.629	A
D - Barrack Square East	223	56	1456	828	0.270	225	538	0.7	0.4	5.978	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	511	1966	0.577	1139	1179	2.5	1.4	4.380	A
B - Eagle Way West	158	39	1531	745	0.212	158	32	0.5	0.3	6.145	A
C - A12 South	1487	372	73	2791	0.533	1490	1316	1.8	1.1	2.773	A
D - Barrack Square East	187	47	1202	954	0.196	188	449	0.4	0.2	4.703	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.55	1.25	1.76	1.92			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.13	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.39	0.04	0.43	6.58	11.48			N/A	N/A
B - Eagle Way West	0.45	0.03	0.34	1.14	1.32			N/A	N/A
C - A12 South	1.75	0.04	0.40	4.67	8.25			N/A	N/A
D - Barrack Square East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.14	0.04	0.44	22.46	43.75			N/A	N/A
B - Eagle Way West	1.23	0.03	0.27	1.23	2.85			N/A	N/A
C - A12 South	3.55	0.03	0.28	3.55	7.44			N/A	N/A
D - Barrack Square East	0.64	0.03	0.26	0.64	0.64			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.92	0.03	0.34	16.21	47.49			N/A	N/A
B - Eagle Way West	1.27	0.03	0.31	2.03	6.41			N/A	N/A
C - A12 South	3.60	0.03	0.26	3.60	3.60			N/A	N/A
D - Barrack Square East	0.66	0.03	0.30	1.11	3.15			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.04	0.44	6.96	12.15			N/A	N/A
B - Eagle Way West	0.46	0.04	0.40	1.24	1.37			N/A	N/A
C - A12 South	1.78	0.08	1.16	3.92	5.48			N/A	N/A
D - Barrack Square East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.03	0.32	2.57	7.10			N/A	N/A
B - Eagle Way West	0.27	0.03	0.29	0.82	1.17			N/A	N/A
C - A12 South	1.15	0.05	0.46	2.79	4.34			N/A	N/A
D - Barrack Square East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	63.42	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1595	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2273	100.000
D - Barrack Square East		ONE HOUR	✓	493	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1519	55
	B - Eagle Way West	61	0	149	24
	C - A12 South	1432	75	1	765
	D - Barrack Square East	160	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	7	4
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	119.47	65.0	138.3	F	1463	2195
B - Eagle Way West	1.11	212.86	16.6	41.2	F	214	322
C - A12 South	0.93	17.94	11.8	63.7	C	2085	3128
D - Barrack Square East	0.78	23.50	3.4	16.5	C	453	679

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1201	300	704	1828	0.657	1193	1238	0.0	1.9	5.604	A
B - Eagle Way West	176	44	1768	636	0.277	174	87	0.0	0.4	7.776	A
C - A12 South	1711	428	151	2731	0.627	1704	1481	0.0	1.7	3.485	A
D - Barrack Square East	371	93	1264	934	0.398	369	634	0.0	0.7	6.342	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1434	358	842	1749	0.820	1424	1480	1.9	4.3	10.781	B
B - Eagle Way West	210	53	2114	467	0.450	208	104	0.4	0.8	13.857	B
C - A12 South	2043	511	181	2713	0.753	2038	1769	1.7	3.0	5.291	A
D - Barrack Square East	443	111	1508	808	0.549	441	758	0.7	1.2	9.755	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1756	439	1000	1657	1.060	1625	1788	4.3	37.1	55.829	F
B - Eagle Way West	257	64	2564	246	1.044	224	125	0.8	9.0	108.015	F
C - A12 South	2502	626	218	2691	0.930	2471	2030	3.0	10.7	14.715	B
D - Barrack Square East	543	136	1712	703	0.772	535	913	1.2	3.1	20.588	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1756	439	1011	1651	1.064	1644	1808	37.1	65.0	119.466	F
B - Eagle Way West	257	64	2592	233	1.105	227	126	9.0	16.6	212.864	F
C - A12 South	2502	626	220	2689	0.930	2498	2054	10.7	11.8	17.942	C
D - Barrack Square East	543	136	1733	693	0.784	542	922	3.1	3.4	23.499	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1434	358	903	1714	0.837	1667	1525	65.0	6.7	77.410	F
B - Eagle Way West	210	53	2155	447	0.470	273	109	16.6	0.9	28.920	D
C - A12 South	2043	511	186	2709	0.754	2078	2046	11.8	3.1	5.998	A
D - Barrack Square East	443	111	1784	667	0.664	449	786	3.4	2.1	16.824	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1201	300	711	1824	0.658	1220	1250	6.7	2.0	6.137	A
B - Eagle Way West	176	44	1783	629	0.280	178	88	0.9	0.4	8.024	A
C - A12 South	1711	428	154	2729	0.627	1717	1514	3.1	1.7	3.576	A
D - Barrack Square East	371	93	1292	919	0.404	377	639	2.1	0.7	6.704	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.88	0.13	1.42	3.68	4.80			N/A	N/A
B - Eagle Way West	0.38	0.03	0.27	0.49	0.91			N/A	N/A
C - A12 South	1.66	0.51	1.01	2.49	2.90			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.27	0.05	0.70	12.17	20.11			N/A	N/A
B - Eagle Way West	0.80	0.04	0.38	1.87	3.19			N/A	N/A
C - A12 South	2.98	0.04	0.40	8.04	15.22			N/A	N/A
D - Barrack Square East	1.19	0.06	0.82	2.50	3.49			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	37.07	6.85	31.11	70.11	85.03			N/A	N/A
B - Eagle Way West	9.05	0.72	6.25	19.35	24.81			N/A	N/A
C - A12 South	10.69	0.05	0.47	29.95	57.23			N/A	N/A
D - Barrack Square East	3.08	0.03	0.33	6.19	16.50			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	65.04	16.37	57.10	116.33	138.27			N/A	N/A
B - Eagle Way West	16.58	1.80	12.94	33.17	41.19			N/A	N/A
C - A12 South	11.77	0.04	0.36	22.92	63.72			N/A	N/A
D - Barrack Square East	3.38	0.03	0.30	3.72	15.74			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.75	0.06	1.15	19.53	31.95			N/A	N/A
B - Eagle Way West	0.93	0.03	0.30	1.41	4.54			N/A	N/A
C - A12 South	3.14	0.05	0.46	8.78	15.17			N/A	N/A
D - Barrack Square East	2.07	0.12	1.46	4.31	5.73			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.03	0.28	1.96	6.36			N/A	N/A
B - Eagle Way West	0.39	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	1.70	0.03	0.32	3.26	8.86			N/A	N/A
D - Barrack Square East	0.69	0.03	0.32	1.51	3.15			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	39.45	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1765	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2141	100.000
D - Barrack Square East		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1600	106
	B - Eagle Way West	63	0	101	39
	C - A12 South	1727	108	0	305
	D - Barrack Square East	142	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	6	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	41.66	21.6	98.5	E	1620	2430
B - Eagle Way West	0.63	27.65	1.7	8.6	D	186	280
C - A12 South	0.86	9.28	5.9	27.0	A	1964	2946
D - Barrack Square East	1.07	145.69	29.2	71.8	F	556	834

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1329	332	334	2080	0.639	1322	1450	0.0	1.7	4.706	A
B - Eagle Way West	153	38	1632	705	0.217	152	149	0.0	0.3	6.493	A
C - A12 South	1612	403	176	2784	0.579	1606	1594	0.0	1.4	3.043	A
D - Barrack Square East	456	114	1318	935	0.488	452	338	0.0	0.9	7.407	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1587	397	400	2042	0.777	1581	1734	1.7	3.4	7.700	A
B - Eagle Way West	183	46	1952	555	0.329	182	179	0.3	0.5	9.624	A
C - A12 South	1924	481	210	2762	0.697	1921	1906	1.4	2.3	4.259	A
D - Barrack Square East	544	136	1576	801	0.680	540	405	0.9	2.0	13.565	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1944	486	486	1991	0.976	1890	2103	3.4	16.8	27.191	D
B - Eagle Way West	224	56	2369	359	0.623	219	214	0.5	1.5	25.100	D
C - A12 South	2357	589	240	2743	0.859	2343	2255	2.3	5.7	8.705	A
D - Barrack Square East	667	167	1885	641	1.041	610	491	2.0	16.3	71.067	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1944	486	490	1988	0.978	1924	2116	16.8	21.6	41.665	E
B - Eagle Way West	224	56	2383	353	0.634	223	216	1.5	1.7	27.649	D
C - A12 South	2357	589	243	2742	0.860	2356	2291	5.7	5.9	9.282	A
D - Barrack Square East	667	167	1919	623	1.070	615	496	16.3	29.2	145.693	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1587	397	406	2038	0.779	1659	1776	21.6	3.7	11.232	B
B - Eagle Way West	183	46	1995	535	0.341	187	188	1.7	0.5	10.471	B
C - A12 South	1924	481	244	2741	0.702	1938	2058	5.9	2.4	4.561	A
D - Barrack Square East	544	136	1652	762	0.715	650	413	29.2	2.8	53.942	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1329	332	337	2079	0.639	1337	1461	3.7	1.8	4.899	A
B - Eagle Way West	153	38	1644	700	0.219	154	151	0.5	0.3	6.607	A
C - A12 South	1612	403	179	2781	0.579	1616	1616	2.4	1.4	3.099	A
D - Barrack Square East	456	114	1333	927	0.492	463	341	2.8	1.0	7.874	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.34	1.04	2.78	3.43			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.36	0.57	1.25	1.73	1.88			N/A	N/A
D - Barrack Square East	0.94	0.13	0.95	1.27	1.68			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.37	0.05	0.46	9.45	16.41			N/A	N/A
B - Eagle Way West	0.48	0.04	0.43	1.26	1.38			N/A	N/A
C - A12 South	2.26	0.04	0.39	6.02	11.36			N/A	N/A
D - Barrack Square East	2.03	0.05	0.47	5.49	8.97			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	16.78	0.15	6.14	46.14	67.17			N/A	N/A
B - Eagle Way West	1.54	0.03	0.29	1.54	6.58			N/A	N/A
C - A12 South	5.71	0.03	0.31	6.65	26.97			N/A	N/A
D - Barrack Square East	16.30	1.12	12.04	34.31	43.43			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	21.65	0.10	4.50	63.13	98.53			N/A	N/A
B - Eagle Way West	1.65	0.03	0.32	3.17	8.62			N/A	N/A
C - A12 South	5.91	0.03	0.28	5.91	11.91			N/A	N/A
D - Barrack Square East	29.21	3.83	23.38	58.15	71.83			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.68	0.04	0.42	10.06	18.89			N/A	N/A
B - Eagle Way West	0.53	0.04	0.43	1.33	1.47			N/A	N/A
C - A12 South	2.39	0.06	0.84	6.35	9.72			N/A	N/A
D - Barrack Square East	2.78	0.04	0.39	7.37	14.41			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.03	0.30	2.07	8.45			N/A	N/A
B - Eagle Way West	0.28	0.03	0.31	1.00	1.31			N/A	N/A
C - A12 South	1.39	0.04	0.36	3.51	6.79			N/A	N/A
D - Barrack Square East	0.98	0.03	0.27	0.98	1.98			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	74.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1881	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	2016	100.000
D - Barrack Square East		ONE HOUR	✓	689	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1707	101
	B - Eagle Way West	46	0	97	19
	C - A12 South	1621	151	1	243
	D - Barrack Square East	218	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	43.68	24.4	105.7	E	1726	2589
B - Eagle Way West	0.40	13.28	0.7	3.0	B	150	224
C - A12 South	0.81	6.71	4.1	11.6	A	1850	2775
D - Barrack Square East	1.28	373.10	83.9	127.9	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1416	354	270	2184	0.649	1409	1414	0.0	1.8	4.606	A
B - Eagle Way West	123	31	1562	769	0.160	122	203	0.0	0.2	5.556	A
C - A12 South	1518	379	252	2790	0.544	1513	1668	0.0	1.2	2.810	A
D - Barrack Square East	519	130	1407	915	0.567	514	273	0.0	1.3	8.861	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1691	423	324	2151	0.786	1684	1690	1.8	3.5	7.600	A
B - Eagle Way West	147	37	1867	626	0.234	146	243	0.2	0.3	7.492	A
C - A12 South	1813	453	300	2760	0.657	1810	1992	1.2	1.9	3.779	A
D - Barrack Square East	619	155	1682	777	0.798	610	326	1.3	3.5	20.628	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2071	518	395	2107	0.983	2011	2019	3.5	18.6	27.796	D
B - Eagle Way West	179	45	2237	452	0.397	178	285	0.3	0.6	13.055	B
C - A12 South	2220	555	310	2754	0.806	2212	2304	1.9	4.0	6.540	A
D - Barrack Square East	759	190	2010	611	1.241	603	396	3.5	42.4	153.542	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2071	518	397	2106	0.984	2048	2023	18.6	24.4	43.678	E
B - Eagle Way West	179	45	2241	450	0.398	179	286	0.6	0.7	13.278	B
C - A12 South	2220	555	307	2755	0.806	2220	2331	4.0	4.1	6.715	A
D - Barrack Square East	759	190	2046	593	1.279	593	399	42.4	83.9	373.102	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1691	423	326	2149	0.787	1773	1735	24.4	3.9	11.599	B
B - Eagle Way West	147	37	1914	605	0.242	148	255	0.7	0.3	7.900	A
C - A12 South	1813	453	348	2730	0.664	1821	2145	4.1	2.0	3.996	A
D - Barrack Square East	619	155	1767	734	0.844	725	332	83.9	57.5	342.610	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1416	354	272	2183	0.649	1424	1493	3.9	1.9	4.794	A
B - Eagle Way West	123	31	1642	733	0.167	123	220	0.3	0.2	5.913	A
C - A12 South	1518	379	341	2734	0.555	1521	1824	2.0	1.3	2.974	A
D - Barrack Square East	519	130	1422	907	0.572	743	275	57.5	1.4	66.304	F

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.30	1.08	2.95	3.73			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	1.19	0.55	1.04	1.35	1.35			N/A	N/A
D - Barrack Square East	1.28	0.05	0.64	2.95	4.40			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.54	0.05	0.46	9.96	17.41			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.89	0.04	0.40	5.06	9.14			N/A	N/A
D - Barrack Square East	3.54	0.05	0.75	9.94	16.05			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	18.58	0.19	7.80	49.94	71.31			N/A	N/A
B - Eagle Way West	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C - A12 South	4.01	0.03	0.28	4.01	11.62			N/A	N/A
D - Barrack Square East	42.40	18.74	39.76	64.11	72.44			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	24.40	0.12	6.76	69.90	105.73			N/A	N/A
B - Eagle Way West	0.65	0.03	0.32	1.36	3.03			N/A	N/A
C - A12 South	4.07	0.03	0.27	4.07	4.07			N/A	N/A
D - Barrack Square East	83.90	47.22	80.98	116.33	127.92			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.86	0.04	0.42	10.59	19.92			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	2.00	0.07	1.15	4.72	6.69			N/A	N/A
D - Barrack Square East	57.50	34.74	55.71	76.87	83.70			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.87	0.03	0.30	2.10	8.76			N/A	N/A
B - Eagle Way West	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.26	0.04	0.43	3.17	5.13			N/A	N/A
D - Barrack Square East	1.41	0.03	0.26	1.41	1.41			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	880	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	867	100.000
D - Barrack Square East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	838	39
	B - Eagle Way West	17	0	57	6
	C - A12 South	694	10	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.12	0.8	1.7	A	808	1211
B - Eagle Way West	0.09	3.86	0.1	0.5	A	73	110
C - A12 South	0.34	1.95	0.5	2.3	A	796	1193
D - Barrack Square East	0.07	3.65	0.1	0.5	A	65	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	663	166	170	2168	0.306	661	536	0.0	0.4	2.386	A
B - Eagle Way West	60	15	646	1166	0.052	60	15	0.0	0.1	3.255	A
C - A12 South	653	163	9	2802	0.233	651	719	0.0	0.3	1.674	A
D - Barrack Square East	54	13	674	1220	0.044	53	157	0.0	0.0	3.085	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	791	198	203	2149	0.368	791	641	0.4	0.6	2.648	A
B - Eagle Way West	72	18	772	1104	0.065	72	17	0.1	0.1	3.485	A
C - A12 South	779	195	10	2801	0.278	779	860	0.3	0.4	1.780	A
D - Barrack Square East	64	16	806	1154	0.055	64	187	0.0	0.1	3.301	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	969	242	249	2122	0.457	968	785	0.6	0.8	3.116	A
B - Eagle Way West	88	22	945	1020	0.086	88	21	0.1	0.1	3.861	A
C - A12 South	955	239	13	2799	0.341	954	1053	0.4	0.5	1.951	A
D - Barrack Square East	78	20	987	1064	0.074	78	229	0.1	0.1	3.652	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	969	242	249	2122	0.457	969	785	0.8	0.8	3.121	A
B - Eagle Way West	88	22	946	1020	0.086	88	21	0.1	0.1	3.862	A
C - A12 South	955	239	13	2799	0.341	955	1054	0.5	0.5	1.951	A
D - Barrack Square East	78	20	988	1063	0.074	78	229	0.1	0.1	3.654	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	791	198	203	2149	0.368	792	641	0.8	0.6	2.655	A
B - Eagle Way West	72	18	773	1104	0.065	72	17	0.1	0.1	3.487	A
C - A12 South	779	195	10	2801	0.278	780	862	0.5	0.4	1.781	A
D - Barrack Square East	64	16	808	1153	0.055	64	188	0.1	0.1	3.307	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	663	166	170	2168	0.306	663	537	0.6	0.4	2.394	A
B - Eagle Way West	60	15	647	1165	0.052	60	15	0.1	0.1	3.257	A
C - A12 South	653	163	9	2802	0.233	653	721	0.4	0.3	1.674	A
D - Barrack Square East	54	13	676	1219	0.044	54	157	0.1	0.0	3.091	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.08	0.77	1.35	1.43			N/A	N/A
B - Eagle Way West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.03	0.25	0.84	0.84			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.52	0.03	0.25	0.52	0.52			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.03	0.27	0.84	1.72			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.52	0.03	0.31	1.45	2.34			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.39	0.00	0.00	0.39	0.39			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	12.42	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1507	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	1966	100.000
D - Barrack Square East		ONE HOUR	✓	251	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1455	51
	B - Eagle Way West	48	0	133	28
	C - A12 South	1419	31	0	515
	D - Barrack Square East	87	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	20.48	8.9	47.5	C	1383	2075
B - Eagle Way West	0.56	20.06	1.3	6.3	C	192	288
C - A12 South	0.78	5.98	3.5	8.1	A	1804	2705
D - Barrack Square East	0.40	8.83	0.7	3.2	A	230	346

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	508	1968	0.577	1129	1167	0.0	1.3	4.268	A
B - Eagle Way West	158	39	1518	751	0.210	157	32	0.0	0.3	6.050	A
C - A12 South	1480	370	74	2787	0.531	1475	1305	0.0	1.1	2.736	A
D - Barrack Square East	189	47	1191	960	0.197	188	446	0.0	0.2	4.658	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1355	339	607	1908	0.710	1351	1396	1.3	2.4	6.414	A
B - Eagle Way West	188	47	1816	607	0.310	188	38	0.3	0.4	8.561	A
C - A12 South	1767	442	89	2778	0.636	1765	1561	1.1	1.7	3.544	A
D - Barrack Square East	226	56	1425	844	0.267	225	534	0.2	0.4	5.815	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1660	415	741	1828	0.908	1637	1706	2.4	8.1	17.102	C
B - Eagle Way West	231	58	2219	413	0.558	228	46	0.4	1.2	19.116	C
C - A12 South	2164	541	109	2765	0.783	2157	1893	1.7	3.5	5.852	A
D - Barrack Square East	276	69	1726	694	0.398	275	652	0.4	0.7	8.565	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1660	415	745	1825	0.909	1657	1712	8.1	8.9	20.483	C
B - Eagle Way West	231	58	2226	410	0.563	230	47	1.2	1.3	20.056	C
C - A12 South	2164	541	109	2765	0.783	2164	1914	3.5	3.5	5.984	A
D - Barrack Square East	276	69	1747	684	0.404	276	655	0.7	0.7	8.829	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1355	339	613	1905	0.711	1381	1404	8.9	2.5	7.192	A
B - Eagle Way West	188	47	1826	603	0.312	191	38	1.3	0.5	8.821	A
C - A12 South	1767	442	90	2777	0.636	1774	1593	3.5	1.8	3.615	A
D - Barrack Square East	226	56	1456	828	0.272	227	538	0.7	0.4	5.997	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	511	1966	0.577	1139	1173	2.5	1.4	4.381	A
B - Eagle Way West	158	39	1525	747	0.211	158	32	0.5	0.3	6.124	A
C - A12 South	1480	370	75	2787	0.531	1482	1316	1.8	1.1	2.764	A
D - Barrack Square East	189	47	1202	954	0.198	189	449	0.4	0.2	4.708	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.55	1.25	1.76	1.92			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.12	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.39	0.04	0.43	6.58	11.48			N/A	N/A
B - Eagle Way West	0.44	0.03	0.34	1.12	1.31			N/A	N/A
C - A12 South	1.73	0.04	0.41	4.62	8.12			N/A	N/A
D - Barrack Square East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.14	0.04	0.44	22.46	43.75			N/A	N/A
B - Eagle Way West	1.21	0.03	0.27	1.21	2.66			N/A	N/A
C - A12 South	3.50	0.03	0.28	3.50	7.02			N/A	N/A
D - Barrack Square East	0.65	0.03	0.26	0.65	0.65			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.92	0.03	0.34	16.20	47.48			N/A	N/A
B - Eagle Way West	1.25	0.03	0.31	1.98	6.29			N/A	N/A
C - A12 South	3.55	0.03	0.26	3.55	3.55			N/A	N/A
D - Barrack Square East	0.67	0.03	0.30	1.10	3.22			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.04	0.44	6.95	12.15			N/A	N/A
B - Eagle Way West	0.46	0.04	0.40	1.23	1.37			N/A	N/A
C - A12 South	1.77	0.08	1.17	3.87	5.36			N/A	N/A
D - Barrack Square East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.03	0.32	2.57	7.10			N/A	N/A
B - Eagle Way West	0.27	0.03	0.29	0.80	1.16			N/A	N/A
C - A12 South	1.14	0.05	0.46	2.75	4.24			N/A	N/A
D - Barrack Square East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	68.79	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1615	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2267	100.000
D - Barrack Square East		ONE HOUR	✓	493	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1539	55
	B - Eagle Way West	61	0	149	24
	C - A12 South	1426	75	1	765
	D - Barrack Square East	160	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	7	4
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	134.66	74.8	147.9	F	1482	2223
B - Eagle Way West	1.10	209.13	16.2	40.8	F	214	322
C - A12 South	0.93	17.78	11.6	62.8	C	2081	3121
D - Barrack Square East	0.79	23.72	3.4	16.8	C	453	679

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	704	1829	0.665	1208	1234	0.0	1.9	5.730	A
B - Eagle Way West	176	44	1764	637	0.276	174	87	0.0	0.4	7.764	A
C - A12 South	1707	427	151	2727	0.626	1700	1497	0.0	1.7	3.484	A
D - Barrack Square East	371	93	1279	926	0.401	369	634	0.0	0.7	6.430	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	842	1749	0.830	1442	1476	1.9	4.6	11.333	B
B - Eagle Way West	210	53	2110	467	0.449	208	104	0.4	0.8	13.808	B
C - A12 South	2038	510	180	2709	0.752	2033	1787	1.7	3.0	5.283	A
D - Barrack Square East	443	111	1526	799	0.555	441	758	0.7	1.2	9.989	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1778	445	1001	1657	1.073	1630	1783	4.6	41.7	61.013	F
B - Eagle Way West	257	64	2559	247	1.040	225	125	0.8	8.9	106.576	F
C - A12 South	2496	624	218	2687	0.929	2466	2036	3.0	10.6	14.623	B
D - Barrack Square East	543	136	1718	700	0.775	535	912	1.2	3.1	20.903	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1778	445	1012	1651	1.077	1646	1802	41.7	74.8	134.658	F
B - Eagle Way West	257	64	2586	234	1.100	228	126	8.9	16.2	209.126	F
C - A12 South	2496	624	220	2686	0.930	2492	2058	10.6	11.6	17.777	C
D - Barrack Square East	543	136	1736	691	0.785	542	922	3.1	3.4	23.719	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	902	1715	0.847	1692	1519	74.8	14.8	99.661	F
B - Eagle Way West	210	53	2150	448	0.469	271	109	16.2	0.9	28.192	D
C - A12 South	2038	510	186	2706	0.753	2072	2070	11.6	3.1	5.977	A
D - Barrack Square East	443	111	1808	655	0.677	448	786	3.4	2.2	17.795	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	711	1825	0.666	1267	1246	14.8	2.0	7.044	A
B - Eagle Way West	176	44	1779	629	0.279	178	89	0.9	0.4	8.012	A
C - A12 South	1707	427	155	2725	0.627	1713	1560	3.1	1.7	3.579	A
D - Barrack Square East	371	93	1338	896	0.415	377	640	2.2	0.7	7.023	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.95	0.12	1.42	3.91	5.18			N/A	N/A
B - Eagle Way West	0.38	0.03	0.27	0.49	0.85			N/A	N/A
C - A12 South	1.66	0.51	1.01	2.47	2.89			N/A	N/A
D - Barrack Square East	0.66	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.55	0.05	0.84	12.97	21.19			N/A	N/A
B - Eagle Way West	0.79	0.04	0.38	1.86	3.16			N/A	N/A
C - A12 South	2.97	0.04	0.40	8.01	15.16			N/A	N/A
D - Barrack Square East	1.22	0.06	0.83	2.58	3.60			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	41.72	9.80	36.20	75.29	89.84			N/A	N/A
B - Eagle Way West	8.91	0.68	6.09	19.17	24.64			N/A	N/A
C - A12 South	10.58	0.05	0.46	29.56	56.82			N/A	N/A
D - Barrack Square East	3.13	0.03	0.34	6.44	16.80			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	74.84	23.59	67.70	126.67	147.92			N/A	N/A
B - Eagle Way West	16.25	1.63	12.56	32.77	40.82			N/A	N/A
C - A12 South	11.64	0.04	0.35	22.27	62.78			N/A	N/A
D - Barrack Square East	3.42	0.03	0.30	3.76	15.89			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.79	0.76	9.75	33.57	43.83			N/A	N/A
B - Eagle Way West	0.92	0.03	0.30	1.42	4.53			N/A	N/A
C - A12 South	3.13	0.05	0.46	8.74	15.09			N/A	N/A
D - Barrack Square East	2.20	0.13	1.07	4.57	5.99			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.03	0.28	2.04	6.26			N/A	N/A
B - Eagle Way West	0.39	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	1.69	0.03	0.32	3.27	8.85			N/A	N/A
D - Barrack Square East	0.72	0.03	0.33	1.60	3.33			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	37.92	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1756	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2136	100.000
D - Barrack Square East		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1590	106
	B - Eagle Way West	63	0	101	39
	C - A12 South	1723	108	0	305
	D - Barrack Square East	142	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	6	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	39.39	20.2	95.3	E	1612	2417
B - Eagle Way West	0.63	27.27	1.6	8.5	D	186	280
C - A12 South	0.86	9.19	5.8	26.4	A	1960	2940
D - Barrack Square East	1.06	140.68	28.1	70.9	F	556	834

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1322	331	334	2079	0.636	1315	1447	0.0	1.7	4.675	A
B - Eagle Way West	153	38	1629	707	0.216	152	149	0.0	0.3	6.480	A
C - A12 South	1608	402	176	2784	0.578	1603	1588	0.0	1.4	3.036	A
D - Barrack Square East	456	114	1311	938	0.486	452	338	0.0	0.9	7.361	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1579	395	400	2040	0.774	1572	1730	1.7	3.3	7.598	A
B - Eagle Way West	183	46	1948	557	0.328	182	179	0.3	0.5	9.580	A
C - A12 South	1920	480	210	2762	0.695	1917	1898	1.4	2.2	4.241	A
D - Barrack Square East	544	136	1567	805	0.677	540	405	0.9	2.0	13.396	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1934	483	486	1989	0.972	1883	2099	3.3	16.0	26.247	D
B - Eagle Way West	224	56	2365	361	0.620	219	214	0.5	1.5	24.801	C
C - A12 South	2352	588	241	2743	0.858	2338	2248	2.2	5.6	8.625	A
D - Barrack Square East	667	167	1878	644	1.036	612	491	2.0	15.8	69.369	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1934	483	490	1987	0.973	1917	2112	16.0	20.2	39.390	E
B - Eagle Way West	224	56	2379	354	0.631	223	216	1.5	1.6	27.269	D
C - A12 South	2352	588	244	2741	0.858	2351	2285	5.6	5.8	9.190	A
D - Barrack Square East	667	167	1911	627	1.064	618	496	15.8	28.1	140.678	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1579	395	406	2036	0.775	1645	1771	20.2	3.6	10.712	B
B - Eagle Way West	183	46	1990	537	0.340	187	188	1.6	0.5	10.400	B
C - A12 South	1920	480	243	2741	0.701	1934	2042	5.8	2.4	4.533	A
D - Barrack Square East	544	136	1639	768	0.709	646	413	28.1	2.7	48.750	E

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1322	331	337	2077	0.637	1329	1457	3.6	1.8	4.863	A
B - Eagle Way West	153	38	1640	701	0.218	154	151	0.5	0.3	6.590	A
C - A12 South	1608	402	179	2781	0.578	1612	1609	2.4	1.4	3.091	A
D - Barrack Square East	456	114	1325	930	0.490	463	341	2.7	1.0	7.809	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.72	0.37	1.03	2.73	3.31			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.36	0.57	1.25	1.72	1.87			N/A	N/A
D - Barrack Square East	0.93	0.13	0.95	1.22	1.65			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.30	0.05	0.46	9.26	16.11			N/A	N/A
B - Eagle Way West	0.48	0.04	0.42	1.26	1.38			N/A	N/A
C - A12 South	2.25	0.04	0.39	5.99	11.28			N/A	N/A
D - Barrack Square East	2.00	0.05	0.46	5.41	8.85			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	15.95	0.13	5.21	44.49	65.69			N/A	N/A
B - Eagle Way West	1.52	0.03	0.29	1.52	6.39			N/A	N/A
C - A12 South	5.64	0.03	0.31	6.36	26.44			N/A	N/A
D - Barrack Square East	15.84	1.42	11.50	33.75	42.93			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.23	0.08	3.19	59.51	95.34			N/A	N/A
B - Eagle Way West	1.63	0.03	0.32	3.09	8.49			N/A	N/A
C - A12 South	5.84	0.03	0.28	5.84	11.38			N/A	N/A
D - Barrack Square East	28.09	3.23	22.09	56.98	70.89			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.60	0.04	0.42	9.86	18.45			N/A	N/A
B - Eagle Way West	0.52	0.04	0.43	1.33	1.46			N/A	N/A
C - A12 South	2.38	0.06	0.85	6.29	9.62			N/A	N/A
D - Barrack Square East	2.68	0.04	0.38	7.01	13.94			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.03	0.30	2.13	8.43			N/A	N/A
B - Eagle Way West	0.28	0.03	0.31	1.00	1.30			N/A	N/A
C - A12 South	1.38	0.04	0.36	3.50	6.75			N/A	N/A
D - Barrack Square East	0.98	0.03	0.27	0.98	2.06			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	75.22	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1885	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	2012	100.000
D - Barrack Square East		ONE HOUR	✓	688	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1710	101
	B - Eagle Way West	46	0	97	19
	C - A12 South	1617	151	1	243
	D - Barrack Square East	217	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	44.69	25.1	107.0	E	1729	2594
B - Eagle Way West	0.40	13.15	0.6	3.0	B	150	224
C - A12 South	0.80	6.65	4.0	11.2	A	1846	2769
D - Barrack Square East	1.28	375.04	84.2	128.1	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1419	355	270	2184	0.650	1411	1410	0.0	1.8	4.618	A
B - Eagle Way West	123	31	1558	771	0.159	122	203	0.0	0.2	5.541	A
C - A12 South	1515	379	252	2790	0.543	1510	1671	0.0	1.2	2.802	A
D - Barrack Square East	518	130	1409	914	0.567	513	273	0.0	1.3	8.879	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1694	424	324	2151	0.788	1687	1685	1.8	3.6	7.645	A
B - Eagle Way West	147	37	1863	628	0.233	146	243	0.2	0.3	7.459	A
C - A12 South	1809	452	300	2760	0.655	1806	1995	1.2	1.9	3.762	A
D - Barrack Square East	619	155	1685	775	0.798	610	326	1.3	3.6	20.726	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2075	519	395	2107	0.985	2013	2014	3.6	19.0	28.203	D
B - Eagle Way West	179	45	2231	455	0.394	178	285	0.3	0.6	12.938	B
C - A12 South	2215	554	309	2754	0.804	2207	2306	1.9	4.0	6.482	A
D - Barrack Square East	758	190	2013	610	1.242	602	396	3.6	42.5	154.219	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2075	519	397	2106	0.985	2050	2017	19.0	25.1	44.692	E
B - Eagle Way West	179	45	2235	453	0.396	179	286	0.6	0.6	13.152	B
C - A12 South	2215	554	307	2756	0.804	2215	2333	4.0	4.0	6.649	A
D - Barrack Square East	758	190	2049	592	1.280	591	399	42.5	84.2	375.044	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1694	424	326	2150	0.788	1779	1730	25.1	3.9	11.870	B
B - Eagle Way West	147	37	1908	607	0.241	148	255	0.6	0.3	7.857	A
C - A12 South	1809	452	346	2731	0.662	1817	2149	4.0	2.0	3.973	A
D - Barrack Square East	619	155	1773	731	0.847	722	333	84.2	58.3	346.126	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1419	355	272	2183	0.650	1427	1490	3.9	1.9	4.811	A
B - Eagle Way West	123	31	1639	734	0.167	123	220	0.3	0.2	5.900	A
C - A12 South	1515	379	342	2733	0.554	1518	1829	2.0	1.3	2.967	A
D - Barrack Square East	518	130	1425	906	0.572	746	275	58.3	1.4	69.000	F

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.29	1.09	2.97	3.76			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	1.18	0.55	1.04	1.26	1.26			N/A	N/A
D - Barrack Square East	1.28	0.05	0.64	2.95	4.42			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.57	0.05	0.46	10.03	17.53			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.88	0.04	0.40	5.02	9.06			N/A	N/A
D - Barrack Square East	3.56	0.05	0.76	9.98	16.11			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	18.96	0.20	8.26	50.60	71.85			N/A	N/A
B - Eagle Way West	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C - A12 South	3.97	0.03	0.28	3.97	11.19			N/A	N/A
D - Barrack Square East	42.52	18.85	39.89	64.23	72.54			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	25.09	0.13	7.52	71.39	106.99			N/A	N/A
B - Eagle Way West	0.65	0.03	0.32	1.34	2.99			N/A	N/A
C - A12 South	4.03	0.03	0.27	4.03	4.03			N/A	N/A
D - Barrack Square East	84.17	47.48	81.26	116.58	128.15			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.90	0.04	0.42	10.68	20.12			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.99	0.08	1.15	4.67	6.59			N/A	N/A
D - Barrack Square East	58.32	35.45	56.54	77.80	84.68			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.88	0.03	0.30	2.08	8.77			N/A	N/A
B - Eagle Way West	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.25	0.04	0.44	3.14	5.06			N/A	N/A
D - Barrack Square East	1.41	0.03	0.26	1.41	1.41			N/A	N/A

2023 Reference Case [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	821	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	753	100.000
D - Barrack Square East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	780	40
	B - Eagle Way West	16	0	52	6
	C - A12 South	581	9	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.95	0.7	2.3	A	754	1131
B - Eagle Way West	0.07	3.61	0.1	0.5	A	67	101
C - A12 South	0.30	1.84	0.4	1.5	A	691	1036
D - Barrack Square East	0.07	3.52	0.1	0.5	A	64	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	618	155	166	2169	0.285	617	449	0.0	0.4	2.318	A
B - Eagle Way West	55	14	560	1205	0.046	55	13	0.0	0.0	3.129	A
C - A12 South	567	142	8	2782	0.204	566	671	0.0	0.3	1.624	A
D - Barrack Square East	53	13	626	1246	0.042	53	156	0.0	0.0	3.016	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	738	185	198	2149	0.344	738	537	0.4	0.5	2.550	A
B - Eagle Way West	66	16	670	1152	0.057	66	16	0.0	0.1	3.314	A
C - A12 South	677	169	9	2781	0.243	676	803	0.3	0.3	1.710	A
D - Barrack Square East	63	16	749	1184	0.053	63	187	0.0	0.1	3.209	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	904	226	243	2123	0.426	904	658	0.5	0.7	2.950	A
B - Eagle Way West	81	20	820	1078	0.075	81	20	0.1	0.1	3.608	A
C - A12 South	829	207	11	2779	0.298	828	983	0.3	0.4	1.844	A
D - Barrack Square East	77	19	918	1100	0.070	77	229	0.1	0.1	3.518	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	904	226	243	2123	0.426	904	658	0.7	0.7	2.953	A
B - Eagle Way West	81	20	821	1078	0.075	81	20	0.1	0.1	3.609	A
C - A12 South	829	207	11	2779	0.298	829	984	0.4	0.4	1.844	A
D - Barrack Square East	77	19	918	1100	0.070	77	229	0.1	0.1	3.519	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	738	185	199	2149	0.344	739	538	0.7	0.5	2.554	A
B - Eagle Way West	66	16	670	1151	0.057	66	16	0.1	0.1	3.316	A
C - A12 South	677	169	9	2781	0.243	677	805	0.4	0.3	1.713	A
D - Barrack Square East	63	16	751	1184	0.053	63	187	0.1	0.1	3.214	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	618	155	166	2168	0.285	619	450	0.5	0.4	2.325	A
B - Eagle Way West	55	14	561	1205	0.046	55	13	0.1	0.0	3.133	A
C - A12 South	567	142	8	2782	0.204	567	674	0.3	0.3	1.624	A
D - Barrack Square East	53	13	628	1245	0.042	53	157	0.1	0.0	3.019	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.06	0.62	1.32	1.41			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.25	0.74	0.74			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.28	0.74	2.34			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.42	0.03	0.33	1.34	1.47			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Reference Case [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1375	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1835	100.000
D - Barrack Square East		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1332	42
	B - Eagle Way West	44	0	122	26
	C - A12 South	1291	29	0	515
	D - Barrack Square East	29	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	8	8	0	5
	D - Barrack Square East	3	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	11.95	4.9	23.3	B	1262	1893
B - Eagle Way West	0.42	12.51	0.7	3.5	B	176	264
C - A12 South	0.73	4.72	2.6	6.2	A	1683	2525
D - Barrack Square East	0.29	6.88	0.4	1.3	A	176	264

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1035	259	498	1951	0.531	1031	1024	0.0	1.1	3.895	A
B - Eagle Way West	145	36	1378	812	0.178	144	29	0.0	0.2	5.383	A
C - A12 South	1381	345	30	2792	0.495	1377	1205	0.0	1.0	2.539	A
D - Barrack Square East	144	36	1091	986	0.146	144	438	0.0	0.2	4.269	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1236	309	596	1893	0.653	1233	1225	1.1	1.9	5.436	A
B - Eagle Way West	173	43	1648	680	0.254	172	35	0.2	0.3	7.080	A
C - A12 South	1649	412	36	2788	0.592	1647	1442	1.0	1.4	3.151	A
D - Barrack Square East	172	43	1305	881	0.196	172	524	0.2	0.2	5.079	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1514	379	728	1814	0.835	1503	1498	1.9	4.7	11.169	B
B - Eagle Way West	212	53	2017	501	0.422	210	43	0.3	0.7	12.291	B
C - A12 South	2020	505	44	2782	0.726	2015	1757	1.4	2.6	4.664	A
D - Barrack Square East	211	53	1590	740	0.285	211	641	0.2	0.4	6.795	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1514	379	731	1813	0.835	1513	1502	4.7	4.9	11.949	B
B - Eagle Way West	212	53	2021	499	0.424	211	43	0.7	0.7	12.506	B
C - A12 South	2020	505	44	2782	0.726	2020	1769	2.6	2.6	4.720	A
D - Barrack Square East	211	53	1602	734	0.288	211	642	0.4	0.4	6.879	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1236	309	599	1891	0.654	1248	1230	4.9	1.9	5.702	A
B - Eagle Way West	173	43	1655	677	0.255	174	35	0.7	0.3	7.181	A
C - A12 South	1649	412	36	2788	0.592	1654	1458	2.6	1.5	3.189	A
D - Barrack Square East	172	43	1321	873	0.198	173	526	0.4	0.2	5.150	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1035	259	501	1949	0.531	1038	1029	1.9	1.1	3.966	A
B - Eagle Way West	145	36	1384	809	0.179	145	29	0.3	0.2	5.427	A
C - A12 South	1381	345	30	2792	0.495	1383	1214	1.5	1.0	2.560	A
D - Barrack Square East	144	36	1099	982	0.147	145	440	0.2	0.2	4.302	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.02	1.44	1.49			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	0.97	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.85	0.04	0.44	4.97	8.39			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.44	0.04	0.43	3.75	6.16			N/A	N/A
D - Barrack Square East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.70	0.03	0.32	6.61	23.29			N/A	N/A
B - Eagle Way West	0.71	0.03	0.26	0.71	0.71			N/A	N/A
C - A12 South	2.60	0.03	0.27	2.60	2.60			N/A	N/A
D - Barrack Square East	0.40	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.87	0.03	0.28	4.87	13.13			N/A	N/A
B - Eagle Way West	0.73	0.03	0.31	1.37	3.52			N/A	N/A
C - A12 South	2.62	0.03	0.26	2.62	2.62			N/A	N/A
D - Barrack Square East	0.40	0.03	0.33	1.30	1.35			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.92	0.05	0.58	5.02	7.85			N/A	N/A
B - Eagle Way West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A12 South	1.46	0.14	1.23	2.58	3.25			N/A	N/A
D - Barrack Square East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.04	0.35	2.80	5.52			N/A	N/A
B - Eagle Way West	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.98	0.06	0.73	1.88	2.67			N/A	N/A
D - Barrack Square East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2023 Reference Case [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	29.71	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1345	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2401	100.000
D - Barrack Square East		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1292	35
	B - Eagle Way West	56	0	137	22
	C - A12 South	1566	69	1	765
	D - Barrack Square East	42	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	22.87	8.9	48.2	C	1234	1851
B - Eagle Way West	1.06	178.75	12.4	35.1	F	197	295
C - A12 South	0.95	23.92	16.5	90.5	C	2203	3305
D - Barrack Square East	0.55	10.63	1.2	4.2	B	343	514

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1013	253	694	1801	0.562	1007	1247	0.0	1.3	4.509	A
B - Eagle Way West	161	40	1780	628	0.257	160	80	0.0	0.3	7.676	A
C - A12 South	1807	452	60	2786	0.649	1800	1304	0.0	1.8	3.625	A
D - Barrack Square East	281	70	1084	1003	0.280	280	617	0.0	0.4	4.966	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1209	302	829	1724	0.701	1205	1491	1.3	2.3	6.883	A
B - Eagle Way West	193	48	2128	457	0.422	191	96	0.3	0.7	13.476	B
C - A12 South	2158	540	72	2779	0.777	2152	1560	1.8	3.4	5.687	A
D - Barrack Square East	336	84	1297	894	0.376	335	737	0.4	0.6	6.432	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	987	1634	0.906	1458	1796	2.3	7.9	18.541	C
B - Eagle Way West	236	59	2572	239	0.986	211	116	0.7	6.9	93.017	F
C - A12 South	2643	661	88	2769	0.955	2600	1878	3.4	14.3	17.915	C
D - Barrack Square East	411	103	1557	760	0.541	409	889	0.6	1.2	10.201	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	1000	1627	0.910	1477	1819	7.9	8.9	22.871	C
B - Eagle Way West	236	59	2606	223	1.059	214	117	6.9	12.4	178.752	F
C - A12 South	2643	661	88	2769	0.955	2634	1899	14.3	16.5	23.923	C
D - Barrack Square East	411	103	1576	749	0.549	411	901	1.2	1.2	10.625	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1209	302	883	1694	0.714	1234	1541	8.9	2.6	8.244	A
B - Eagle Way West	193	48	2185	429	0.449	239	98	12.4	0.8	23.716	C
C - A12 South	2158	540	73	2778	0.777	2210	1621	16.5	3.6	6.892	A
D - Barrack Square East	336	84	1356	865	0.388	338	762	1.2	0.6	6.862	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1013	253	701	1797	0.563	1018	1257	2.6	1.3	4.648	A
B - Eagle Way West	161	40	1794	621	0.260	163	81	0.8	0.4	7.902	A
C - A12 South	1807	452	61	2786	0.649	1814	1318	3.6	1.9	3.730	A
D - Barrack Square East	281	70	1096	997	0.282	282	622	0.6	0.4	5.044	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.55	1.18	1.66	1.85			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.83	0.36	1.12	2.91	3.65			N/A	N/A
D - Barrack Square East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.29	0.04	0.44	6.30	10.77			N/A	N/A
B - Eagle Way West	0.71	0.04	0.39	1.61	2.56			N/A	N/A
C - A12 South	3.38	0.04	0.41	9.24	17.33			N/A	N/A
D - Barrack Square East	0.59	0.08	0.76	1.35	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.89	0.05	0.45	22.03	41.84			N/A	N/A
B - Eagle Way West	6.88	0.24	3.84	16.22	21.78			N/A	N/A
C - A12 South	14.27	0.07	1.50	42.04	69.54			N/A	N/A
D - Barrack Square East	1.15	0.03	0.26	1.15	1.15			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.86	0.04	0.35	17.95	48.21			N/A	N/A
B - Eagle Way West	12.40	0.85	8.53	27.22	35.11			N/A	N/A
C - A12 South	16.51	0.05	0.46	45.15	90.49			N/A	N/A
D - Barrack Square East	1.19	0.03	0.28	1.19	4.20			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.57	0.05	0.45	7.11	12.11			N/A	N/A
B - Eagle Way West	0.85	0.03	0.31	1.64	4.16			N/A	N/A
C - A12 South	3.59	0.04	0.44	10.04	17.96			N/A	N/A
D - Barrack Square East	0.64	0.08	0.79	1.36	1.43			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.03	0.31	2.29	6.66			N/A	N/A
B - Eagle Way West	0.36	0.03	0.26	0.48	0.80			N/A	N/A
C - A12 South	1.87	0.03	0.31	3.07	9.56			N/A	N/A
D - Barrack Square East	0.40	0.03	0.34	1.13	1.32			N/A	N/A

2023 Reference Case [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1376	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1891	100.000
D - Barrack Square East		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1293	29
	B - Eagle Way West	58	0	92	36
	C - A12 South	1487	99	0	305
	D - Barrack Square East	93	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	3
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	4	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	8.08	3.3	10.0	A	1263	1894
B - Eagle Way West	0.42	12.76	0.7	3.4	B	171	256
C - A12 South	0.76	5.42	3.1	7.2	A	1735	2603
D - Barrack Square East	0.78	20.56	3.3	16.8	C	508	763

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1036	259	325	2048	0.506	1032	1230	0.0	1.0	3.529	A
B - Eagle Way West	140	35	1416	800	0.175	139	137	0.0	0.2	5.440	A
C - A12 South	1424	356	134	2785	0.511	1419	1360	0.0	1.0	2.629	A
D - Barrack Square East	417	104	1079	1048	0.398	414	278	0.0	0.7	5.660	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1237	309	389	2011	0.615	1235	1471	1.0	1.6	4.628	A
B - Eagle Way West	167	42	1694	668	0.250	167	164	0.2	0.3	7.170	A
C - A12 South	1700	425	160	2768	0.614	1698	1628	1.0	1.6	3.355	A
D - Barrack Square East	498	125	1292	937	0.532	496	333	0.7	1.1	8.142	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1515	379	476	1961	0.773	1508	1798	1.6	3.3	7.842	A
B - Eagle Way West	205	51	2071	490	0.418	203	200	0.3	0.7	12.497	B
C - A12 South	2082	521	194	2747	0.758	2076	1985	1.6	3.1	5.320	A
D - Barrack Square East	610	153	1577	786	0.776	602	407	1.1	3.2	18.727	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1515	379	478	1959	0.773	1515	1804	3.3	3.3	8.082	A
B - Eagle Way West	205	51	2077	487	0.421	205	201	0.7	0.7	12.761	B
C - A12 South	2082	521	196	2746	0.758	2082	1997	3.1	3.1	5.419	A
D - Barrack Square East	610	153	1584	783	0.779	609	408	3.2	3.3	20.555	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1237	309	392	2009	0.616	1244	1480	3.3	1.6	4.746	A
B - Eagle Way West	167	42	1703	664	0.252	169	165	0.7	0.3	7.292	A
C - A12 South	1700	425	163	2767	0.614	1706	1646	3.1	1.6	3.411	A
D - Barrack Square East	498	125	1301	931	0.535	507	335	3.3	1.2	8.647	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1036	259	327	2046	0.506	1038	1236	1.6	1.0	3.578	A
B - Eagle Way West	140	35	1423	797	0.176	140	138	0.3	0.2	5.490	A
C - A12 South	1424	356	135	2784	0.511	1426	1370	1.6	1.1	2.656	A
D - Barrack Square East	417	104	1086	1044	0.399	419	280	1.2	0.7	5.777	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.04	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.05	0.46	4.11	6.66			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.58	0.04	0.42	4.17	7.16			N/A	N/A
D - Barrack Square East	1.11	0.06	0.68	2.42	3.47			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.28	0.03	0.28	3.28	10.01			N/A	N/A
B - Eagle Way West	0.70	0.03	0.26	0.70	0.70			N/A	N/A
C - A12 South	3.06	0.03	0.27	3.06	3.82			N/A	N/A
D - Barrack Square East	3.17	0.03	0.33	5.92	16.77			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.34	0.03	0.27	3.34	3.34			N/A	N/A
B - Eagle Way West	0.72	0.03	0.31	1.38	3.44			N/A	N/A
C - A12 South	3.10	0.03	0.26	3.10	3.10			N/A	N/A
D - Barrack Square East	3.35	0.03	0.30	3.35	14.72			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.07	0.99	3.70	5.22			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.61	0.10	1.21	3.19	4.28			N/A	N/A
D - Barrack Square East	1.17	0.05	0.47	2.82	4.35			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.04	0.42	2.54	4.02			N/A	N/A
B - Eagle Way West	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.05	0.05	0.53	2.35	3.46			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.52	2.98			N/A	N/A

2023 Reference Case [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1437	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1852	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1336	35
	B - Eagle Way West	42	0	89	18
	C - A12 South	1470	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	3
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	7.14	3.1	7.1	A	1319	1978
B - Eagle Way West	0.29	8.96	0.4	1.3	A	137	205
C - A12 South	0.73	4.78	2.7	6.2	A	1699	2548
D - Barrack Square East	0.77	19.93	3.2	16.0	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1082	270	263	2160	0.501	1078	1196	0.0	1.0	3.314	A
B - Eagle Way West	112	28	1348	864	0.130	112	186	0.0	0.1	4.779	A
C - A12 South	1394	348	144	2834	0.492	1390	1387	0.0	1.0	2.486	A
D - Barrack Square East	414	103	1119	1049	0.394	411	222	0.0	0.6	5.621	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1292	323	315	2129	0.607	1290	1431	1.0	1.5	4.279	A
B - Eagle Way West	134	34	1612	739	0.181	134	223	0.1	0.2	5.949	A
C - A12 South	1664	416	172	2817	0.591	1663	1659	1.0	1.4	3.114	A
D - Barrack Square East	494	123	1340	937	0.527	492	265	0.6	1.1	8.053	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	396	385	2086	0.758	1576	1750	1.5	3.0	6.976	A
B - Eagle Way West	164	41	1971	569	0.289	163	272	0.2	0.4	8.870	A
C - A12 South	2039	510	209	2793	0.730	2034	2025	1.4	2.7	4.710	A
D - Barrack Square East	605	151	1637	786	0.769	597	324	1.1	3.1	18.292	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1582	396	386	2085	0.759	1582	1755	3.0	3.1	7.144	A
B - Eagle Way West	164	41	1977	566	0.290	164	273	0.4	0.4	8.958	A
C - A12 South	2039	510	211	2792	0.730	2038	2036	2.7	2.7	4.775	A
D - Barrack Square East	605	151	1643	783	0.772	604	325	3.1	3.2	19.928	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1292	323	317	2128	0.607	1298	1438	3.1	1.6	4.369	A
B - Eagle Way West	134	34	1620	735	0.182	135	224	0.4	0.2	6.004	A
C - A12 South	1664	416	175	2815	0.591	1669	1676	2.7	1.5	3.155	A
D - Barrack Square East	494	123	1348	933	0.529	502	266	3.2	1.1	8.512	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1082	270	265	2159	0.501	1084	1202	1.6	1.0	3.356	A
B - Eagle Way West	112	28	1354	861	0.130	113	187	0.2	0.2	4.813	A
C - A12 South	1394	348	145	2834	0.492	1396	1396	1.5	1.0	2.508	A
D - Barrack Square East	414	103	1126	1046	0.396	416	223	1.1	0.7	5.732	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.96	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.64	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.05	0.46	3.94	6.38			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.43	0.04	0.43	3.74	6.20			N/A	N/A
D - Barrack Square East	1.09	0.06	0.69	2.34	3.33			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.04	0.03	0.28	3.04	7.09			N/A	N/A
B - Eagle Way West	0.40	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.65	0.03	0.27	2.65	2.65			N/A	N/A
D - Barrack Square East	3.06	0.03	0.32	5.43	16.04			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.09	0.03	0.27	3.09	3.09			N/A	N/A
B - Eagle Way West	0.41	0.03	0.33	1.30	1.31			N/A	N/A
C - A12 South	2.68	0.03	0.26	2.68	2.68			N/A	N/A
D - Barrack Square East	3.22	0.03	0.30	3.22	13.83			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.08	1.07	3.36	4.63			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.46	0.13	1.23	2.59	3.28			N/A	N/A
D - Barrack Square East	1.15	0.05	0.48	2.74	4.15			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.05	0.45	2.38	3.67			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.97	0.06	0.70	1.88	2.68			N/A	N/A
D - Barrack Square East	0.66	0.03	0.33	1.51	2.90			N/A	N/A

2023 Early Years [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	834	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	827	100.000
D - Barrack Square East		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	792	40
	B - Eagle Way West	16	0	52	6
	C - A12 South	656	9	0	163
	D - Barrack Square East	2	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.98	0.8	2.2	A	765	1148
B - Eagle Way West	0.08	3.79	0.1	0.5	A	67	101
C - A12 South	0.33	1.98	0.5	2.2	A	759	1139
D - Barrack Square East	0.07	3.54	0.1	0.5	A	64	97

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	628	157	166	2170	0.289	626	505	0.0	0.4	2.329	A
B - Eagle Way West	55	14	616	1172	0.047	55	13	0.0	0.0	3.222	A
C - A12 South	623	156	8	2731	0.228	622	681	0.0	0.3	1.707	A
D - Barrack Square East	53	13	636	1242	0.043	53	156	0.0	0.0	3.027	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	750	187	198	2151	0.348	749	604	0.4	0.5	2.568	A
B - Eagle Way West	66	16	737	1112	0.059	66	16	0.0	0.1	3.440	A
C - A12 South	744	186	9	2730	0.273	744	814	0.3	0.4	1.812	A
D - Barrack Square East	63	16	761	1179	0.054	63	187	0.0	0.1	3.225	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	918	230	243	2125	0.432	917	740	0.5	0.8	2.979	A
B - Eagle Way West	81	20	902	1029	0.078	81	20	0.1	0.1	3.793	A
C - A12 South	911	228	11	2728	0.334	911	997	0.4	0.5	1.980	A
D - Barrack Square East	77	19	931	1094	0.071	77	229	0.1	0.1	3.540	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	918	230	243	2125	0.432	918	741	0.8	0.8	2.982	A
B - Eagle Way West	81	20	903	1029	0.078	81	20	0.1	0.1	3.794	A
C - A12 South	911	228	11	2728	0.334	911	998	0.5	0.5	1.980	A
D - Barrack Square East	77	19	932	1093	0.071	77	229	0.1	0.1	3.542	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	750	187	199	2151	0.349	751	605	0.8	0.5	2.571	A
B - Eagle Way West	66	16	738	1112	0.059	66	16	0.1	0.1	3.445	A
C - A12 South	744	186	9	2730	0.273	744	816	0.5	0.4	1.812	A
D - Barrack Square East	63	16	762	1178	0.054	63	187	0.1	0.1	3.227	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	628	157	166	2170	0.289	628	507	0.5	0.4	2.335	A
B - Eagle Way West	55	14	618	1171	0.047	55	13	0.1	0.0	3.224	A
C - A12 South	623	156	8	2731	0.228	623	683	0.4	0.3	1.710	A
D - Barrack Square East	53	13	638	1240	0.043	53	157	0.1	0.0	3.033	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.06	0.67	1.33	1.42			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.03	0.25	0.76	0.76			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.50	0.03	0.25	0.50	0.50			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.03	0.28	0.76	2.22			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.50	0.03	0.31	1.45	2.18			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.54	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	10.36	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1418	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1969	100.000
D - Barrack Square East		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1375	42
	B - Eagle Way West	44	0	122	26
	C - A12 South	1425	29	0	515
	D - Barrack Square East	29	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	8	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	12	8	0	5
	D - Barrack Square East	3	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	15.03	6.3	32.3	C	1301	1952
B - Eagle Way West	0.53	18.95	1.1	5.5	C	176	264
C - A12 South	0.80	6.58	3.9	10.2	A	1807	2710
D - Barrack Square East	0.30	7.30	0.4	1.5	A	176	264

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1068	267	498	1933	0.552	1063	1124	0.0	1.2	4.115	A
B - Eagle Way West	145	36	1478	745	0.194	144	29	0.0	0.2	5.977	A
C - A12 South	1482	371	30	2724	0.544	1478	1236	0.0	1.2	2.879	A
D - Barrack Square East	144	36	1123	966	0.150	144	438	0.0	0.2	4.377	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1275	319	595	1875	0.680	1271	1345	1.2	2.1	5.925	A
B - Eagle Way West	173	43	1768	600	0.288	172	35	0.2	0.4	8.390	A
C - A12 South	1770	442	36	2720	0.651	1767	1479	1.2	1.8	3.769	A
D - Barrack Square East	172	43	1343	856	0.202	172	524	0.2	0.3	5.262	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1561	390	727	1798	0.868	1546	1643	2.1	5.9	13.512	B
B - Eagle Way West	212	53	2161	405	0.523	209	43	0.4	1.1	18.144	C
C - A12 South	2168	542	44	2714	0.799	2160	1800	1.8	3.8	6.401	A
D - Barrack Square East	211	53	1633	712	0.297	211	640	0.3	0.4	7.174	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1561	390	731	1796	0.869	1560	1650	5.9	6.3	15.029	C
B - Eagle Way West	212	53	2169	401	0.528	211	43	1.1	1.1	18.953	C
C - A12 South	2168	542	44	2714	0.799	2168	1815	3.8	3.9	6.577	A
D - Barrack Square East	211	53	1648	704	0.300	211	642	0.4	0.4	7.300	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1275	319	601	1872	0.681	1291	1354	6.3	2.2	6.362	A
B - Eagle Way West	173	43	1779	595	0.290	175	35	1.1	0.4	8.631	A
C - A12 South	1770	442	36	2719	0.651	1778	1501	3.9	1.9	3.855	A
D - Barrack Square East	172	43	1364	845	0.204	173	528	0.4	0.3	5.360	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1068	267	501	1931	0.553	1071	1130	2.2	1.2	4.207	A
B - Eagle Way West	145	36	1486	741	0.195	145	29	0.4	0.2	6.047	A
C - A12 South	1482	371	30	2723	0.544	1485	1247	1.9	1.2	2.912	A
D - Barrack Square East	144	36	1132	961	0.150	145	440	0.3	0.2	4.412	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.11	1.45	1.73			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.19	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.08	0.04	0.43	5.68	9.71			N/A	N/A
B - Eagle Way West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A12 South	1.84	0.04	0.41	4.93	8.80			N/A	N/A
D - Barrack Square East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.91	0.04	0.35	12.67	32.27			N/A	N/A
B - Eagle Way West	1.05	0.03	0.27	1.05	1.24			N/A	N/A
C - A12 South	3.83	0.03	0.28	3.83	10.21			N/A	N/A
D - Barrack Square East	0.42	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.25	0.03	0.30	6.25	25.51			N/A	N/A
B - Eagle Way West	1.09	0.03	0.31	1.90	5.50			N/A	N/A
C - A12 South	3.90	0.03	0.27	3.90	3.90			N/A	N/A
D - Barrack Square East	0.43	0.03	0.33	1.35	1.55			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.05	0.47	5.91	9.72			N/A	N/A
B - Eagle Way West	0.41	0.03	0.35	1.14	1.32			N/A	N/A
C - A12 South	1.89	0.07	1.11	4.41	6.23			N/A	N/A
D - Barrack Square East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.03	0.33	2.81	6.36			N/A	N/A
B - Eagle Way West	0.24	0.03	0.27	0.49	0.86			N/A	N/A
C - A12 South	1.20	0.04	0.43	2.98	4.85			N/A	N/A
D - Barrack Square East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2023 Early Years [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	49.94	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1370	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2445	100.000
D - Barrack Square East		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1317	35
	B - Eagle Way West	56	0	137	22
	C - A12 South	1610	69	1	765
	D - Barrack Square East	42	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	10	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	13	5	0	2
	D - Barrack Square East	2	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	26.04	10.2	56.6	D	1257	1886
B - Eagle Way West	1.30	354.81	26.2	50.1	F	197	295
C - A12 South	0.99	44.36	33.0	129.8	E	2244	3366
D - Barrack Square East	0.56	10.94	1.2	4.2	B	343	514

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	693	1787	0.577	1026	1280	0.0	1.3	4.698	A
B - Eagle Way West	161	40	1813	591	0.273	160	80	0.0	0.4	8.321	A
C - A12 South	1841	460	60	2724	0.676	1833	1322	0.0	2.1	4.004	A
D - Barrack Square East	281	70	1103	989	0.284	280	617	0.0	0.4	5.060	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	828	1711	0.720	1227	1529	1.3	2.5	7.369	A
B - Eagle Way West	193	48	2167	414	0.466	191	95	0.4	0.8	16.025	C
C - A12 South	2198	550	72	2717	0.809	2190	1582	2.1	4.1	6.734	A
D - Barrack Square East	336	84	1319	877	0.383	335	737	0.4	0.6	6.622	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1508	377	960	1636	0.922	1482	1815	2.5	9.0	20.607	C
B - Eagle Way West	236	59	2586	203	1.160	190	115	0.8	12.3	158.982	F
C - A12 South	2692	673	88	2707	0.994	2613	1888	4.1	24.0	26.694	D
D - Barrack Square East	411	103	1567	747	0.550	409	875	0.6	1.2	10.556	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1508	377	967	1633	0.924	1504	1842	9.0	10.2	26.041	D
B - Eagle Way West	236	59	2629	182	1.298	180	116	12.3	26.2	354.814	F
C - A12 South	2692	673	88	2707	0.995	2657	1904	24.0	33.0	44.363	E
D - Barrack Square East	411	103	1582	740	0.556	411	889	1.2	1.2	10.941	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	942	1648	0.748	1260	1636	10.2	3.1	9.935	A
B - Eagle Way West	193	48	2286	354	0.545	292	100	26.2	1.3	112.888	F
C - A12 South	2198	550	73	2716	0.809	2312	1681	33.0	4.4	11.432	B
D - Barrack Square East	336	84	1416	830	0.405	338	786	1.2	0.7	7.350	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	703	1782	0.579	1038	1293	3.1	1.4	4.883	A
B - Eagle Way West	161	40	1830	582	0.277	165	81	1.3	0.4	8.706	A
C - A12 South	1841	460	61	2723	0.676	1850	1340	4.4	2.1	4.167	A
D - Barrack Square East	281	70	1118	982	0.286	282	623	0.7	0.4	5.157	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.54	1.25	1.78	1.94			N/A	N/A
B - Eagle Way West	0.37	0.03	0.32	1.04	1.27			N/A	N/A
C - A12 South	2.06	0.22	1.20	3.75	4.75			N/A	N/A
D - Barrack Square East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.50	0.05	0.45	6.90	11.76			N/A	N/A
B - Eagle Way West	0.84	0.03	0.35	1.98	3.81			N/A	N/A
C - A12 South	4.08	0.04	0.45	11.48	20.73			N/A	N/A
D - Barrack Square East	0.61	0.08	0.77	1.36	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.04	0.05	0.74	26.24	46.19			N/A	N/A
B - Eagle Way West	12.27	2.02	10.02	22.72	27.56			N/A	N/A
C - A12 South	24.04	0.31	12.12	62.04	86.05			N/A	N/A
D - Barrack Square East	1.19	0.03	0.27	1.19	1.19			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.24	0.04	0.39	24.60	56.55			N/A	N/A
B - Eagle Way West	26.23	8.57	23.63	43.16	50.13			N/A	N/A
C - A12 South	32.99	0.22	13.44	90.16	129.77			N/A	N/A
D - Barrack Square East	1.23	0.03	0.28	1.23	4.22			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.07	0.05	0.49	8.61	14.27			N/A	N/A
B - Eagle Way West	1.35	0.03	0.32	2.56	6.92			N/A	N/A
C - A12 South	4.45	0.04	0.43	12.38	22.91			N/A	N/A
D - Barrack Square East	0.69	0.10	0.83	1.37	1.44			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.03	0.31	2.16	6.97			N/A	N/A
B - Eagle Way West	0.39	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.11	0.03	0.30	2.47	9.94			N/A	N/A
D - Barrack Square East	0.40	0.04	0.35	1.16	1.33			N/A	N/A

2023 Early Years [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	9.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1370	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1895	100.000
D - Barrack Square East		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1287	29
	B - Eagle Way West	58	0	92	36
	C - A12 South	1491	99	0	305
	D - Barrack Square East	93	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	10	3
	B - Eagle Way West	8	0	2	0
	C - A12 South	8	2	0	2
	D - Barrack Square East	4	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	8.81	3.6	12.7	A	1257	1886
B - Eagle Way West	0.44	13.71	0.8	3.7	B	171	256
C - A12 South	0.77	5.88	3.4	7.7	A	1739	2609
D - Barrack Square East	0.79	22.36	3.6	18.3	C	508	763

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	325	2002	0.515	1027	1233	0.0	1.1	3.679	A
B - Eagle Way West	140	35	1419	787	0.178	139	137	0.0	0.2	5.552	A
C - A12 South	1427	357	134	2737	0.521	1423	1356	0.0	1.1	2.730	A
D - Barrack Square East	417	104	1075	1038	0.402	414	278	0.0	0.7	5.748	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	389	1966	0.627	1229	1475	1.1	1.7	4.872	A
B - Eagle Way West	167	42	1698	652	0.256	167	164	0.2	0.3	7.401	A
C - A12 South	1704	426	160	2721	0.626	1702	1622	1.1	1.7	3.524	A
D - Barrack Square East	498	125	1286	925	0.539	496	333	0.7	1.1	8.361	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	377	476	1917	0.787	1501	1802	1.7	3.5	8.500	A
B - Eagle Way West	205	51	2075	471	0.435	203	200	0.3	0.7	13.373	B
C - A12 South	2087	522	194	2700	0.773	2080	1977	1.7	3.3	5.747	A
D - Barrack Square East	610	153	1570	772	0.790	601	406	1.1	3.4	20.052	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	377	478	1916	0.787	1508	1809	3.5	3.6	8.812	A
B - Eagle Way West	205	51	2082	467	0.438	205	201	0.7	0.8	13.707	B
C - A12 South	2087	522	196	2699	0.773	2087	1991	3.3	3.4	5.876	A
D - Barrack Square East	610	153	1578	768	0.794	609	408	3.4	3.6	22.355	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1232	308	392	1964	0.627	1239	1485	3.6	1.7	5.017	A
B - Eagle Way West	167	42	1708	647	0.258	169	165	0.8	0.4	7.548	A
C - A12 South	1704	426	163	2719	0.627	1711	1642	3.4	1.7	3.594	A
D - Barrack Square East	498	125	1297	919	0.542	508	335	3.6	1.2	8.954	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1031	258	327	2001	0.516	1034	1240	1.7	1.1	3.735	A
B - Eagle Way West	140	35	1427	783	0.179	140	138	0.4	0.2	5.606	A
C - A12 South	1427	357	135	2736	0.522	1429	1366	1.7	1.1	2.759	A
D - Barrack Square East	417	104	1082	1034	0.403	419	280	1.2	0.7	5.875	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.08	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.66	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.65	0.05	0.45	4.38	7.09			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.66	0.04	0.41	4.43	7.67			N/A	N/A
D - Barrack Square East	1.14	0.05	0.65	2.55	3.68			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.54	0.03	0.29	3.54	12.74			N/A	N/A
B - Eagle Way West	0.75	0.03	0.26	0.75	0.75			N/A	N/A
C - A12 South	3.31	0.03	0.28	3.31	5.88			N/A	N/A
D - Barrack Square East	3.40	0.03	0.34	7.15	18.32			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.62	0.03	0.27	3.62	3.67			N/A	N/A
B - Eagle Way West	0.77	0.03	0.31	1.46	3.74			N/A	N/A
C - A12 South	3.36	0.03	0.26	3.36	3.36			N/A	N/A
D - Barrack Square East	3.63	0.03	0.31	3.99	16.90			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.06	0.92	4.03	5.87			N/A	N/A
B - Eagle Way West	0.35	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.70	0.09	1.18	3.62	4.89			N/A	N/A
D - Barrack Square East	1.21	0.05	0.45	2.95	4.69			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.04	0.40	2.69	4.50			N/A	N/A
B - Eagle Way West	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.10	0.05	0.47	2.60	3.90			N/A	N/A
D - Barrack Square East	0.68	0.03	0.32	1.50	3.14			N/A	N/A

2023 Early Years [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1420	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1883	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1319	35
	B - Eagle Way West	42	0	89	18
	C - A12 South	1501	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	6	3
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	7.63	3.3	8.8	A	1303	1955
B - Eagle Way West	0.30	9.43	0.4	1.5	A	137	205
C - A12 South	0.75	5.08	2.9	6.7	A	1728	2592
D - Barrack Square East	0.78	21.09	3.4	17.1	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	263	2108	0.507	1065	1220	0.0	1.0	3.440	A
B - Eagle Way West	112	28	1371	850	0.132	112	186	0.0	0.2	4.872	A
C - A12 South	1417	354	144	2823	0.502	1413	1374	0.0	1.0	2.547	A
D - Barrack Square East	414	103	1107	1042	0.397	411	222	0.0	0.7	5.683	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1277	319	315	2077	0.615	1274	1459	1.0	1.6	4.472	A
B - Eagle Way West	134	34	1640	722	0.186	134	223	0.2	0.2	6.116	A
C - A12 South	1693	423	172	2805	0.603	1691	1644	1.0	1.5	3.224	A
D - Barrack Square East	494	123	1324	929	0.532	492	265	0.7	1.1	8.204	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	391	385	2035	0.768	1557	1783	1.6	3.2	7.425	A
B - Eagle Way West	164	41	2005	549	0.299	163	272	0.2	0.4	9.328	A
C - A12 South	2073	518	209	2782	0.745	2068	2005	1.5	2.9	5.002	A
D - Barrack Square East	605	151	1618	777	0.779	596	324	1.1	3.2	19.173	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	391	386	2035	0.768	1563	1789	3.2	3.3	7.627	A
B - Eagle Way West	164	41	2011	546	0.301	164	273	0.4	0.4	9.435	A
C - A12 South	2073	518	211	2781	0.746	2073	2017	2.9	2.9	5.084	A
D - Barrack Square East	605	151	1624	773	0.782	604	325	3.2	3.4	21.090	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1277	319	317	2076	0.615	1283	1467	3.3	1.6	4.579	A
B - Eagle Way West	134	34	1649	718	0.187	135	224	0.4	0.2	6.182	A
C - A12 South	1693	423	175	2803	0.604	1698	1661	2.9	1.5	3.274	A
D - Barrack Square East	494	123	1333	924	0.534	503	266	3.4	1.2	8.718	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	265	2107	0.507	1071	1225	1.6	1.0	3.483	A
B - Eagle Way West	112	28	1378	847	0.133	113	187	0.2	0.2	4.905	A
C - A12 South	1417	354	145	2822	0.502	1420	1384	1.5	1.0	2.570	A
D - Barrack Square East	414	103	1113	1038	0.398	416	223	1.2	0.7	5.797	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	1.00	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.05	0.45	4.11	6.67			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.51	0.04	0.42	3.95	6.73			N/A	N/A
D - Barrack Square East	1.11	0.06	0.67	2.43	3.49			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.20	0.03	0.28	3.20	8.82			N/A	N/A
B - Eagle Way West	0.42	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.86	0.03	0.27	2.86	2.86			N/A	N/A
D - Barrack Square East	3.22	0.03	0.33	6.25	17.14			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.26	0.03	0.27	3.26	3.26			N/A	N/A
B - Eagle Way West	0.43	0.03	0.33	1.35	1.49			N/A	N/A
C - A12 South	2.90	0.03	0.26	2.90	2.90			N/A	N/A
D - Barrack Square East	3.40	0.03	0.30	3.40	15.25			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.07	1.03	3.62	5.01			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.54	0.11	1.23	2.87	3.78			N/A	N/A
D - Barrack Square East	1.17	0.05	0.46	2.83	4.40			N/A	N/A

18:00 - 18:15

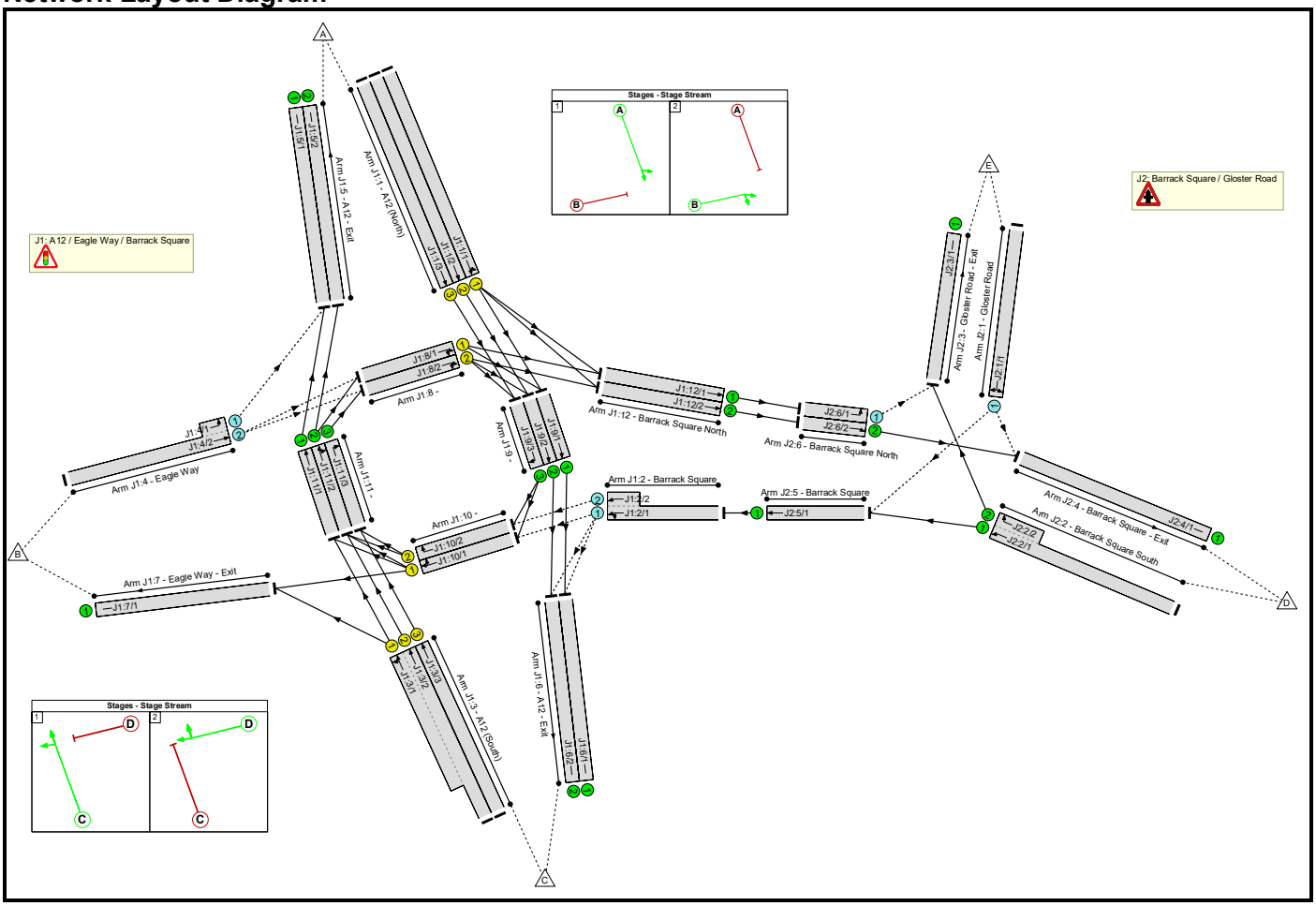
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.04	0.43	2.52	3.93			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	1.01	0.05	0.62	2.09	2.99			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.50	2.98			N/A	N/A

Full Input Data And Results

User and Project Details

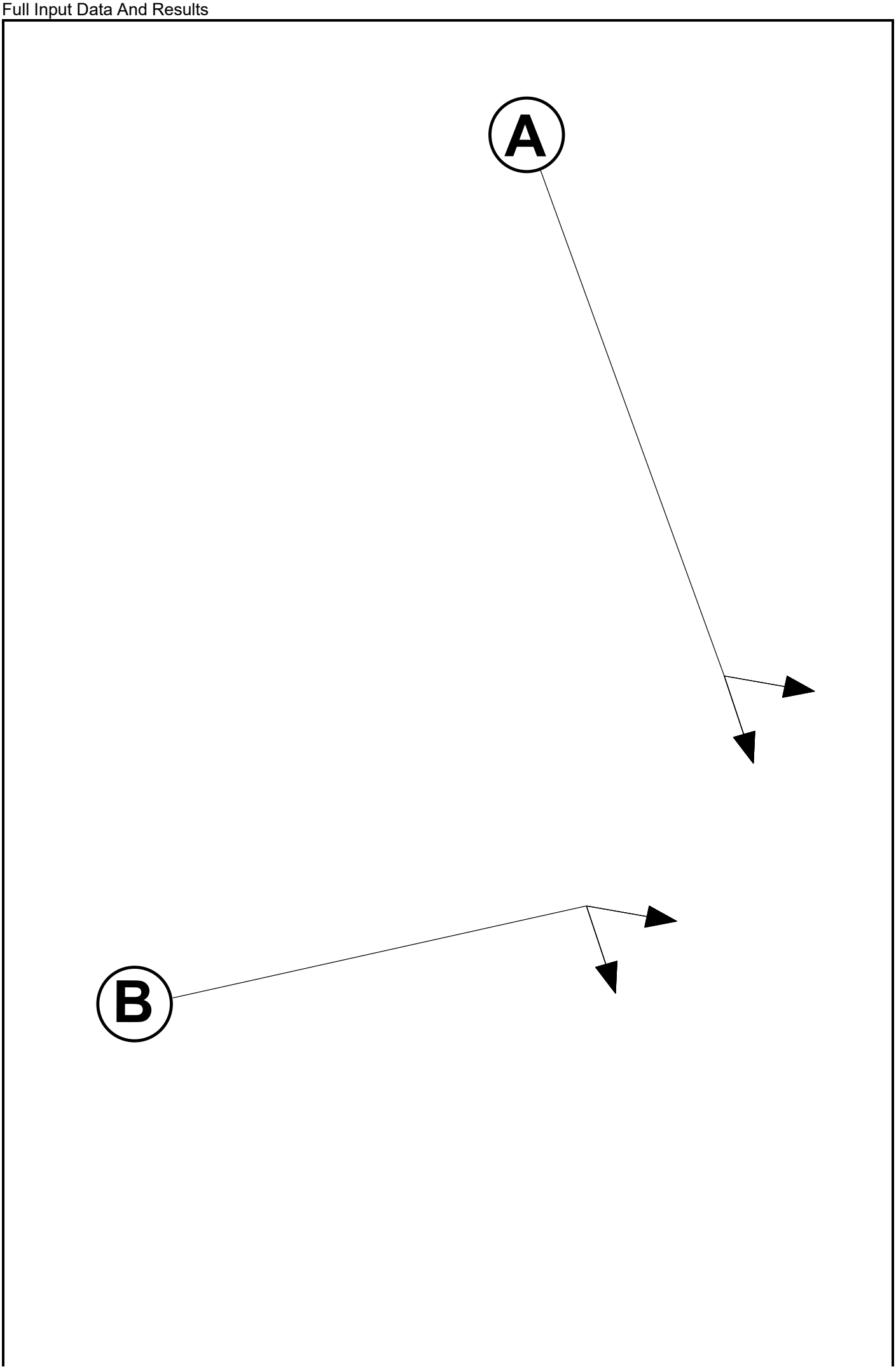
Project:	
Title:	
Location:	
Additional detail:	
File name:	2020.06.16 J23_Model_v16 miti (updated).lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram


A
B

Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Phase Intergreens Matrix

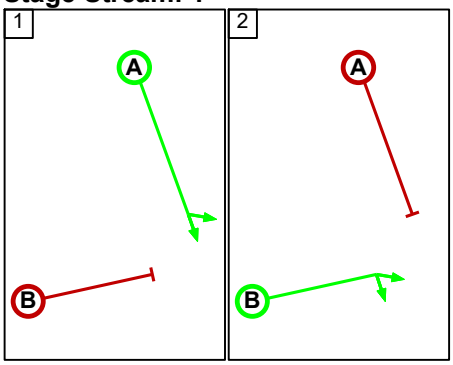
		Starting Phase			
		A	B	C	D
Terminating Phase	A		5	-	-
	B	5		-	-
	C	-	-		5
	D	-	-	5	

Phases in Stage

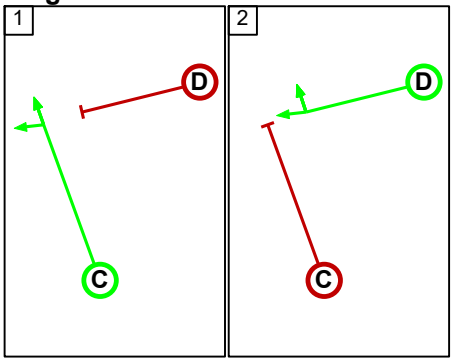
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage	
		1	2
From Stage	1		5
	2	5	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J1:2/1 (Barrack Square)	J1:6/1 (Left)	1000	0	J1:9/1	0.33	All	-	-	-	-	-
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
	J1:6/2 (Left)	1000	0	J1:9/1	0.33	All					
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
J1:2/2 (Barrack Square)	J1:10/1 (Ahead)	1000	0	J1:9/1	0.33	All					
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
	J1:10/2 (Ahead)	1000	0	J1:9/1	0.33	All					
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
J1:4/1 (Eagle Way)	J1:5/1 (Left)	1000	0	J1:11/1	0.33	All	-	-	-	-	-
				J1:11/2	0.33	All					
				J1:11/3	0.33	All					
J1:4/2 (Eagle Way)	J1:8/1 (Ahead)	1000	0	J1:11/1	0.33	All	-	-	-	-	-
				J1:11/2	0.33	All					
				J1:11/3	0.33	All					
	J1:8/2 (Ahead)	1000	0	J1:11/1	0.33	All					
				J1:11/2	0.33	All					
				J1:11/3	0.33	All					

Full Input Data And Results

Junction: J2: Barrack Square / Gloster Road											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
J2:1/1 (Gloster Road)	J2:4/1 (Left)	715	0	J2:6/2	0.22	To J2:4/1 (Ahead)	-	-	-	-	-
	J2:5/1 (Right)	600	0	J2:6/2	0.22	To J2:4/1 (Ahead)					
				J2:2/1	0.19	All					
				J2:2/2	0.19	All					
J2:6/1 (Barrack Square North)	J2:3/1 (Left)	1000	0	J2:2/2	0.33	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (A12 (North))	U	A	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	20.00
											Arm J1:12 Left	Inf
J1:1/2 (A12 (North))	U	A	2	3	34.8	Geom	-	3.50	0.00	N	Arm J1:9 Ahead	20.00
J1:1/3 (A12 (North))	U	A	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	20.00
J1:2/1 (Barrack Square)	O		2	3	6.4	Geom	-	3.50	0.00	N	Arm J1:6 Left	27.00
											Arm J1:10 Ahead	27.00
J1:2/2 (Barrack Square)	O		2	3	3.5	Geom	-	3.50	0.00	Y	Arm J1:10 Ahead	27.00
J1:3/1 (A12 (South))	U	C	2	3	17.4	Geom	-	3.50	0.00	Y	Arm J1:7 Left	20.00
											Arm J1:11 Ahead	20.00
J1:3/2 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:11 Ahead	20.00
J1:3/3 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:11 Ahead	20.00
J1:4/1 (Eagle Way)	O		2	3	2.8	Geom	-	3.25	0.00	Y	Arm J1:5 Left	23.00
J1:4/2 (Eagle Way)	O		2	3	34.8	Inf	-	-	-	-	-	-
J1:5/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:5/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:6/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:6/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:7/1 (Eagle Way - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:8/1	U	B	2	3	10.4	Geom	-	3.25	0.00	Y	Arm J1:9 Right	15.00
											Arm J1:12 Ahead	15.00

Full Input Data And Results

J1:8/2	U	B	2	3	10.4	Geom	-	3.25	0.00	Y	Arm J1:9 Right	15.00
											Arm J1:12 Ahead	15.00
J1:9/1	U		2	3	9.7	Inf	-	-	-	-	-	-
J1:9/2	U		2	3	9.7	Inf	-	-	-	-	-	-
J1:9/3	U		2	3	9.7	Inf	-	-	-	-	-	-
J1:10/1	U	D	2	3	9.0	Geom	-	3.25	0.00	Y	Arm J1:7 Ahead	15.00
											Arm J1:11 Right	15.00
J1:10/2	U	D	2	3	9.0	Geom	-	3.25	0.00	Y	Arm J1:11 Right	15.00
J1:11/1	U		2	3	9.2	Inf	-	-	-	-	-	-
J1:11/2	U		2	3	9.2	Inf	-	-	-	-	-	-
J1:11/3	U		2	3	9.2	Inf	-	-	-	-	-	-
J1:12/1 (Barrack Square North)	U		2	3	5.2	Inf	-	-	-	-	-	-
J1:12/2 (Barrack Square North)	U		2	3	5.2	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: Barrack Square / Gloster Road												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
J2:1/1 (Gloster Road)	O		2	3	34.8	Inf	-	-	-	-	-	-
J2:2/1 (Barrack Square South)	U		2	3	34.8	User	1800	-	-	-	-	-
J2:2/2 (Barrack Square South)	U		2	3	5.2	User	1800	-	-	-	-	-
J2:3/1 (Gloster Road - Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:4/1 (Barrack Square - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J2:5/1 (Barrack Square)	U		2	3	7.0	Inf	-	-	-	-	-	-
J2:6/1 (Barrack Square North)	O		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/2 (Barrack Square North)	U		2	3	6.3	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 06:00-07:00'	06:00	07:00	01:00	
2: 'Base 07:00-08:00'	07:00	08:00	01:00	
3: 'Base 08:00-09:00'	08:00	09:00	01:00	
4: 'Base 15:00-16:00'	15:00	16:00	01:00	
5: 'Base 17:00-18:00'	17:00	18:00	01:00	
6: '28RC 06:00-07:00'	06:00	07:00	01:00	
7: '28RC 07:00-08:00'	07:00	08:00	01:00	
8: '28RC 08:00-09:00'	08:00	09:00	01:00	
9: '28RC 15:00-16:00'	15:00	16:00	01:00	
10: '28RC 17:00-18:00'	17:00	18:00	01:00	
11: '28PC 06:00-07:00'	06:00	07:00	01:00	
12: '28PC 07:00-08:00'	07:00	08:00	01:00	
13: '28PC 08:00-09:00'	08:00	09:00	01:00	
14: '28PC 15:00-16:00'	15:00	16:00	01:00	
15: '28PC 17:00-18:00'	17:00	18:00	01:00	
16: '34RC 06:00-07:00'	06:00	07:00	01:00	
17: '34RC 07:00-08:00'	07:00	08:00	01:00	
18: '34RC 08:00-09:00'	08:00	09:00	01:00	
19: '34RC 15:00-16:00'	15:00	16:00	01:00	
20: '34RC 17:00-18:00'	17:00	18:00	01:00	
21: '34OP 06:00-07:00'	06:00	07:00	01:00	
22: '34OP 07:00-08:00'	07:00	08:00	01:00	
23: '34OP 08:00-09:00'	08:00	09:00	01:00	
24: '34OP 15:00-16:00'	15:00	16:00	01:00	
25: '34OP 17:00-18:00'	17:00	18:00	01:00	
36: 'Aldi 28PC 15:00-16:00'	15:00	16:00	01:00	
37: 'Aldi 28PC 17:00-18:00'	17:00	18:00	01:00	
38: 'Aldi 34RC 07:00-08:00'	07:00	08:00	01:00	
39: 'Aldi 34RC 08:00-09:00'	08:00	09:00	01:00	
40: 'Aldi 34RC 15:00-16:00'	15:00	16:00	01:00	
41: 'Aldi 34RC 17:00-18:00'	17:00	18:00	01:00	
42: 'Aldi 34OP 07:00-08:00'	07:00	08:00	01:00	
43: 'Aldi 34OP 08:00-09:00'	08:00	09:00	01:00	
44: 'Aldi 34OP 15:00-16:00'	15:00	16:00	01:00	
45: 'Aldi 34OP 17:00-18:00'	17:00	18:00	01:00	
46: 'New Base 06:00-07:00'	06:00	07:00	01:00	F2+F26
47: 'New Base 07:00-08:00'	07:00	08:00	01:00	F2+F26
48: 'New Base 08:00-09:00'	08:00	09:00	01:00	F3+F27
49: 'New Base 15:00-16:00'	15:00	16:00	01:00	F4+F28

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50: 'New Base 17:00-18:00'	17:00	18:00	01:00	F5+F29
76: '28RC 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F6+F56
77: '28RC 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F7+F57+F30
78: '28RC 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F8+F58+F31
79: '28RC 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F9+F59+F32
80: '28RC 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F10+F60+F33
81: '28PC 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F11+F61
82: '28PC 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F12+F62+F34
83: '28PC 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F13+F63+F35
84: '28PC 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F14+F64+F36
85: '28PC 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F15+F65+F37
86: '34RC 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F16+F66
87: '34RC 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F17+F67+F38
88: '34RC 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F18+F68+F39
89: '34RC 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F19+F69+F40
90: '34RC 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F20+F70+F41
91: '34OP 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F21+F71
92: '34OP 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F22+F72+F42
93: '34OP 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F23+F73+F43
94: '34OP 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F24+F74+F44
95: '34OP 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F25+F75+F45

Scenario 1: 'Base 06:00-07:00' (FG1: 'Base 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	2	808	15	23	848
	B	15	0	18	15	22	70
	C	616	11	36	61	82	806

Full Input Data And Results

	D	0	3	19	0	6	28
	E	0	3	22	47	0	72
	Tot.	631	19	903	138	133	1824

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Base 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	397
J1:1/2	449
J1:1/3	2
J1:2/1 (with short)	47(In) 47(Out)
J1:2/2 (short)	0
J1:3/1 (short)	353
J1:3/2 (with short)	709(In) 356(Out)
J1:3/3	97
J1:4/1 (short)	15
J1:4/2 (with short)	70(In) 55(Out)
J1:5/1	357
J1:5/2	274
J1:6/1	392
J1:6/2	511
J1:7/1	19
J1:8/1	116
J1:8/2	118
J1:9/1	371
J1:9/2	491
J1:9/3	2
J1:10/1	8
J1:10/2	0
J1:11/1	342
J1:11/2	356
J1:11/3	97
J1:12/1	127
J1:12/2	91
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	72
J2:2/1 (with short)	28(In) 22(Out)
J2:2/2 (short)	6
J2:3/1	133
J2:4/1	138
J2:5/1	47
J2:6/1	127
J2:6/2	91

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.4 %	1840	1840
				Arm J1:12 Left	Inf	9.6 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	87.2 %	1994	1994
				Arm J1:10 Ahead	27.00	12.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	0.0 %	1965	1965
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.1 %	1828	1828
				Arm J1:11 Ahead	20.00	96.9 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	10.3 %	1764	1764
				Arm J1:12 Ahead	15.00	89.7 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.6 %	1764	1764
				Arm J1:12 Ahead	15.00	64.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	0.0 %	1940	1940

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Base 07:00-08:00' (FG47: 'New Base 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	3	1370	18	22	1413
	B	45	0	30	50	53	178
	C	1301	29	84	219	232	1865
	D	3	1	19	0	5	28
	E	17	11	143	41	0	212
	Tot.	1366	44	1646	328	312	3696

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: Base 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	675
J1:1/2	735
J1:1/3	3
J1:2/1 (with short)	194(In) 176(Out)
J1:2/2 (short)	18
J1:3/1 (short)	781
J1:3/2 (with short)	1562(In) 781(Out)
J1:3/3	303
J1:4/1 (short)	45
J1:4/2 (with short)	178(In) 133(Out)
J1:5/1	798
J1:5/2	568
J1:6/1	747
J1:6/2	899
J1:7/1	44
J1:8/1	315
J1:8/2	353
J1:9/1	665
J1:9/2	819
J1:9/3	3
J1:10/1	17
J1:10/2	18
J1:11/1	753
J1:11/2	800
J1:11/3	303
J1:12/1	307
J1:12/2	287
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	212
J2:2/1 (with short)	28(In) 23(Out)
J2:2/2 (short)	5
J2:3/1	312
J2:4/1	328
J2:5/1	194
J2:6/1	307
J2:6/2	287

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	94.1 %	1835	1835
				Arm J1:12 Left	Inf	5.9 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	92.0 %	1994	1994
				Arm J1:10 Ahead	27.00	8.0 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.7 %	1828	1828
				Arm J1:11 Ahead	20.00	96.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	9.5 %	1764	1764
				Arm J1:12 Ahead	15.00	90.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	23.8 %	1764	1764
				Arm J1:12 Ahead	15.00	76.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	88.2 %	1764	1764
				Arm J1:11 Right	15.00	11.8 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'Base 08:00-09:00' (FG48: 'New Base 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	18	1432	24	26	1500
	B	52	0	25	79	41	197
	C	1563	67	108	429	270	2437
	D	4	1	54	0	9	68
	E	24	16	280	67	0	387
	Tot.	1643	102	1899	599	346	4589

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: Base 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	713
J1:1/2	769
J1:1/3	18
J1:2/1 (with short)	379(In) 351(Out)
J1:2/2 (short)	28
J1:3/1 (short)	950
J1:3/2 (with short)	1900(In) 950(Out)
J1:3/3	537
J1:4/1 (short)	52
J1:4/2 (with short)	197(In) 145(Out)
J1:5/1	935
J1:5/2	708
J1:6/1	855
J1:6/2	1044
J1:7/1	102
J1:8/1	336
J1:8/2	616
J1:9/1	688
J1:9/2	877
J1:9/3	18
J1:10/1	35
J1:10/2	28
J1:11/1	883
J1:11/2	978
J1:11/3	537
J1:12/1	337
J1:12/2	532
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	387
J2:2/1 (with short)	68(In) 59(Out)
J2:2/2 (short)	9
J2:3/1	346
J2:4/1	599
J2:5/1	379
J2:6/1	337
J2:6/2	532

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	93.0 %	1837	1837
				Arm J1:12 Left	Inf	7.0 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	95.2 %	1994	1994
				Arm J1:10 Ahead	27.00	4.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	7.1 %	1828	1828
				Arm J1:11 Ahead	20.00	92.9 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	7.4 %	1764	1764
				Arm J1:12 Ahead	15.00	92.6 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.5 %	1764	1764
				Arm J1:12 Ahead	15.00	82.5 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'Base 15:00-16:00' (FG49: 'New Base 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	48	1365	0	44	1457
	B	56	0	31	7	81	175
	C	1481	92	54	30	265	1922
	D	41	13	197	0	46	297
	E	77	18	265	17	0	377
	Tot.	1655	171	1912	54	436	4228

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: Base 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	674
J1:1/2	735
J1:1/3	48
J1:2/1 (with short)	611(In) 493(Out)
J1:2/2 (short)	118
J1:3/1 (short)	919
J1:3/2 (with short)	1838(In) 919(Out)
J1:3/3	84
J1:4/1 (short)	56
J1:4/2 (with short)	175(In) 119(Out)
J1:5/1	883
J1:5/2	772
J1:6/1	862
J1:6/2	1050
J1:7/1	171
J1:8/1	346
J1:8/2	122
J1:9/1	630
J1:9/2	820
J1:9/3	48
J1:10/1	79
J1:10/2	118
J1:11/1	827
J1:11/2	1037
J1:11/3	84
J1:12/1	390
J1:12/2	37
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	377
J2:2/1 (with short)	297(In) 251(Out)
J2:2/2 (short)	46
J2:3/1	436
J2:4/1	54
J2:5/1	611
J2:6/1	390
J2:6/2	37

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	93.5 %	1836	1836
				Arm J1:12 Left	Inf	6.5 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	93.7 %	1994	1994
				Arm J1:10 Ahead	27.00	6.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.0 %	1828	1828
				Arm J1:11 Ahead	20.00	90.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	69.7 %	1764	1764
				Arm J1:12 Ahead	15.00	30.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'Base 17:00-18:00' (FG50: 'New Base 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	60	1362	1	48	1471
	B	40	0	33	5	62	140
	C	1435	130	53	22	213	1853
	D	40	24	225	0	34	323
	E	65	22	228	6	0	321
	Tot.	1580	236	1901	34	357	4108

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: Base 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	674
J1:1/2	737
J1:1/3	60
J1:2/1 (with short)	604(In) 499(Out)
J1:2/2 (short)	105
J1:3/1 (short)	889
J1:3/2 (with short)	1778(In) 889(Out)
J1:3/3	75
J1:4/1 (short)	40
J1:4/2 (with short)	140(In) 100(Out)
J1:5/1	799
J1:5/2	781
J1:6/1	852
J1:6/2	1049
J1:7/1	236
J1:8/1	275
J1:8/2	113
J1:9/1	625
J1:9/2	823
J1:9/3	60
J1:10/1	106
J1:10/2	105
J1:11/1	759
J1:11/2	994
J1:11/3	75
J1:12/1	323
J1:12/2	28
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	321
J2:2/1 (with short)	323(In) 289(Out)
J2:2/2 (short)	34
J2:3/1	357
J2:4/1	34
J2:5/1	604
J2:6/1	323
J2:6/2	28

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	92.7 %	1837	1837
				Arm J1:12 Left	Inf	7.3 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	90.8 %	1994	1994
				Arm J1:10 Ahead	27.00	9.2 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	14.6 %	1828	1828
				Arm J1:11 Ahead	20.00	85.4 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	76.1 %	1764	1764
				Arm J1:12 Ahead	15.00	23.9 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '28RC 06:00-07:00' (FG76: '28RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	885	18	25	930
	B	17	0	29	17	24	87
	C	695	12	39	70	90	906
	D	4	6	23	0	7	40
	E	0	3	24	51	0	78
	Tot.	716	23	1000	156	146	2041

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 28RC 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	438
J1:1/2	490
J1:1/3	2
J1:2/1 (with short)	60(In) 56(Out)
J1:2/2 (short)	4
J1:3/1 (short)	398
J1:3/2 (with short)	797(In) 399(Out)
J1:3/3	109
J1:4/1 (short)	17
J1:4/2 (with short)	87(In) 70(Out)
J1:5/1	403
J1:5/2	313
J1:6/1	439
J1:6/2	561
J1:7/1	23
J1:8/1	134
J1:8/2	135
J1:9/1	415
J1:9/2	538
J1:9/3	2
J1:10/1	11
J1:10/2	4
J1:11/1	386
J1:11/2	403
J1:11/3	109
J1:12/1	139
J1:12/2	105
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	78
J2:2/1 (with short)	40(In) 33(Out)
J2:2/2 (short)	7
J2:3/1	146
J2:4/1	156
J2:5/1	60
J2:6/1	139
J2:6/2	105

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.2 %	1841	1841
				Arm J1:12 Left	Inf	9.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	83.9 %	1994	1994
				Arm J1:10 Ahead	27.00	16.1 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.0 %	1828	1828
				Arm J1:11 Ahead	20.00	97.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	14.9 %	1764	1764
				Arm J1:12 Ahead	15.00	85.1 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.6 %	1764	1764
				Arm J1:12 Ahead	15.00	64.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 7: '28RC 07:00-08:00' (FG77: '28RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1481	36	25	1546
	B	52	0	58	57	59	226
	C	1582	34	93	255	258	2222
	D	73	5	35	0	6	119
	E	20	12	159	46	0	237
	Tot.	1727	55	1826	394	348	4350

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 28RC 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	740
J1:1/2	802
J1:1/3	4
J1:2/1 (with short)	304(In) 247(Out)
J1:2/2 (short)	57
J1:3/1 (short)	937
J1:3/2 (with short)	1874(In) 937(Out)
J1:3/3	348
J1:4/1 (short)	52
J1:4/2 (with short)	226(In) 174(Out)
J1:5/1	973
J1:5/2	754
J1:6/1	835
J1:6/2	991
J1:7/1	55
J1:8/1	375
J1:8/2	405
J1:9/1	737
J1:9/2	895
J1:9/3	4
J1:10/1	57
J1:10/2	57
J1:11/1	921
J1:11/2	1012
J1:11/3	348
J1:12/1	342
J1:12/2	348
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	237
J2:2/1 (with short)	119(In) 113(Out)
J2:2/2 (short)	6
J2:3/1	348
J2:4/1	394
J2:5/1	304
J2:6/1	342
J2:6/2	348

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	91.8 %	1838	1838
				Arm J1:12 Left	Inf	8.2 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	78.5 %	1994	1994
				Arm J1:10 Ahead	27.00	21.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.6 %	1828	1828
				Arm J1:11 Ahead	20.00	96.4 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.5 %	1764	1764
				Arm J1:12 Ahead	15.00	84.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	23.0 %	1764	1764
				Arm J1:12 Ahead	15.00	77.0 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	36.8 %	1764	1764
				Arm J1:11 Right	15.00	63.2 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '28RC 08:00-09:00' (FG78: '28RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1573	58	33	1686
	B	60	0	56	88	46	250
	C	1920	78	119	467	303	2887
	D	181	6	84	0	10	281
	E	28	18	313	74	0	433
	Tot.	2189	124	2145	687	392	5537

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 28RC 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	805
J1:1/2	859
J1:1/3	22
J1:2/1 (with short)	630(In) 487(Out)
J1:2/2 (short)	143
J1:3/1 (short)	1150
J1:3/2 (with short)	2301(In) 1151(Out)
J1:3/3	586
J1:4/1 (short)	60
J1:4/2 (with short)	250(In) 190(Out)
J1:5/1	1165
J1:5/2	1024
J1:6/1	969
J1:6/2	1176
J1:7/1	124
J1:8/1	405
J1:8/2	674
J1:9/1	770
J1:9/2	978
J1:9/3	22
J1:10/1	112
J1:10/2	143
J1:11/1	1105
J1:11/2	1327
J1:11/3	586
J1:12/1	382
J1:12/2	613
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	433
J2:2/1 (with short)	281(In) 271(Out)
J2:2/2 (short)	10
J2:3/1	392
J2:4/1	687
J2:5/1	630
J2:6/1	382
J2:6/2	613

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	88.7 %	1842	1842
				Arm J1:12 Left	Inf	11.3 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	81.5 %	1994	1994
				Arm J1:10 Ahead	27.00	18.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	6.8 %	1828	1828
				Arm J1:11 Ahead	20.00	93.2 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	13.8 %	1764	1764
				Arm J1:12 Ahead	15.00	86.2 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.7 %	1764	1764
				Arm J1:12 Ahead	15.00	82.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	41.1 %	1764	1764
				Arm J1:11 Right	15.00	58.9 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 9: '28RC 15:00-16:00' (FG79: '28RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	56	1547	105	55	1763
	B	66	0	50	14	88	218
	C	1759	108	58	53	296	2274
	D	116	19	217	0	50	402
	E	91	20	297	18	0	426
	Tot.	2032	203	2169	190	489	5083

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 28RC 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	826
J1:1/2	881
J1:1/3	56
J1:2/1 (with short)	760(In) 557(Out)
J1:2/2 (short)	203
J1:3/1 (short)	1071
J1:3/2 (with short)	2163(In) 1092(Out)
J1:3/3	111
J1:4/1 (short)	66
J1:4/2 (with short)	218(In) 152(Out)
J1:5/1	1031
J1:5/2	1001
J1:6/1	924
J1:6/2	1245
J1:7/1	203
J1:8/1	384
J1:8/2	175
J1:9/1	666
J1:9/2	989
J1:9/3	56
J1:10/1	99
J1:10/2	203
J1:11/1	965
J1:11/2	1297
J1:11/3	111
J1:12/1	439
J1:12/2	172
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	426
J2:2/1 (with short)	402(In) 352(Out)
J2:2/2 (short)	50
J2:3/1	489
J2:4/1	190
J2:5/1	760
J2:6/1	439
J2:6/2	172

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	80.6 %	1853	1853
				Arm J1:12 Left	Inf	19.4 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	92.3 %	1994	1994
				Arm J1:10 Ahead	27.00	7.7 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.1 %	1828	1828
				Arm J1:11 Ahead	20.00	89.9 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	61.7 %	1764	1764
				Arm J1:12 Ahead	15.00	38.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	96.0 %	1764	1764
				Arm J1:11 Right	15.00	4.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 10: '28RC 17:00-18:00' (FG80: '28RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	70	1537	90	59	1756
	B	47	0	51	9	67	174
	C	1685	152	58	43	239	2177
	D	127	34	244	0	37	442
	E	76	25	256	7	0	364
	Tot.	1935	281	2146	149	402	4913

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 28RC 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	815
J1:1/2	871
J1:1/3	70
J1:2/1 (with short)	762(In) 561(Out)
J1:2/2 (short)	201
J1:3/1 (short)	1036
J1:3/2 (with short)	2076(In) 1040(Out)
J1:3/3	101
J1:4/1 (short)	47
J1:4/2 (with short)	174(In) 127(Out)
J1:5/1	932
J1:5/2	1003
J1:6/1	916
J1:6/2	1230
J1:7/1	281
J1:8/1	306
J1:8/2	161
J1:9/1	666
J1:9/2	980
J1:9/3	70
J1:10/1	131
J1:10/2	201
J1:11/1	885
J1:11/2	1242
J1:11/3	101
J1:12/1	365
J1:12/2	142
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	364
J2:2/1 (with short)	442(In) 405(Out)
J2:2/2 (short)	37
J2:3/1	402
J2:4/1	149
J2:5/1	762
J2:6/1	365
J2:6/2	142

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	81.7 %	1852	1852
				Arm J1:12 Left	Inf	18.3 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	89.1 %	1994	1994
				Arm J1:10 Ahead	27.00	10.9 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	14.7 %	1828	1828
				Arm J1:11 Ahead	20.00	85.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	67.7 %	1764	1764
				Arm J1:12 Ahead	15.00	32.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	98.5 %	1764	1764
				Arm J1:11 Right	15.00	1.5 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 11: '28PC 06:00-07:00' (FG81: '28PC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	889	21	27	939
	B	17	0	32	18	26	93
	C	843	13	43	81	98	1078
	D	4	6	27	0	7	44
	E	0	4	26	56	0	86
	Tot.	864	25	1017	176	158	2240

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 28PC 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	443
J1:1/2	494
J1:1/3	2
J1:2/1 (with short)	67(In) 63(Out)
J1:2/2 (short)	4
J1:3/1 (short)	477
J1:3/2 (with short)	954(In) 477(Out)
J1:3/3	124
J1:4/1 (short)	17
J1:4/2 (with short)	93(In) 76(Out)
J1:5/1	481
J1:5/2	383
J1:6/1	446
J1:6/2	571
J1:7/1	25
J1:8/1	148
J1:8/2	150
J1:9/1	419
J1:9/2	545
J1:9/3	2
J1:10/1	12
J1:10/2	4
J1:11/1	464
J1:11/2	481
J1:11/3	124
J1:12/1	151
J1:12/2	120
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	86
J2:2/1 (with short)	44(In) 37(Out)
J2:2/2 (short)	7
J2:3/1	158
J2:4/1	176
J2:5/1	67
J2:6/1	151
J2:6/2	120

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	89.2 %	1842	1842
				Arm J1:12 Left	Inf	10.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	84.1 %	1994	1994
				Arm J1:10 Ahead	27.00	15.9 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	2.7 %	1828	1828
				Arm J1:11 Ahead	20.00	97.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	16.2 %	1764	1764
				Arm J1:12 Ahead	15.00	83.8 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	34.0 %	1764	1764
				Arm J1:12 Ahead	15.00	66.0 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 12: '28PC 07:00-08:00' (FG82: '28PC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1487	37	26	1554
	B	52	0	61	58	61	232
	C	1693	34	97	270	268	2362
	D	74	5	42	0	6	127
	E	21	13	165	47	0	246
	Tot.	1840	56	1852	412	361	4521

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 28PC 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	744
J1:1/2	806
J1:1/3	4
J1:2/1 (with short)	320(In) 261(Out)
J1:2/2 (short)	59
J1:3/1 (short)	991
J1:3/2 (with short)	1995(In) 1004(Out)
J1:3/3	367
J1:4/1 (short)	52
J1:4/2 (with short)	232(In) 180(Out)
J1:5/1	1027
J1:5/2	813
J1:6/1	846
J1:6/2	1006
J1:7/1	56
J1:8/1	390
J1:8/2	425
J1:9/1	742
J1:9/2	903
J1:9/3	4
J1:10/1	58
J1:10/2	59
J1:11/1	975
J1:11/2	1081
J1:11/3	367
J1:12/1	355
J1:12/2	365
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	246
J2:2/1 (with short)	127(In) 121(Out)
J2:2/2 (short)	6
J2:3/1	361
J2:4/1	412
J2:5/1	320
J2:6/1	355
J2:6/2	365

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	91.5 %	1839	1839
				Arm J1:12 Left	Inf	8.5 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	79.3 %	1994	1994
				Arm J1:10 Ahead	27.00	20.7 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.4 %	1828	1828
				Arm J1:11 Ahead	20.00	96.6 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.6 %	1764	1764
				Arm J1:12 Ahead	15.00	84.4 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	22.8 %	1764	1764
				Arm J1:12 Ahead	15.00	77.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	37.9 %	1764	1764
				Arm J1:11 Right	15.00	62.1 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 13: '28PC 08:00-09:00' (FG83: '28PC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1578	59	33	1692
	B	60	0	59	90	47	256
	C	1893	78	122	475	309	2877
	D	167	6	90	0	10	273
	E	29	18	318	76	0	441
	Tot.	2149	124	2167	700	399	5539

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 28PC 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	808
J1:1/2	862
J1:1/3	22
J1:2/1 (with short)	628(In) 531(Out)
J1:2/2 (short)	97
J1:3/1 (short)	1125
J1:3/2 (with short)	2280(In) 1155(Out)
J1:3/3	597
J1:4/1 (short)	60
J1:4/2 (with short)	256(In) 196(Out)
J1:5/1	1157
J1:5/2	992
J1:6/1	979
J1:6/2	1188
J1:7/1	124
J1:8/1	415
J1:8/2	687
J1:9/1	775
J1:9/2	984
J1:9/3	22
J1:10/1	145
J1:10/2	97
J1:11/1	1097
J1:11/2	1301
J1:11/3	597
J1:12/1	389
J1:12/2	624
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	441
J2:2/1 (with short)	273(In) 263(Out)
J2:2/2 (short)	10
J2:3/1	399
J2:4/1	700
J2:5/1	628
J2:6/1	389
J2:6/2	624

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	88.6 %	1843	1843
				Arm J1:12 Left	Inf	11.4 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	76.8 %	1994	1994
				Arm J1:10 Ahead	27.00	23.2 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	6.9 %	1828	1828
				Arm J1:11 Ahead	20.00	93.1 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	14.2 %	1764	1764
				Arm J1:12 Ahead	15.00	85.8 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.8 %	1764	1764
				Arm J1:12 Ahead	15.00	82.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	31.7 %	1764	1764
				Arm J1:11 Right	15.00	68.3 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 14: '28PC 15:00-16:00' (FG84: '28PC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	56	1595	106	58	1815
	B	66	0	52	15	91	224
	C	1772	108	60	61	304	2305
	D	117	20	224	0	51	412
	E	94	21	305	19	0	439
	Tot.	2049	205	2236	201	504	5195

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 28PC 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	851
J1:1/2	908
J1:1/3	56
J1:2/1 (with short)	781(In) 578(Out)
J1:2/2 (short)	203
J1:3/1 (short)	1081
J1:3/2 (with short)	2184(In) 1103(Out)
J1:3/3	121
J1:4/1 (short)	66
J1:4/2 (with short)	224(In) 158(Out)
J1:5/1	1043
J1:5/2	1006
J1:6/1	952
J1:6/2	1284
J1:7/1	205
J1:8/1	395
J1:8/2	188
J1:9/1	687
J1:9/2	1020
J1:9/3	56
J1:10/1	105
J1:10/2	203
J1:11/1	977
J1:11/2	1310
J1:11/3	121
J1:12/1	453
J1:12/2	182
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	439
J2:2/1 (with short)	412(In) 361(Out)
J2:2/2 (short)	51
J2:3/1	504
J2:4/1	201
J2:5/1	781
J2:6/1	453
J2:6/2	182

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	80.7 %	1853	1853
				Arm J1:12 Left	Inf	19.3 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	91.5 %	1994	1994
				Arm J1:10 Ahead	27.00	8.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.0 %	1828	1828
				Arm J1:11 Ahead	20.00	90.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	59.6 %	1764	1764
				Arm J1:12 Ahead	15.00	40.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	92.4 %	1764	1764
				Arm J1:11 Right	15.00	7.6 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 15: '28PC 17:00-18:00' (FG85: '28PC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	70	1546	90	59	1765
	B	47	0	51	9	67	174
	C	1678	152	57	42	240	2169
	D	127	34	243	0	37	441
	E	77	25	256	7	0	365
	Tot.	1929	281	2153	148	403	4914

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 15: 28PC 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	822
J1:1/2	873
J1:1/3	70
J1:2/1 (with short)	762(In) 558(Out)
J1:2/2 (short)	204
J1:3/1 (short)	1035
J1:3/2 (with short)	2070(In) 1035(Out)
J1:3/3	99
J1:4/1 (short)	47
J1:4/2 (with short)	174(In) 127(Out)
J1:5/1	930
J1:5/2	999
J1:6/1	923
J1:6/2	1230
J1:7/1	281
J1:8/1	307
J1:8/2	159
J1:9/1	673
J1:9/2	981
J1:9/3	70
J1:10/1	129
J1:10/2	204
J1:11/1	883
J1:11/2	1239
J1:11/3	99
J1:12/1	366
J1:12/2	141
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	365
J2:2/1 (with short)	441(In) 404(Out)
J2:2/2 (short)	37
J2:3/1	403
J2:4/1	148
J2:5/1	762
J2:6/1	366
J2:6/2	141

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	81.9 %	1851	1851
				Arm J1:12 Left	Inf	18.1 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	89.4 %	1994	1994
				Arm J1:10 Ahead	27.00	10.6 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	14.7 %	1828	1828
				Arm J1:11 Ahead	20.00	85.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	67.9 %	1764	1764
				Arm J1:12 Ahead	15.00	32.1 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 16: '34RC 06:00-07:00' (FG86: '34RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	921	19	26	968
	B	18	0	32	17	25	92
	C	787	13	41	76	94	1011
	D	4	6	25	0	7	42
	E	0	3	25	54	0	82
	Tot.	809	24	1044	166	152	2195

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 16: 34RC 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	457
J1:1/2	509
J1:1/3	2
J1:2/1 (with short)	63(In) 59(Out)
J1:2/2 (short)	4
J1:3/1 (short)	447
J1:3/2 (with short)	894(In) 447(Out)
J1:3/3	117
J1:4/1 (short)	18
J1:4/2 (with short)	92(In) 74(Out)
J1:5/1	452
J1:5/2	357
J1:6/1	460
J1:6/2	584
J1:7/1	24
J1:8/1	141
J1:8/2	144
J1:9/1	434
J1:9/2	560
J1:9/3	2
J1:10/1	11
J1:10/2	4
J1:11/1	434
J1:11/2	451
J1:11/3	117
J1:12/1	145
J1:12/2	112
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	82
J2:2/1 (with short)	42(In) 35(Out)
J2:2/2 (short)	7
J2:3/1	152
J2:4/1	166
J2:5/1	63
J2:6/1	145
J2:6/2	112

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.2 %	1841	1841
				Arm J1:12 Left	Inf	9.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	84.7 %	1994	1994
				Arm J1:10 Ahead	27.00	15.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	2.9 %	1828	1828
				Arm J1:11 Ahead	20.00	97.1 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.6 %	1764	1764
				Arm J1:12 Ahead	15.00	84.4 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.4 %	1764	1764
				Arm J1:12 Ahead	15.00	64.6 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 17: '34RC 07:00-08:00' (FG87: '34RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1574	44	26	1648
	B	54	0	66	60	62	242
	C	1742	35	98	276	271	2422
	D	154	5	56	0	6	221
	E	21	13	167	48	0	249
	Tot.	1971	57	1961	428	365	4782

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 17: 34RC 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	791
J1:1/2	853
J1:1/3	4
J1:2/1 (with short)	416(In) 311(Out)
J1:2/2 (short)	105
J1:3/1 (short)	1012
J1:3/2 (with short)	2048(In) 1036(Out)
J1:3/3	374
J1:4/1 (short)	54
J1:4/2 (with short)	242(In) 188(Out)
J1:5/1	1066
J1:5/2	905
J1:6/1	899
J1:6/2	1062
J1:7/1	57
J1:8/1	399
J1:8/2	434
J1:9/1	787
J1:9/2	951
J1:9/3	4
J1:10/1	92
J1:10/2	105
J1:11/1	1012
J1:11/2	1176
J1:11/3	374
J1:12/1	359
J1:12/2	380
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	249
J2:2/1 (with short)	221(In) 215(Out)
J2:2/2 (short)	6
J2:3/1	365
J2:4/1	428
J2:5/1	416
J2:6/1	359
J2:6/2	380

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	91.2 %	1839	1839
				Arm J1:12 Left	Inf	8.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	71.7 %	1994	1994
				Arm J1:10 Ahead	27.00	28.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.5 %	1828	1828
				Arm J1:11 Ahead	20.00	96.5 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	16.5 %	1764	1764
				Arm J1:12 Ahead	15.00	83.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	22.6 %	1764	1764
				Arm J1:12 Ahead	15.00	77.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	23.9 %	1764	1764
				Arm J1:11 Right	15.00	76.1 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 18: '34RC 08:00-09:00' (FG88: '34RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1685	76	35	1818
	B	63	0	67	93	49	272
	C	2034	81	126	495	320	3056
	D	331	8	112	0	11	462
	E	30	19	330	78	0	457
	Tot.	2458	130	2320	742	415	6065

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 18: 34RC 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	870
J1:1/2	926
J1:1/3	22
J1:2/1 (with short)	830(In) 795(Out)
J1:2/2 (short)	35
J1:3/1 (short)	1210
J1:3/2 (with short)	2435(In) 1225(Out)
J1:3/3	621
J1:4/1 (short)	63
J1:4/2 (with short)	272(In) 209(Out)
J1:5/1	1355
J1:5/2	1103
J1:6/1	1047
J1:6/2	1273
J1:7/1	130
J1:8/1	436
J1:8/2	714
J1:9/1	826
J1:9/2	1052
J1:9/3	22
J1:10/1	375
J1:10/2	35
J1:11/1	1292
J1:11/2	1423
J1:11/3	621
J1:12/1	404
J1:12/2	664
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	457
J2:2/1 (with short)	462(In) 451(Out)
J2:2/2 (short)	11
J2:3/1	415
J2:4/1	742
J2:5/1	830
J2:6/1	404
J2:6/2	664

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	87.2 %	1844	1844
				Arm J1:12 Left	Inf	12.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	55.6 %	1994	1994
				Arm J1:10 Ahead	27.00	44.4 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	6.7 %	1828	1828
				Arm J1:11 Ahead	20.00	93.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.4 %	1764	1764
				Arm J1:12 Ahead	15.00	84.6 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.6 %	1764	1764
				Arm J1:12 Ahead	15.00	82.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	13.1 %	1764	1764
				Arm J1:11 Right	15.00	86.9 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 19: '34RC 15:00-16:00' (FG89: '34RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	58	1780	212	62	2112
	B	68	0	60	19	98	245
	C	2006	112	65	104	327	2614
	D	182	22	254	0	55	513
	E	101	23	328	20	0	472
	Tot.	2357	215	2487	355	542	5956

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 19: 34RC 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	987
J1:1/2	1067
J1:1/3	58
J1:2/1 (with short)	910(In) 697(Out)
J1:2/2 (short)	213
J1:3/1 (short)	1184
J1:3/2 (with short)	2445(In) 1261(Out)
J1:3/3	169
J1:4/1 (short)	68
J1:4/2 (with short)	245(In) 177(Out)
J1:5/1	1175
J1:5/2	1182
J1:6/1	1004
J1:6/2	1483
J1:7/1	215
J1:8/1	425
J1:8/2	248
J1:9/1	713
J1:9/2	1192
J1:9/3	58
J1:10/1	173
J1:10/2	213
J1:11/1	1107
J1:11/2	1509
J1:11/3	169
J1:12/1	487
J1:12/2	335
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	472
J2:2/1 (with short)	513(In) 458(Out)
J2:2/2 (short)	55
J2:3/1	542
J2:4/1	355
J2:5/1	910
J2:6/1	487
J2:6/2	335

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	72.2 %	1864	1864
				Arm J1:12 Left	Inf	27.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	83.5 %	1994	1994
				Arm J1:10 Ahead	27.00	16.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	9.5 %	1828	1828
				Arm J1:11 Ahead	20.00	90.5 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	50.4 %	1764	1764
				Arm J1:12 Ahead	15.00	49.6 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	59.5 %	1764	1764
				Arm J1:11 Right	15.00	40.5 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 20: '34RC 17:00-18:00' (FG90: '34RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	73	1809	185	64	2131
	B	49	0	59	10	72	190
	C	1857	158	62	92	259	2428
	D	201	38	275	0	40	554
	E	83	26	277	7	0	393
	Tot.	2190	295	2482	294	435	5696

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 20: 34RC 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	1000
J1:1/2	1058
J1:1/3	73
J1:2/1 (with short)	900(In) 634(Out)
J1:2/2 (short)	266
J1:3/1 (short)	1129
J1:3/2 (with short)	2274(In) 1145(Out)
J1:3/3	154
J1:4/1 (short)	49
J1:4/2 (with short)	190(In) 141(Out)
J1:5/1	1029
J1:5/2	1161
J1:6/1	1028
J1:6/2	1454
J1:7/1	295
J1:8/1	331
J1:8/2	223
J1:9/1	751
J1:9/2	1179
J1:9/3	73
J1:10/1	155
J1:10/2	266
J1:11/1	980
J1:11/2	1420
J1:11/3	154
J1:12/1	395
J1:12/2	287
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	393
J2:2/1 (with short)	554(In) 514(Out)
J2:2/2 (short)	40
J2:3/1	435
J2:4/1	294
J2:5/1	900
J2:6/1	395
J2:6/2	287

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	75.1 %	1860	1860
				Arm J1:12 Left	Inf	24.9 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	87.1 %	1994	1994
				Arm J1:10 Ahead	27.00	12.9 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	14.0 %	1828	1828
				Arm J1:11 Ahead	20.00	86.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	54.3 %	1764	1764
				Arm J1:12 Ahead	15.00	45.7 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	88.4 %	1764	1764
				Arm J1:11 Right	15.00	11.6 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 21: '34OP 06:00-07:00' (FG91: '34OP 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	922	19	26	969
	B	18	0	32	17	25	92
	C	788	13	41	76	94	1012
	D	4	6	25	0	7	42
	E	0	3	25	54	0	82
	Tot.	810	24	1045	166	152	2197

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 21: 34OP 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	458
J1:1/2	509
J1:1/3	2
J1:2/1 (with short)	63(In) 59(Out)
J1:2/2 (short)	4
J1:3/1 (short)	447
J1:3/2 (with short)	895(In) 448(Out)
J1:3/3	117
J1:4/1 (short)	18
J1:4/2 (with short)	92(In) 74(Out)
J1:5/1	452
J1:5/2	358
J1:6/1	461
J1:6/2	584
J1:7/1	24
J1:8/1	141
J1:8/2	144
J1:9/1	435
J1:9/2	560
J1:9/3	2
J1:10/1	11
J1:10/2	4
J1:11/1	434
J1:11/2	452
J1:11/3	117
J1:12/1	145
J1:12/2	112
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	82
J2:2/1 (with short)	42(In) 35(Out)
J2:2/2 (short)	7
J2:3/1	152
J2:4/1	166
J2:5/1	63
J2:6/1	145
J2:6/2	112

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.2 %	1841	1841
				Arm J1:12 Left	Inf	9.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	84.7 %	1994	1994
				Arm J1:10 Ahead	27.00	15.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	2.9 %	1828	1828
				Arm J1:11 Ahead	20.00	97.1 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.6 %	1764	1764
				Arm J1:12 Ahead	15.00	84.4 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.4 %	1764	1764
				Arm J1:12 Ahead	15.00	64.6 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 22: '34OP 07:00-08:00' (FG92: '34OP 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1574	44	26	1648
	B	54	0	66	60	62	242
	C	1734	35	98	276	271	2414
	D	158	5	56	0	6	225
	E	21	13	167	48	0	249
	Tot.	1967	57	1961	428	365	4778

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 22: 34OP 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	791
J1:1/2	853
J1:1/3	4
J1:2/1 (with short)	420(In) 313(Out)
J1:2/2 (short)	107
J1:3/1 (short)	1009
J1:3/2 (with short)	2040(In) 1031(Out)
J1:3/3	374
J1:4/1 (short)	54
J1:4/2 (with short)	242(In) 188(Out)
J1:5/1	1064
J1:5/2	903
J1:6/1	899
J1:6/2	1062
J1:7/1	57
J1:8/1	399
J1:8/2	434
J1:9/1	787
J1:9/2	951
J1:9/3	4
J1:10/1	94
J1:10/2	107
J1:11/1	1010
J1:11/2	1174
J1:11/3	374
J1:12/1	359
J1:12/2	380
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	249
J2:2/1 (with short)	225(In) 219(Out)
J2:2/2 (short)	6
J2:3/1	365
J2:4/1	428
J2:5/1	420
J2:6/1	359
J2:6/2	380

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	91.2 %	1839	1839
				Arm J1:12 Left	Inf	8.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	71.2 %	1994	1994
				Arm J1:10 Ahead	27.00	28.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.5 %	1828	1828
				Arm J1:11 Ahead	20.00	96.5 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	16.5 %	1764	1764
				Arm J1:12 Ahead	15.00	83.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	22.6 %	1764	1764
				Arm J1:12 Ahead	15.00	77.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	23.4 %	1764	1764
				Arm J1:11 Right	15.00	76.6 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 23: '34OP 08:00-09:00' (FG93: '34OP 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1661	76	35	1794
	B	63	0	68	93	49	273
	C	1756	81	126	490	321	2774
	D	7	8	102	0	11	128
	E	30	19	331	78	0	458
	Tot.	1856	130	2288	737	416	5427

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 23: 34OP 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	858
J1:1/2	914
J1:1/3	22
J1:2/1 (with short)	497(In) 460(Out)
J1:2/2 (short)	37
J1:3/1 (short)	1079
J1:3/2 (with short)	2158(In) 1079(Out)
J1:3/3	616
J1:4/1 (short)	63
J1:4/2 (with short)	273(In) 210(Out)
J1:5/1	1061
J1:5/2	795
J1:6/1	1032
J1:6/2	1256
J1:7/1	130
J1:8/1	438
J1:8/2	709
J1:9/1	815
J1:9/2	1040
J1:9/3	22
J1:10/1	49
J1:10/2	37
J1:11/1	998
J1:11/2	1116
J1:11/3	616
J1:12/1	405
J1:12/2	659
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	458
J2:2/1 (with short)	128(In) 117(Out)
J2:2/2 (short)	11
J2:3/1	416
J2:4/1	737
J2:5/1	497
J2:6/1	405
J2:6/2	659

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	87.1 %	1845	1845
				Arm J1:12 Left	Inf	12.9 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	94.1 %	1994	1994
				Arm J1:10 Ahead	27.00	5.9 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	7.5 %	1828	1828
				Arm J1:11 Ahead	20.00	92.5 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.5 %	1764	1764
				Arm J1:12 Ahead	15.00	84.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.8 %	1764	1764
				Arm J1:12 Ahead	15.00	82.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 24: '34OP 15:00-16:00' (FG94: '34OP 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	58	1771	212	61	2102
	B	68	0	60	19	97	244
	C	2001	112	64	103	326	2606
	D	182	22	253	0	55	512
	E	101	23	327	20	0	471
	Tot.	2352	215	2475	354	539	5935

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 24: 34OP 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	995
J1:1/2	1049
J1:1/3	58
J1:2/1 (with short)	908(In) 695(Out)
J1:2/2 (short)	213
J1:3/1 (short)	1192
J1:3/2 (with short)	2439(In) 1247(Out)
J1:3/3	167
J1:4/1 (short)	68
J1:4/2 (with short)	244(In) 176(Out)
J1:5/1	1183
J1:5/2	1169
J1:6/1	1013
J1:6/2	1462
J1:7/1	215
J1:8/1	423
J1:8/2	246
J1:9/1	722
J1:9/2	1173
J1:9/3	58
J1:10/1	173
J1:10/2	213
J1:11/1	1115
J1:11/2	1495
J1:11/3	167
J1:12/1	484
J1:12/2	334
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	471
J2:2/1 (with short)	512(In) 457(Out)
J2:2/2 (short)	55
J2:3/1	539
J2:4/1	354
J2:5/1	908
J2:6/1	484
J2:6/2	334

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	72.6 %	1864	1864
				Arm J1:12 Left	Inf	27.4 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	83.5 %	1994	1994
				Arm J1:10 Ahead	27.00	16.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	9.4 %	1828	1828
				Arm J1:11 Ahead	20.00	90.6 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	50.4 %	1764	1764
				Arm J1:12 Ahead	15.00	49.6 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	59.5 %	1764	1764
				Arm J1:11 Right	15.00	40.5 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 25: '34OP 17:00-18:00' (FG95: '34OP 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	73	1813	185	64	2135
	B	49	0	59	10	72	190
	C	1852	158	62	91	259	2422
	D	200	38	274	0	40	552
	E	83	26	277	7	0	393
	Tot.	2184	295	2485	293	435	5692

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 25: 34OP 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	1001
J1:1/2	1061
J1:1/3	73
J1:2/1 (with short)	898(In) 629(Out)
J1:2/2 (short)	269
J1:3/1 (short)	1129
J1:3/2 (with short)	2269(In) 1140(Out)
J1:3/3	153
J1:4/1 (short)	49
J1:4/2 (with short)	190(In) 141(Out)
J1:5/1	1027
J1:5/2	1157
J1:6/1	1028
J1:6/2	1457
J1:7/1	295
J1:8/1	331
J1:8/2	222
J1:9/1	752
J1:9/2	1182
J1:9/3	73
J1:10/1	151
J1:10/2	269
J1:11/1	978
J1:11/2	1416
J1:11/3	153
J1:12/1	395
J1:12/2	286
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	393
J2:2/1 (with short)	552(In) 512(Out)
J2:2/2 (short)	40
J2:3/1	435
J2:4/1	293
J2:5/1	898
J2:6/1	395
J2:6/2	286

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	75.1 %	1860	1860
				Arm J1:12 Left	Inf	24.9 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	87.6 %	1994	1994
				Arm J1:10 Ahead	27.00	12.4 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	14.0 %	1828	1828
				Arm J1:11 Ahead	20.00	86.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	54.5 %	1764	1764
				Arm J1:12 Ahead	15.00	45.5 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	90.7 %	1764	1764
				Arm J1:11 Right	15.00	9.3 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

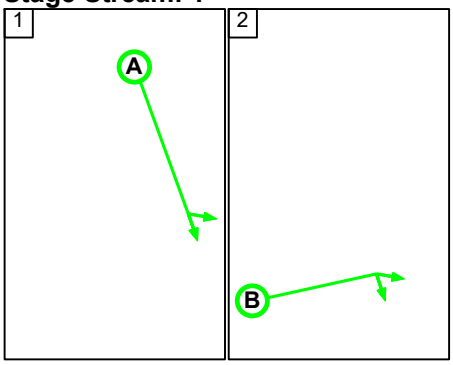
Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Base 06:00-07:00' (FG1: 'Base 06:00-07:00', Plan 1: 'Network Control Plan 1')

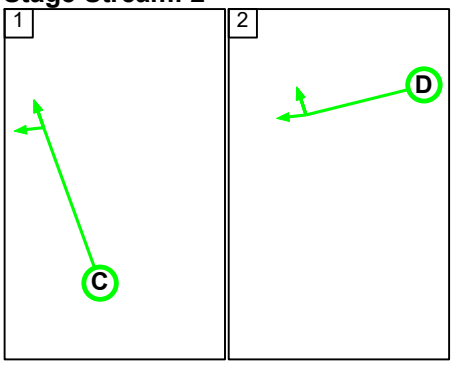
Stage Sequence Diagram

Stage Stream: 1



Full Input Data And Results

Stage Stream: 2



Stage Timings

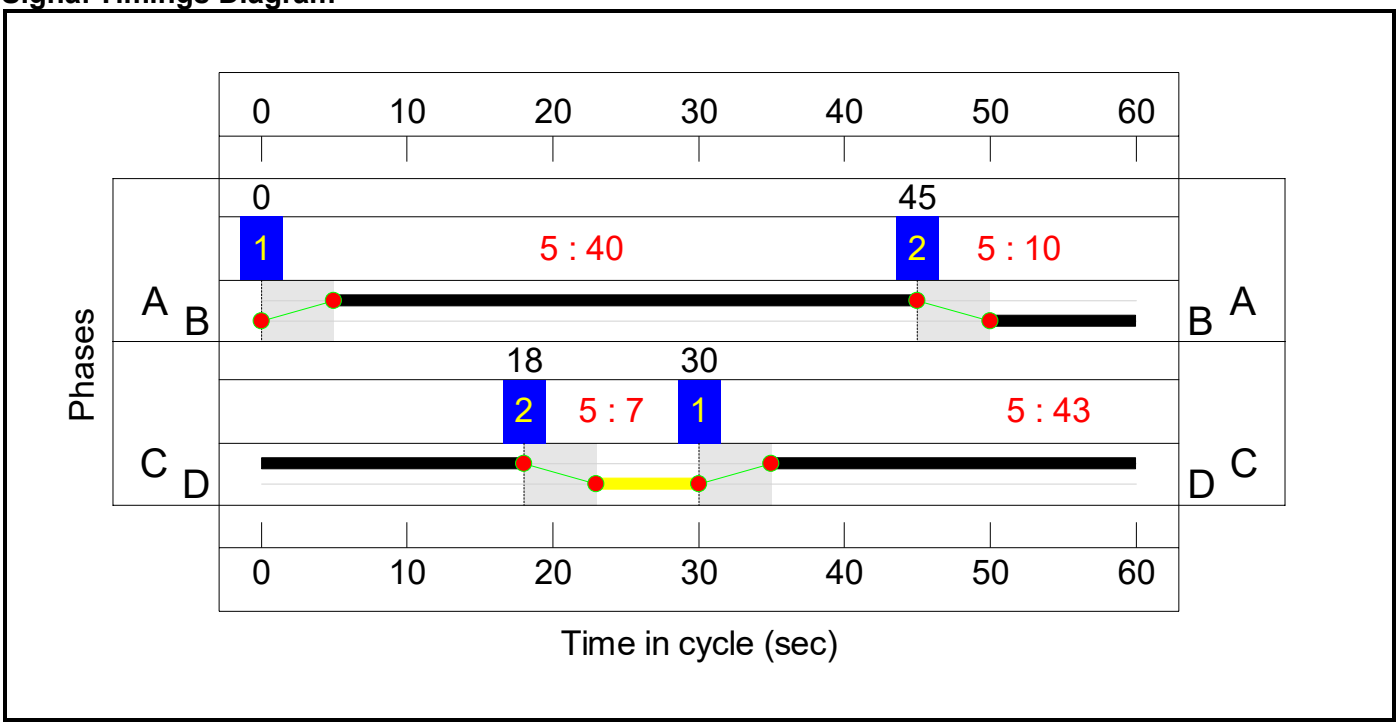
Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	0	45

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	30	18

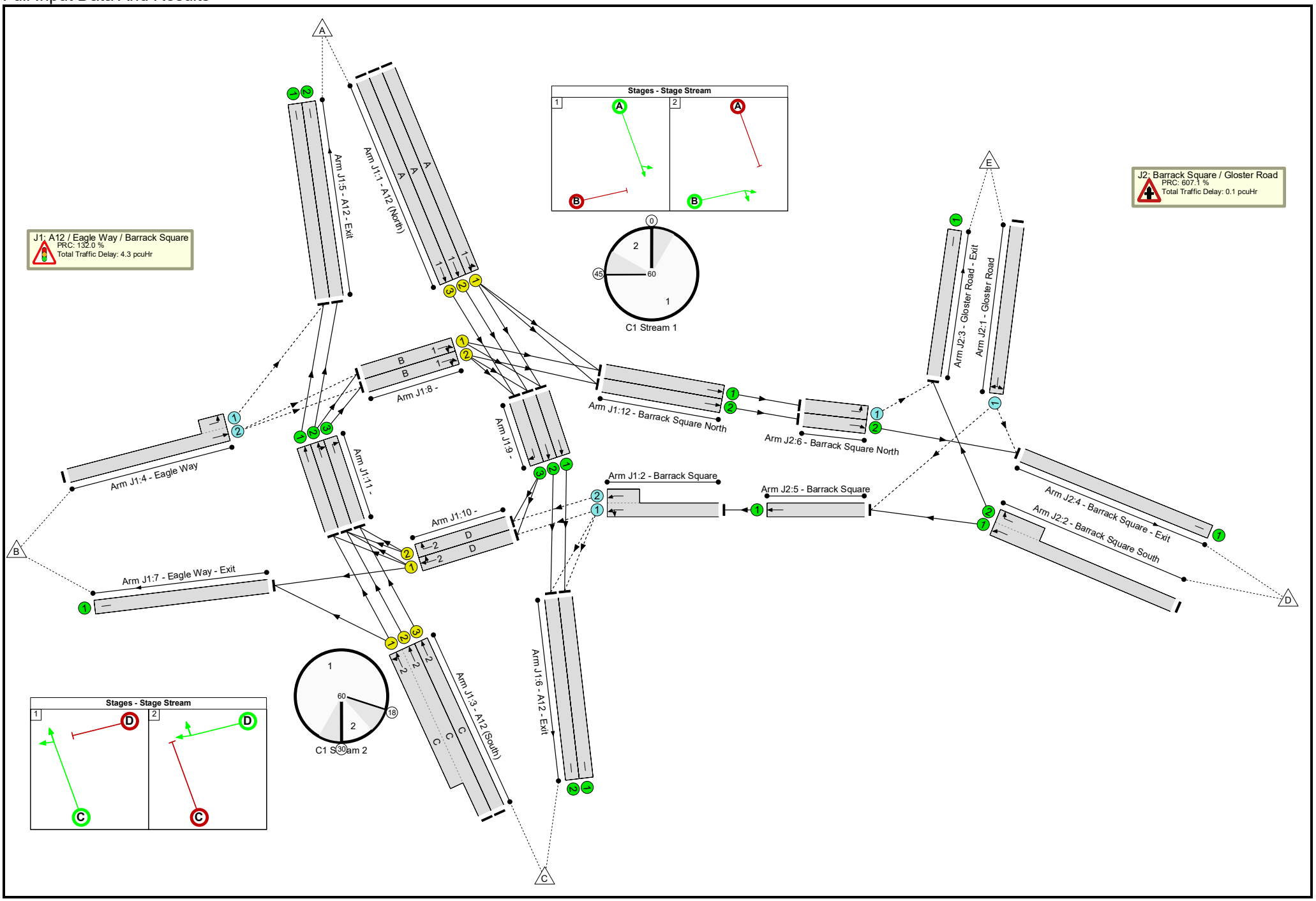
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**38.8%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**38.8%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	40	-	397	1840	1257	31.6%
1/2	A12 (North) Ahead	U	1	N/A	A		1	40	-	449	1958	1338	33.6%
1/3	A12 (North) Ahead	U	1	N/A	A		1	40	-	2	1828	1249	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	47	1994:1965	716+0	6.6 : 0.0%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	709	1828:1828	918+910	38.8 : 38.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	97	1828	1341	7.2%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	70	Inf :1821	738+201	7.5 : 7.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	274	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	19	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	10	-	116	1764	323	35.9%
8/2	Right Ahead	U	1	N/A	B		1	10	-	118	1764	323	36.5%
9/1	Ahead	U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	8	1764	235	3.4%
10/2	Right	U	2	N/A	D		1	7	-	0	1940	259	0.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	97	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	91	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**12.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	72	Inf	648	11.1%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	28	1800:1800	1414+386	1.6 : 1.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	133	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	138	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	47	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	127	Inf	998	12.7%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	91	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**433**	**0**	**0**	**2.8**	**1.6**	**0.0**	**4.5**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**234**	**0**	**0**	**2.8**	**1.5**	**0.0**	**4.3**	**-**	**-**	**-**	**-**
1/1	397	397	-	-	-	0.4	0.2	-	0.7	5.9	2.6	0.2	2.9
1/2	449	449	-	-	-	0.5	0.3	-	0.7	5.9	3.0	0.3	3.2
1/3	2	2	-	-	-	0.0	0.0	-	0.0	4.6	0.0	0.0	0.0
2/1+2/2	47	47	94	0	0	0.0	0.0	-	0.0	2.8	0.0	0.0	0.1
3/2+3/1	709	709	-	-	-	0.5	0.3	-	0.8	4.3	1.9	0.3	2.2
3/3	97	97	-	-	-	0.1	0.0	-	0.1	3.7	0.4	0.0	0.5
4/2+4/1	70	70	140	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.1
5/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	19	19	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	116	116	-	-	-	0.6	0.3	-	0.9	28.5	1.6	0.3	1.9
8/2	118	118	-	-	-	0.6	0.3	-	0.9	28.5	1.6	0.3	1.9
9/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.1	30.1	0.1	0.0	0.1
10/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	97	97	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	91	91	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**199**	**0**	**0**	**0.0**	**0.1**	**0.0**	**0.1**	**-**	**-**	**-**	**-**
1/1	72	72	72	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
2/1+2/2	28	28	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	133	133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	138	138	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	47	47	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	127	127	127	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	91	91	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

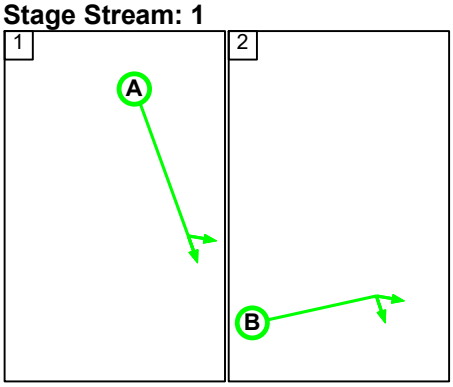
C1	Stream: 1 PRC for Signalled Lanes (%):	146.7	Total Delay for Signalled Lanes (pcuHr):	3.25	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	132.0	Total Delay for Signalled Lanes (pcuHr):	1.01	Cycle Time (s):	60
	PRC Over All Lanes (%):	132.0	Total Delay Over All Lanes(pcuHr):	4.48		

Full Input Data And Results

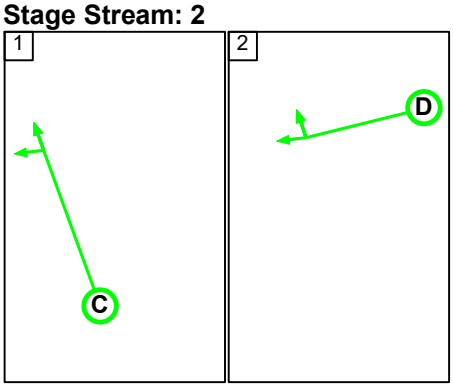
Scenario 2: 'Base 07:00-08:00' (FG47: 'New Base 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

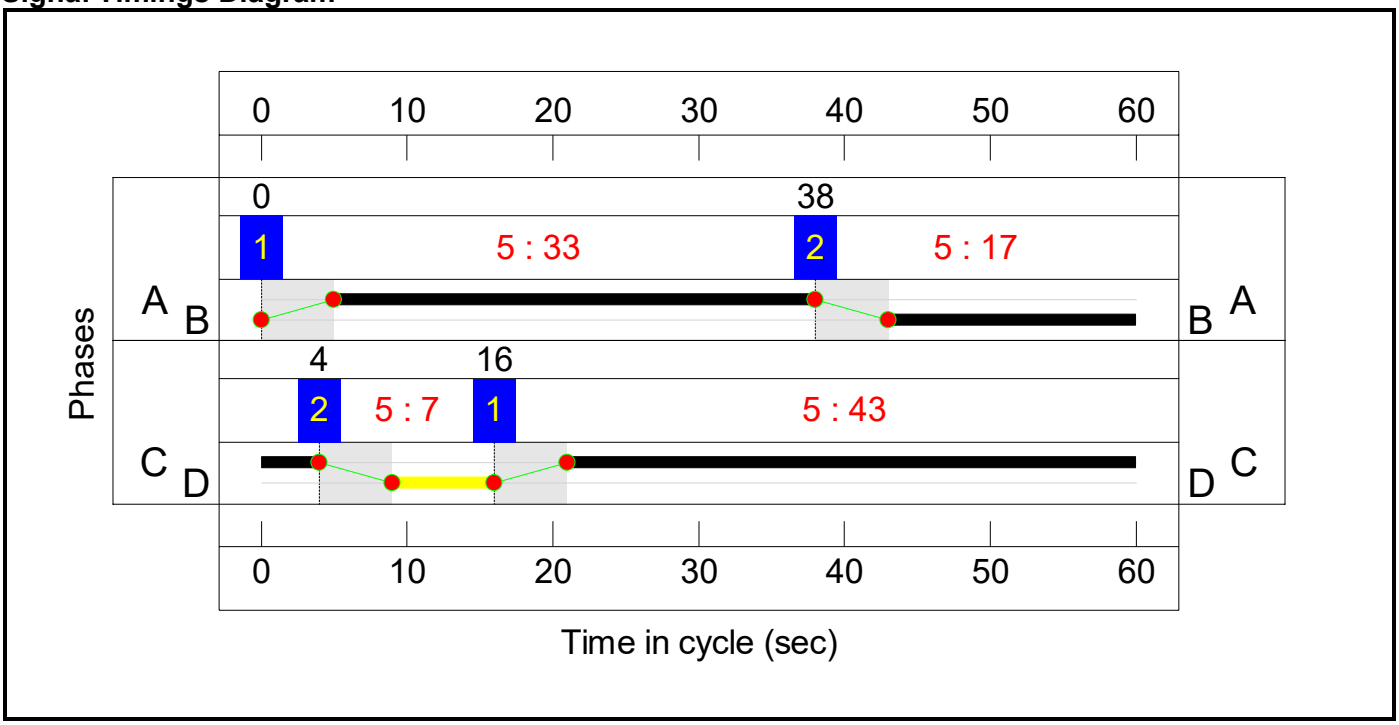
Stage	1	2
Duration	33	17
Change Point	0	38

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	16	4

Full Input Data And Results

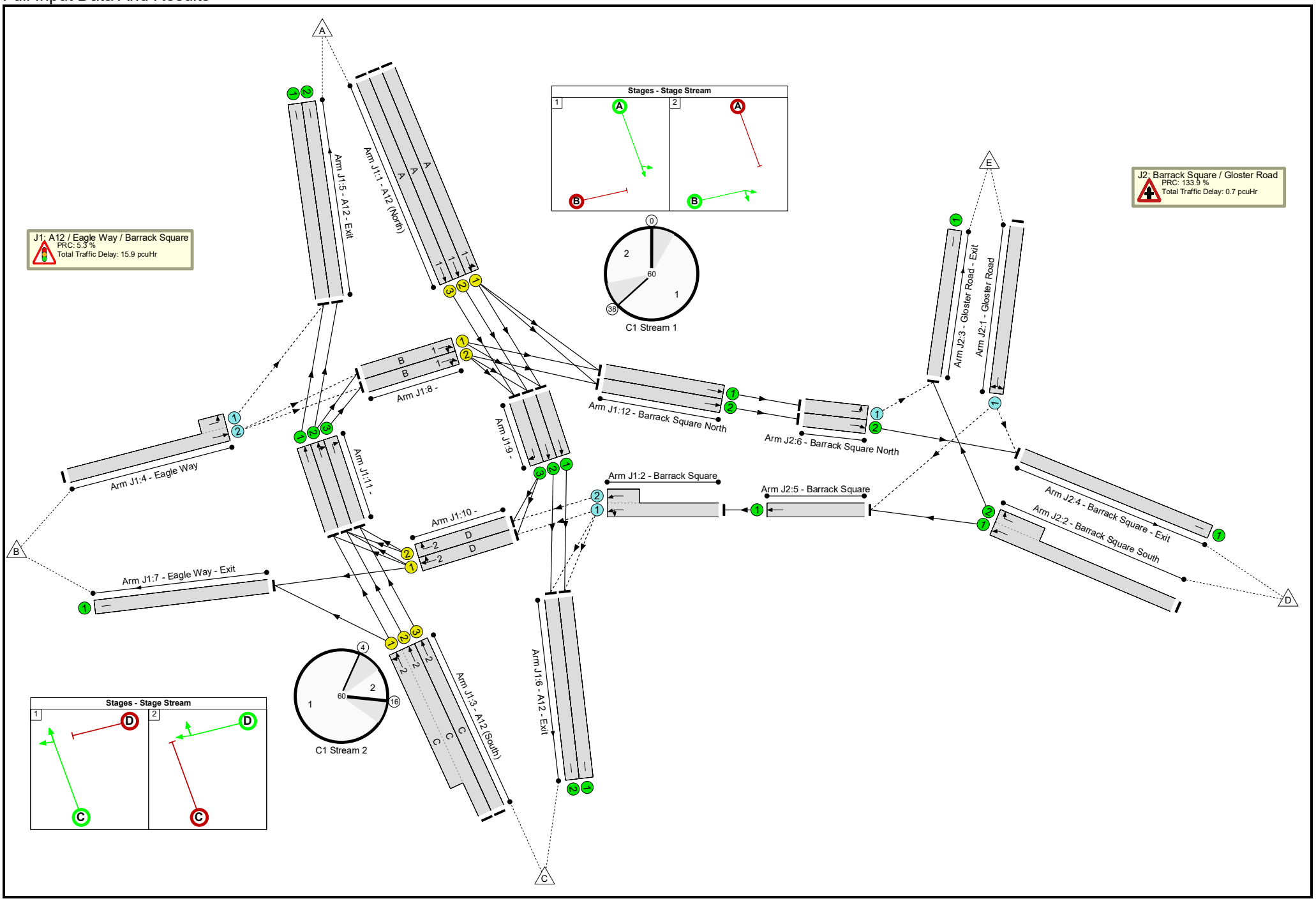
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.4%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.4%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	33	-	675	1835	1040	64.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	33	-	735	1958	1110	66.2%
1/3	A12 (North) Ahead	U	1	N/A	A		1	33	-	3	1828	1036	0.3%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	194	1994:1862	544+56	32.3 : 32.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1562	1828:1828	914+914	85.4 : 85.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	303	1828	1341	22.6%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	178	Inf :1821	439+149	30.3 : 30.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	747	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	44	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	17	-	315	1764	529	59.5%
8/2	Right Ahead	U	1	N/A	B		1	17	-	353	1764	529	66.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	819	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	3	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	17	1764	235	7.2%
10/2	Right	U	2	N/A	D		1	7	-	18	1764	235	7.7%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	307	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**38.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	212	Inf	551	38.5%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	28	1800:1800	1479+321	1.6 : 1.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	328	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	307	Inf	998	30.8%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1263**	**0**	**0**	**8.8**	**7.7**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**744**	**0**	**0**	**8.7**	**7.2**	**0.0**	**15.9**	**-**	**-**	**-**	**-**
1/1	675	675	-	-	-	1.7	0.9	-	2.6	13.8	7.7	0.9	8.6
1/2	735	735	-	-	-	1.8	1.0	-	2.8	13.8	8.4	1.0	9.3
1/3	3	3	-	-	-	0.0	0.0	-	0.0	7.6	0.0	0.0	0.0
2/1+2/2	194	194	388	0	0	0.1	0.2	-	0.4	7.1	1.1	0.2	1.4
3/2+3/1	1562	1562	-	-	-	1.6	2.9	-	4.5	10.3	5.9	2.9	8.7
3/3	303	303	-	-	-	0.2	0.1	-	0.4	4.3	1.6	0.1	1.7
4/2+4/1	178	178	356	0	0	0.1	0.2	-	0.3	6.5	0.7	0.2	1.0
5/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	44	44	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	315	315	-	-	-	1.3	0.7	-	2.0	23.2	4.1	0.7	4.8
8/2	353	353	-	-	-	1.6	1.0	-	2.6	26.1	5.0	1.0	6.0
9/1	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	3	3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	17	17	-	-	-	0.1	0.0	-	0.1	30.8	0.2	0.0	0.3
10/2	18	18	-	-	-	0.1	0.0	-	0.1	29.7	0.3	0.0	0.3
11/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	800	800	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	303	303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**519**	**0**	**0**	**0.1**	**0.5**	**0.0**	**0.7**	**-**	**-**	**-**	**-**
1/1	212	212	212	0	0	0.0	0.3	-	0.3	5.3	0.0	0.3	0.3
2/1+2/2	28	28	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	328	328	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	307	307	307	0	0	0.1	0.2	-	0.3	4.0	4.0	0.2	4.3
6/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

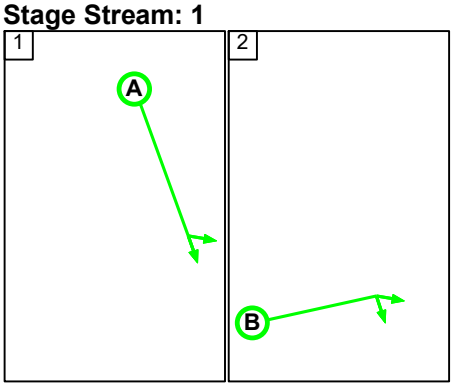
C1	Stream: 1 PRC for Signalled Lanes (%):	34.9	Total Delay for Signalled Lanes (pcuHr):	10.00	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	5.3	Total Delay for Signalled Lanes (pcuHr):	5.15	Cycle Time (s): 60
	PRC Over All Lanes (%):	5.3	Total Delay Over All Lanes(pcuHr):	16.51	

Full Input Data And Results

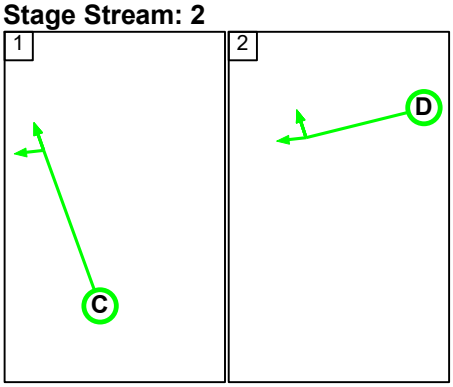
Scenario 3: 'Base 08:00-09:00' (FG48: 'New Base 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

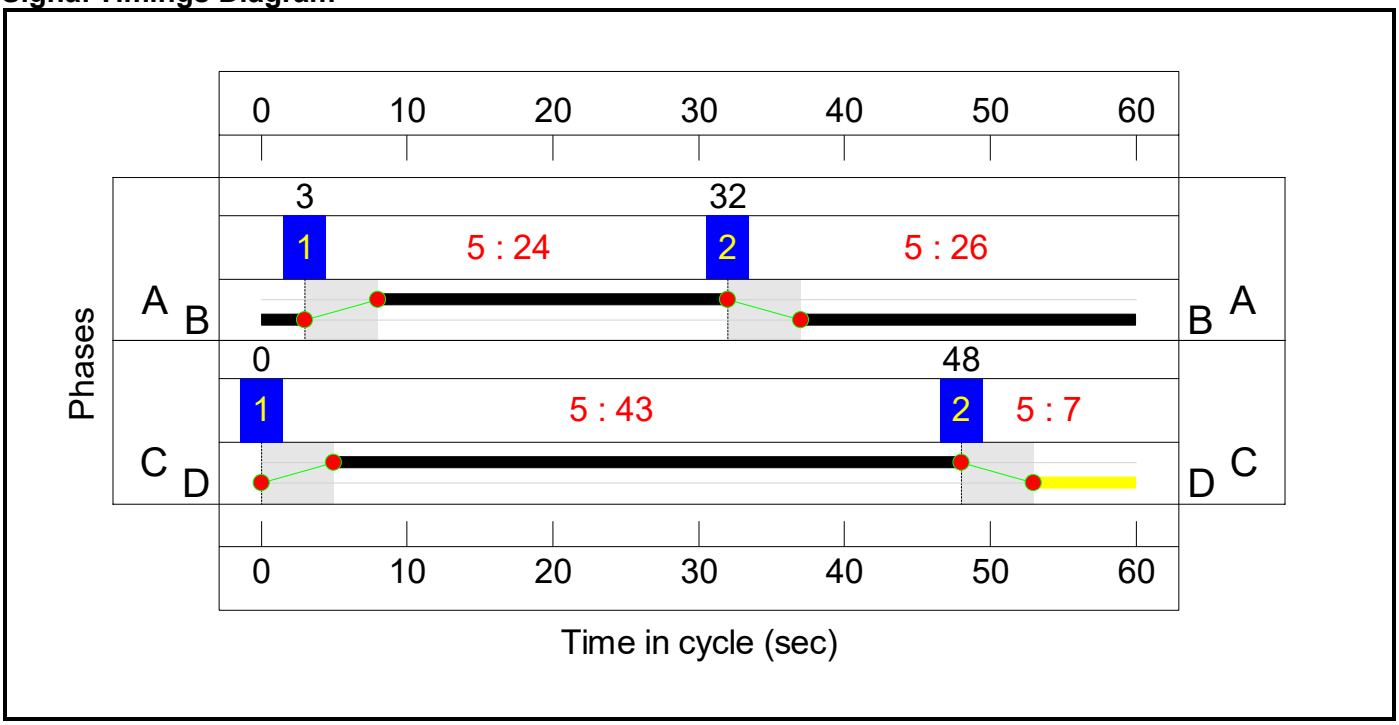
Stage	1	2
Duration	24	26
Change Point	3	32

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	0	48

Full Input Data And Results

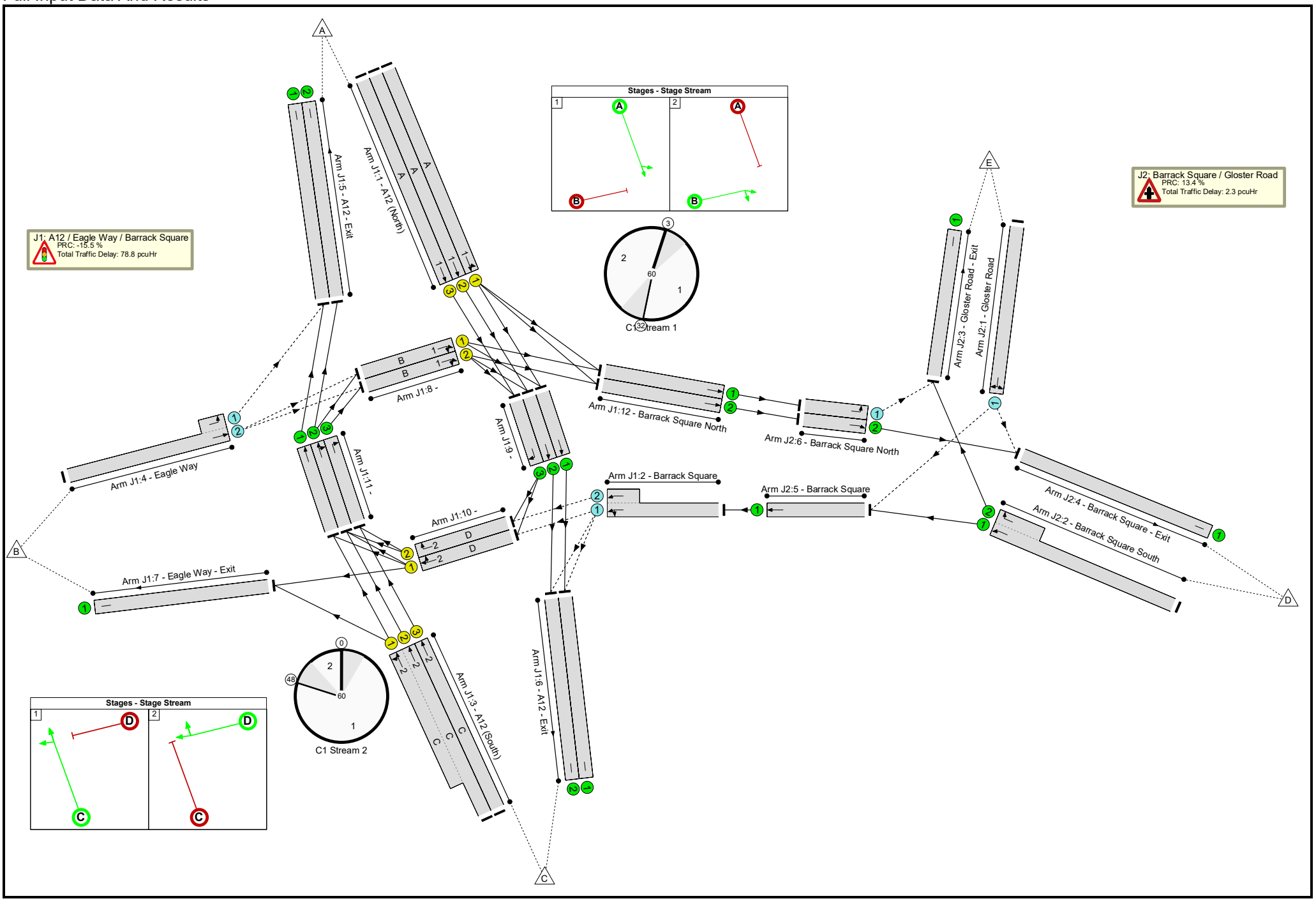
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	24	-	713	1837	765	93.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	24	-	769	1958	816	94.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	24	-	18	1828	762	2.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	379	1994:1862	539+43	65.2 : 65.2%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1900	1828:1828	914+914	103.9 : 103.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	537	1828	1341	40.1%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	197	Inf :1821	339+121	42.8 : 42.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	935	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	708	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	855	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1044	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	102	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	26	-	336	1764	794	41.0%
8/2	Right Ahead	U	1	N/A	B		1	26	-	616	1764	794	77.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	877	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	18	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	35	1764	235	14.9%
10/2	Right	U	2	N/A	D		1	7	-	28	1764	235	11.9%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	883	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	978	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**79.4%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	387	Inf	488	79.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	68	1800:1800	1562+238	3.8 : 3.8%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	599	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	337	Inf	997	32.8%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1866**	**0**	**0**	**16.8**	**64.3**	**0.0**	**81.1**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1152**	**0**	**0**	**16.6**	**62.2**	**0.0**	**78.8**	**-**	**-**	**-**	**-**
1/1	713	713	-	-	-	3.3	5.6	-	8.9	45.0	11.3	5.6	16.9
1/2	769	769	-	-	-	3.6	6.4	-	10.0	47.0	12.2	6.4	18.6
1/3	18	18	-	-	-	0.1	0.0	-	0.1	12.9	0.2	0.0	0.2
2/1+2/2	379	379	758	0	0	0.9	0.9	-	1.9	17.6	4.3	0.9	5.2
3/2+3/1	1900	1828	-	-	-	4.9	46.3	-	51.1	96.9	42.0	46.3	88.2
3/3	537	537	-	-	-	0.5	0.3	-	0.8	5.3	3.3	0.3	3.6
4/2+4/1	197	197	394	0	0	0.3	0.4	-	0.7	13.1	1.8	0.4	2.1
5/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	682	682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1044	1044	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	99	99	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	326	326	-	-	-	0.7	0.3	-	1.1	11.7	3.5	0.3	3.8
8/2	616	616	-	-	-	2.0	1.7	-	3.7	21.7	8.6	1.7	10.3
9/1	688	688	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	877	877	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	18	18	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	35	35	-	-	-	0.2	0.1	-	0.3	31.7	0.5	0.1	0.6
10/2	28	28	-	-	-	0.1	0.1	-	0.2	26.2	0.4	0.1	0.5
11/1	850	850	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	942	942	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**714**	**0**	**0**	**0.2**	**2.1**	**0.0**	**2.3**	**-**	**-**	**-**	**-**
1/1	387	387	387	0	0	0.1	1.9	-	2.0	18.3	3.1	1.9	5.0
2/1+2/2	68	68	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	327	327	327	0	0	0.1	0.2	-	0.3	3.7	3.4	0.2	3.7
6/2	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

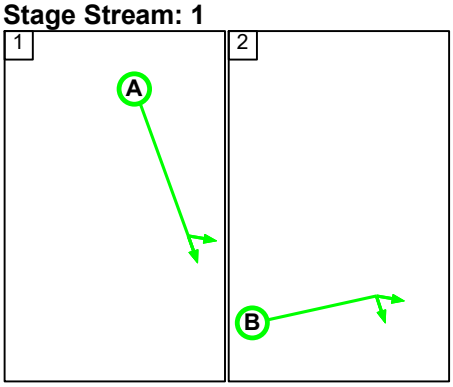
C1	Stream: 1 PRC for Signalled Lanes (%):	-4.7	Total Delay for Signalled Lanes (pcuHr):	23.78	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-15.5	Total Delay for Signalled Lanes (pcuHr):	52.42	Cycle Time (s):	60
	PRC Over All Lanes (%):	-15.5	Total Delay Over All Lanes(pcuHr):	81.09		

Full Input Data And Results

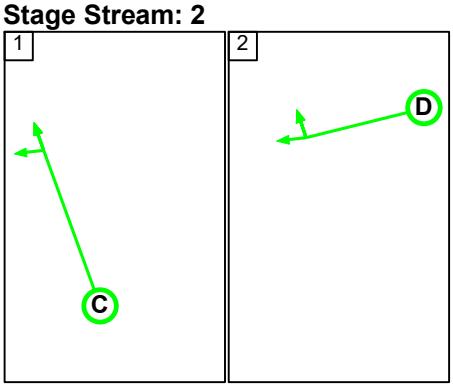
Scenario 4: 'Base 15:00-16:00' (FG49: 'New Base 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

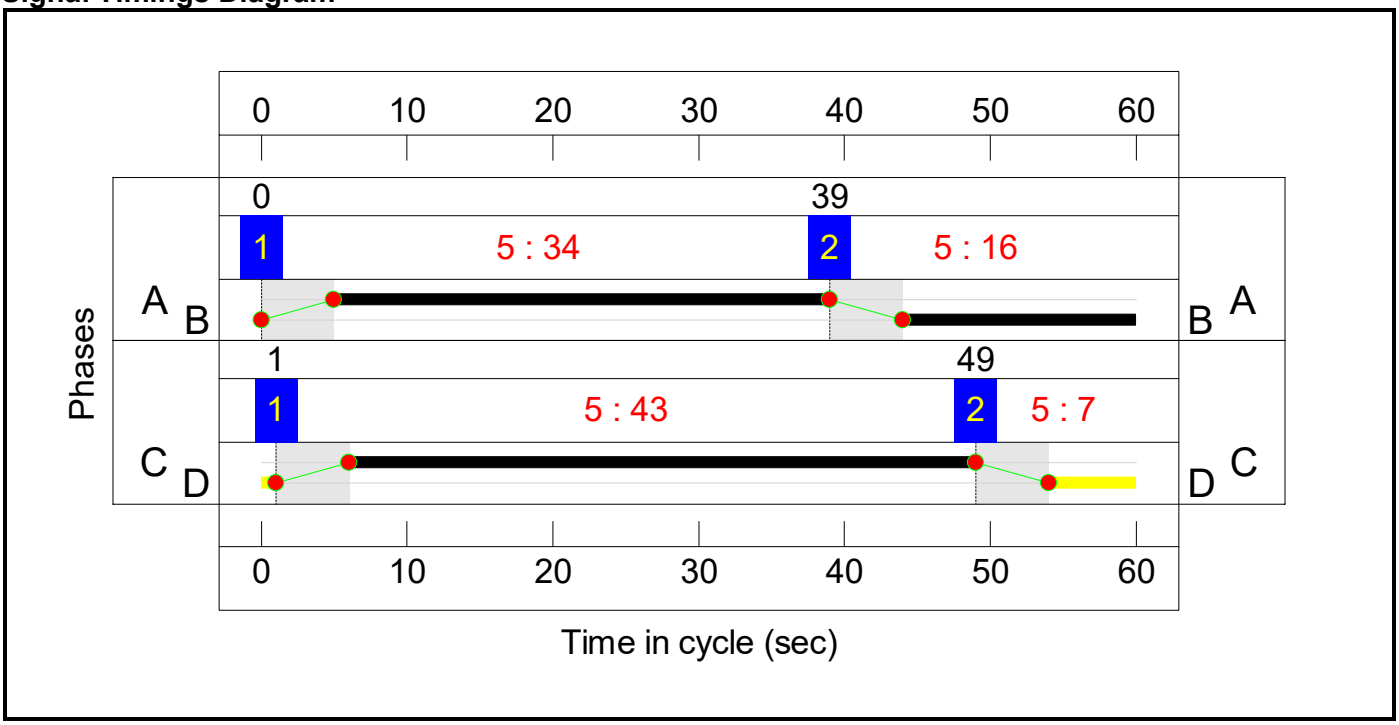
Stage	1	2
Duration	34	16
Change Point	0	39

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	1	49

Full Input Data And Results

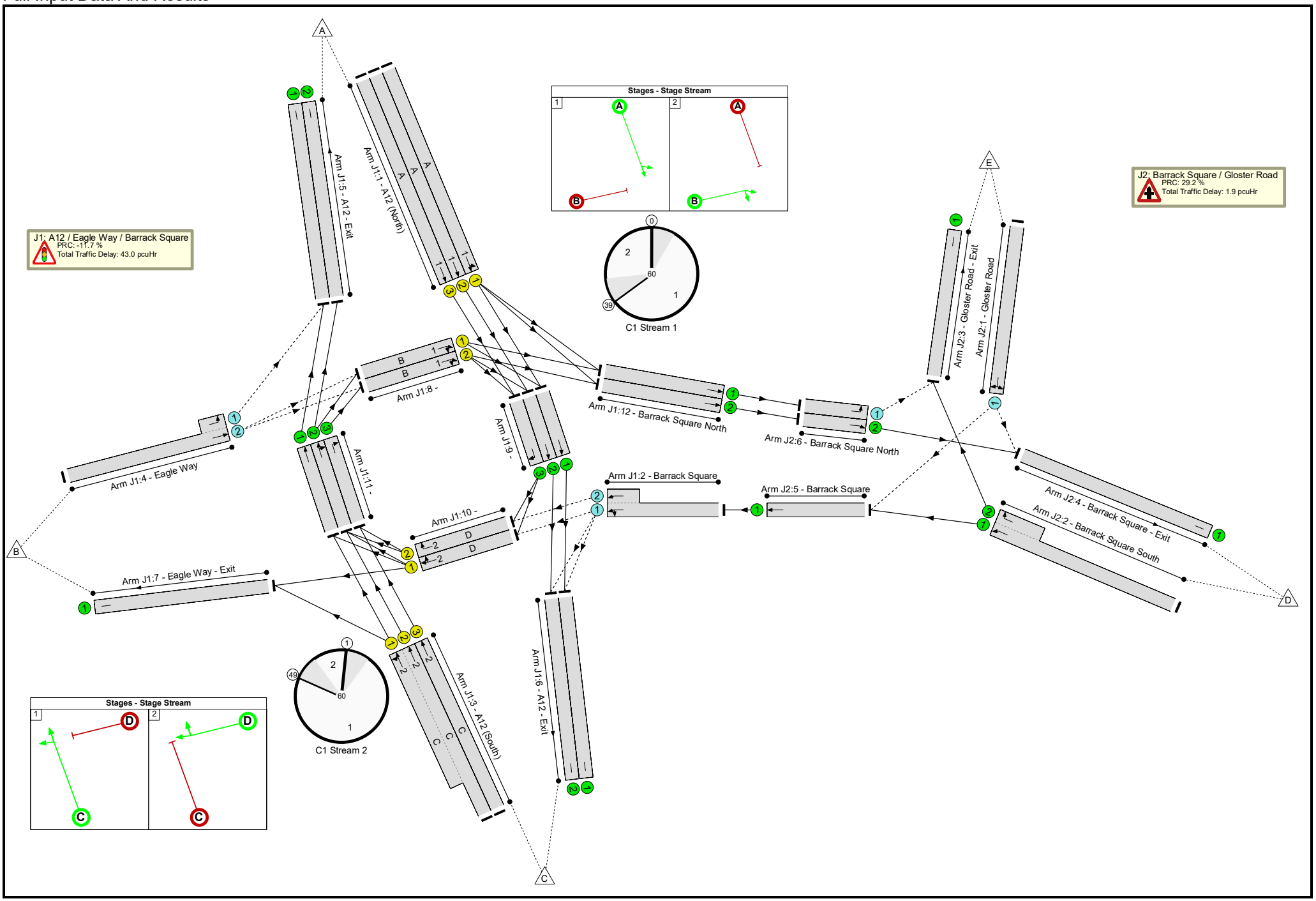
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.5%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.5%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	34	-	674	1836	1071	62.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	34	-	735	1958	1142	64.4%
1/3	A12 (North) Ahead	U	1	N/A	A		1	34	-	48	1828	1066	4.5%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	611	1994:1862	543+130	90.9 : 90.9%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1838	1828:1828	914+914	100.5 : 100.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	84	1828	1341	6.3%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	175	Inf :1821	391+184	30.4 : 30.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	883	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	772	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	862	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1050	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	171	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	16	-	346	1764	500	68.9%
8/2	Right Ahead	U	1	N/A	B		1	16	-	122	1764	500	24.4%
9/1	Ahead	U	N/A	N/A	-		-	-	-	630	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	820	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	48	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	79	1764	235	33.6%
10/2	Right	U	2	N/A	D		1	7	-	118	1764	235	50.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	827	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1037	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	84	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	377	Inf	541	69.7%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	297	1800:1800	1521+279	16.5 : 16.5%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	436	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	390	Inf	985	39.5%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2338**	**0**	**0**	**10.9**	**34.0**	**0.0**	**44.9**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1572**	**0**	**0**	**10.6**	**32.5**	**0.0**	**43.0**	**-**	**-**	**-**	**-**
1/1	674	674	-	-	-	1.5	0.8	-	2.4	12.7	7.3	0.8	8.1
1/2	735	735	-	-	-	1.7	0.9	-	2.6	12.7	8.2	0.9	9.1
1/3	48	48	-	-	-	0.1	0.0	-	0.1	7.2	0.3	0.0	0.4
2/1+2/2	611	611	1222	0	0	1.3	4.4	-	5.7	33.5	7.3	4.4	11.6
3/2+3/1	1838	1828	-	-	-	2.5	24.1	-	26.6	52.1	40.1	24.1	64.1
3/3	84	84	-	-	-	0.1	0.0	-	0.1	3.7	0.4	0.0	0.4
4/2+4/1	175	175	350	0	0	0.1	0.2	-	0.3	7.2	0.8	0.2	1.0
5/1	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	768	768	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	862	862	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1050	1050	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	345	345	-	-	-	1.5	1.1	-	2.6	26.6	5.1	1.1	6.2
8/2	122	122	-	-	-	0.5	0.2	-	0.6	18.9	1.5	0.2	1.7
9/1	630	630	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	820	820	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	48	48	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	79	79	-	-	-	0.6	0.3	-	0.8	37.1	1.2	0.3	1.5
10/2	118	118	-	-	-	0.7	0.5	-	1.2	37.1	1.8	0.5	2.3
11/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	84	84	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**766**	**0**	**0**	**0.3**	**1.6**	**0.0**	**1.9**	**-**	**-**	**-**	**-**
1/1	377	377	377	0	0	0.0	1.1	-	1.1	10.8	0.0	1.1	1.1
2/1+2/2	297	297	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	389	389	389	0	0	0.3	0.3	-	0.6	5.8	5.3	0.3	5.6
6/2	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

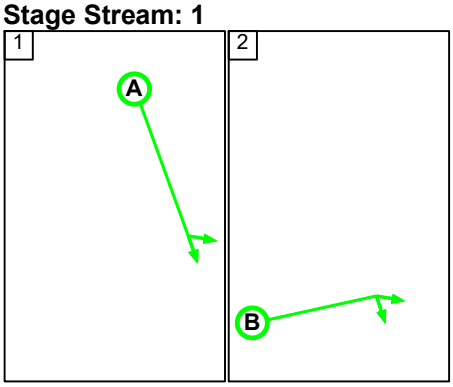
C1	Stream: 1 PRC for Signalled Lanes (%):	30.5	Total Delay for Signalled Lanes (pcuHr):	8.27	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-11.7	Total Delay for Signalled Lanes (pcuHr):	28.74	Cycle Time (s): 60
	PRC Over All Lanes (%):	-11.7	Total Delay Over All Lanes(pcuHr):	44.90	

Full Input Data And Results

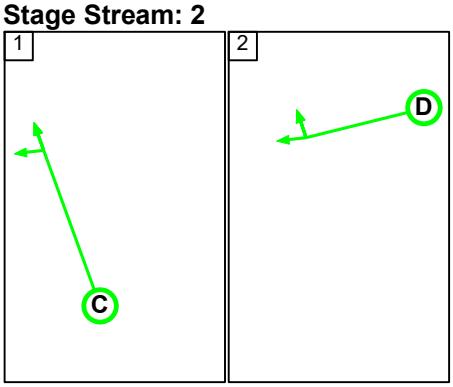
Scenario 5: 'Base 17:00-18:00' (FG50: 'New Base 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

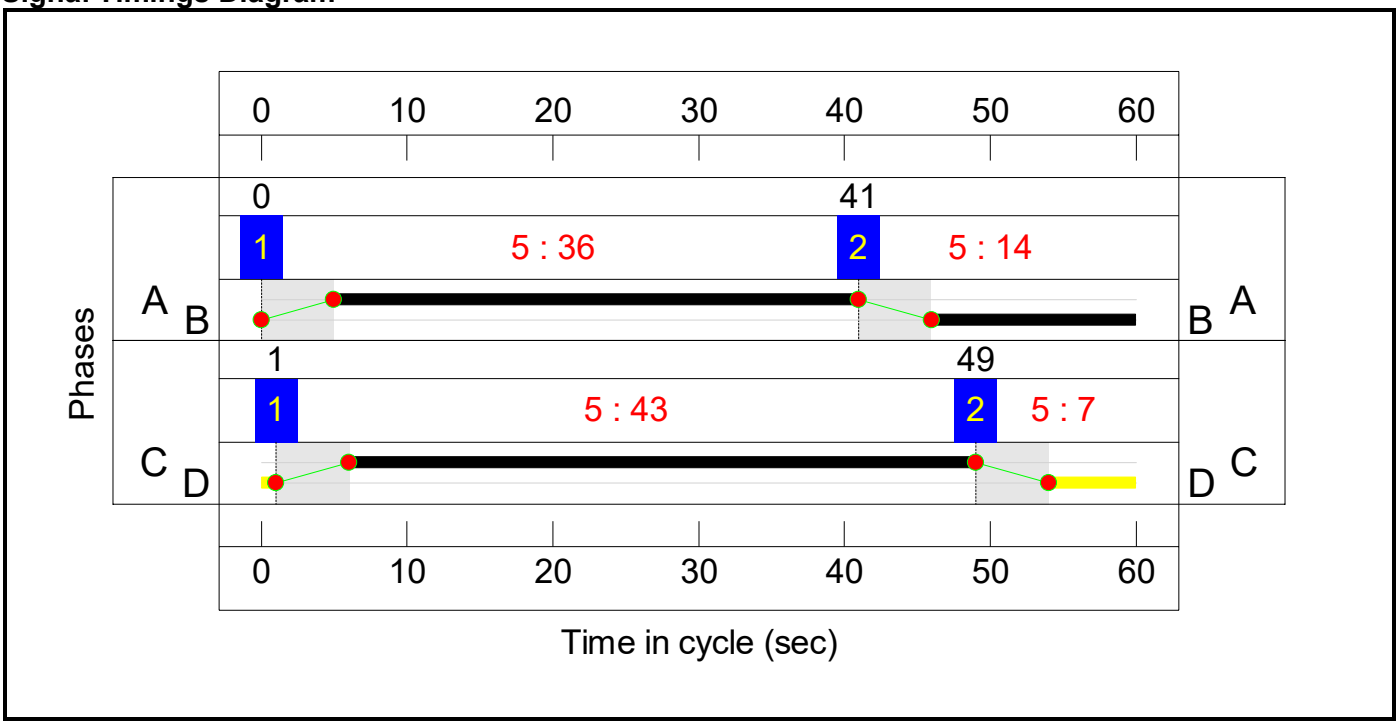
Stage	1	2
Duration	36	14
Change Point	0	41

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	1	49

Full Input Data And Results

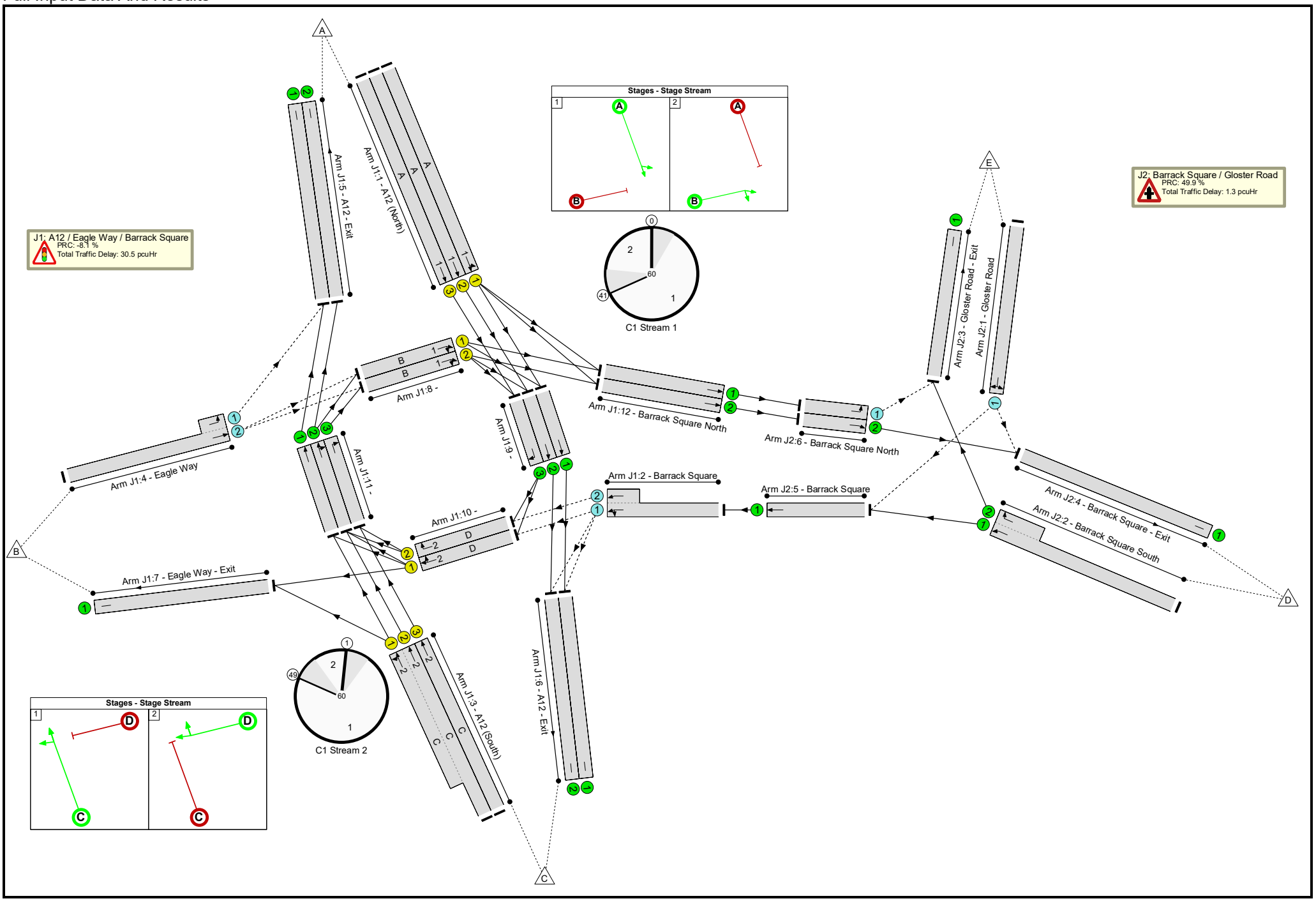
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.3%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.3%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	36	-	674	1837	1133	59.5%
1/2	A12 (North) Ahead	U	1	N/A	A		1	36	-	737	1958	1207	61.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	36	-	60	1828	1127	5.3%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	604	1994:1862	535+113	93.3 : 93.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1778	1828:1828	914+914	97.3 : 97.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	75	1828	1341	5.6%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	140	Inf :1821	418+167	23.9 : 23.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	799	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	781	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	852	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	236	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	14	-	275	1764	441	62.4%
8/2	Right Ahead	U	1	N/A	B		1	14	-	113	1764	441	25.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	106	1764	235	45.1%
10/2	Right	U	2	N/A	D		1	7	-	105	1764	235	44.6%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	759	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	323	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.0%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	321	Inf	535	60.0%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	323	1800:1800	1611+189	17.9 : 17.9%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	34	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	323	Inf	988	32.7%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2132**	**0**	**0**	**9.6**	**22.2**	**0.0**	**31.8**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1488**	**0**	**0**	**9.5**	**21.1**	**0.0**	**30.5**	**-**	**-**	**-**	**-**
1/1	674	674	-	-	-	1.3	0.7	-	2.0	10.9	6.7	0.7	7.5
1/2	737	737	-	-	-	1.4	0.8	-	2.2	10.9	7.4	0.8	8.2
1/3	60	60	-	-	-	0.1	0.0	-	0.1	6.3	0.4	0.0	0.4
2/1+2/2	604	604	1208	0	0	1.3	5.5	-	6.9	40.9	7.6	5.5	13.1
3/2+3/1	1778	1778	-	-	-	2.1	12.0	-	14.1	28.5	7.7	12.0	19.7
3/3	75	75	-	-	-	0.0	0.0	-	0.1	3.7	0.3	0.0	0.4
4/2+4/1	140	140	280	0	0	0.1	0.2	-	0.2	6.0	0.5	0.2	0.7
5/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	781	781	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	852	852	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	236	236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	275	275	-	-	-	1.2	0.8	-	2.1	27.0	4.0	0.8	4.9
8/2	113	113	-	-	-	0.5	0.2	-	0.7	21.3	1.5	0.2	1.7
9/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	106	106	-	-	-	0.7	0.4	-	1.2	39.3	1.7	0.4	2.1
10/2	105	105	-	-	-	0.6	0.4	-	1.0	35.9	1.6	0.4	2.0
11/1	759	759	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	994	994	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	75	75	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	28	28	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**644**	**0**	**0**	**0.2**	**1.1**	**0.0**	**1.3**	**-**	**-**	**-**	**-**
1/1	321	321	321	0	0	0.0	0.7	-	0.7	8.4	0.0	0.7	0.7
2/1+2/2	323	323	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	34	34	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	323	323	323	0	0	0.2	0.2	-	0.4	4.5	4.1	0.2	4.4
6/2	28	28	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

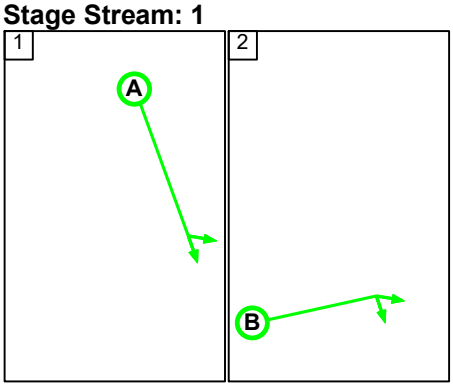
C1	Stream: 1 PRC for Signalled Lanes (%):	44.3	Total Delay for Signalled Lanes (pcuHr):	7.10	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-8.1	Total Delay for Signalled Lanes (pcuHr):	16.34	Cycle Time (s):	60
	PRC Over All Lanes (%):	-8.1	Total Delay Over All Lanes(pcuHr):	31.79		

Full Input Data And Results

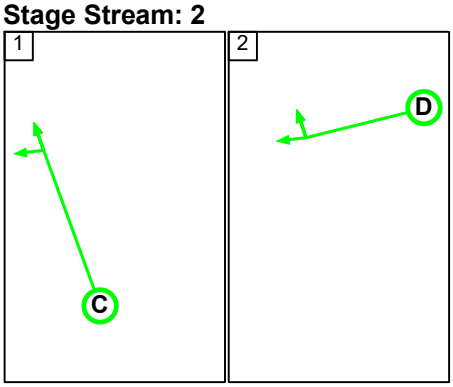
Scenario 6: '28RC 06:00-07:00' (FG76: '28RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

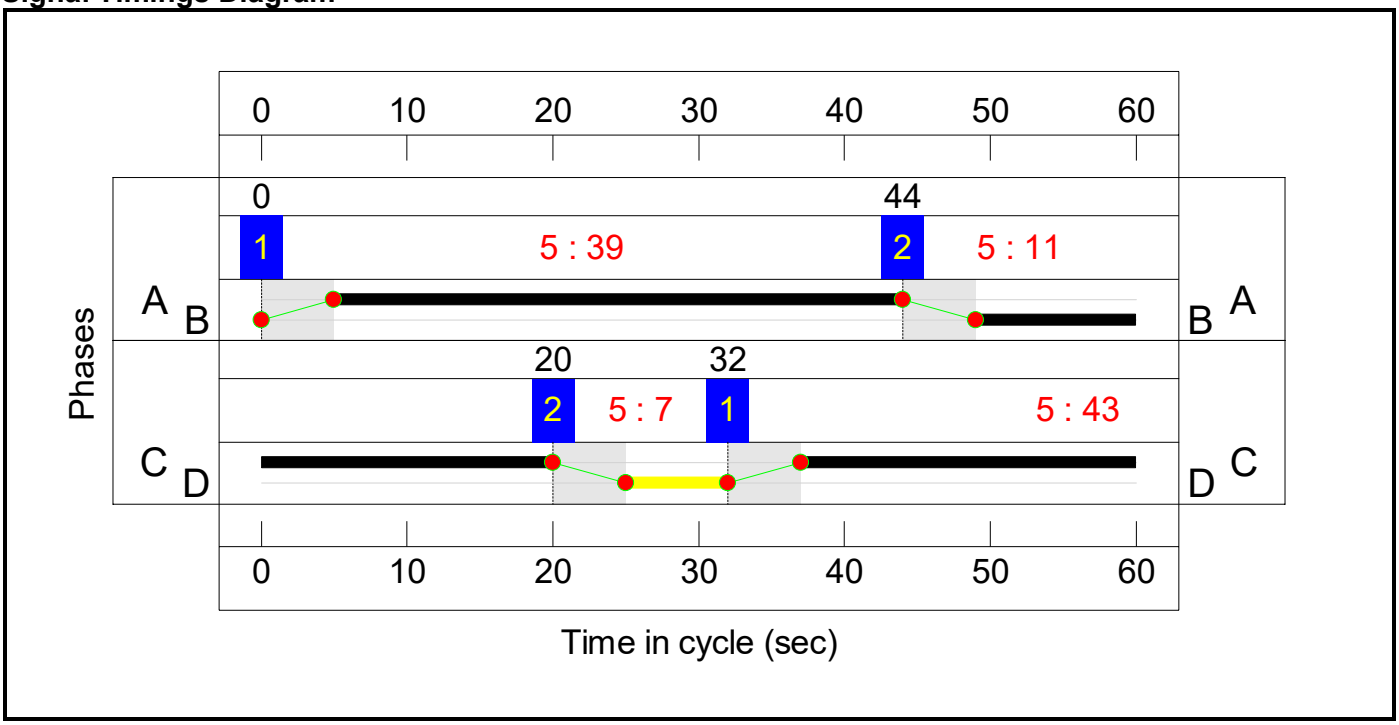
Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	32	20

Full Input Data And Results

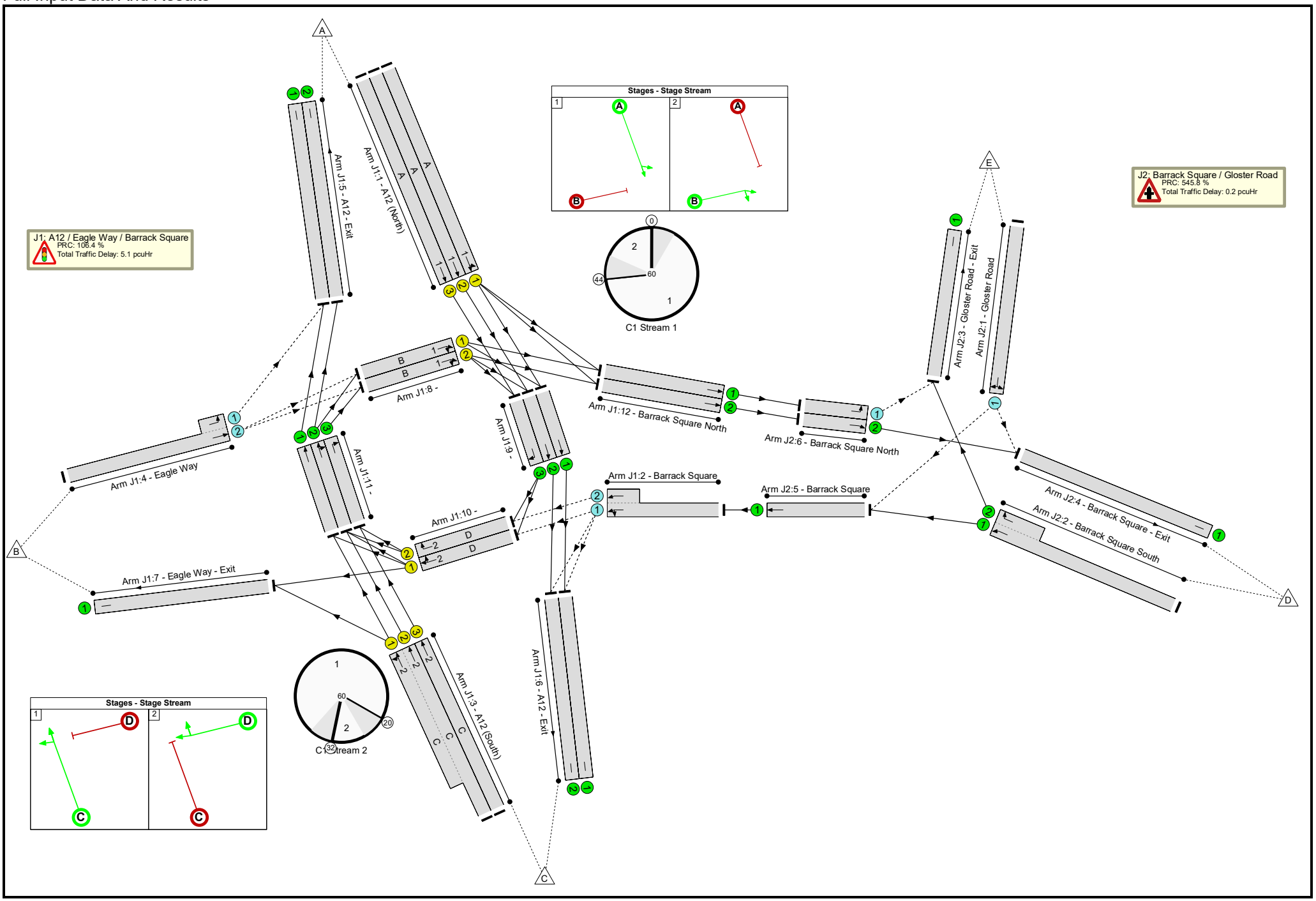
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.6%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.6%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	39	-	438	1841	1227	35.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	39	-	490	1958	1305	37.5%
1/3	A12 (North) Ahead	U	1	N/A	A		1	39	-	2	1828	1219	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	60	1994:1862	688+49	8.1 : 8.1%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	797	1828:1828	915+913	43.6 : 43.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	109	1828	1341	8.1%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	87	Inf :1821	705+171	9.9 : 9.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	313	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	561	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	11	-	134	1764	353	38.0%
8/2	Right Ahead	U	1	N/A	B		1	11	-	135	1764	353	38.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	538	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	11	1764	235	4.7%
10/2	Right	U	2	N/A	D		1	7	-	4	1764	235	1.7%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	386	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	139	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**13.9%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	78	Inf	644	12.1%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	40	1800:1800	1485+315	2.2 : 2.2%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	146	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	139	Inf	997	13.9%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**511**	**0**	**0**	**3.4**	**1.9**	**0.0**	**5.3**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**294**	**0**	**0**	**3.4**	**1.8**	**0.0**	**5.1**	**-**	**-**	**-**	**-**
1/1	438	438	-	-	-	0.5	0.3	-	0.8	6.7	3.2	0.3	3.4
1/2	490	490	-	-	-	0.6	0.3	-	0.9	6.7	3.5	0.3	3.8
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.0	0.0	0.0	0.0
2/1+2/2	60	60	120	0	0	0.0	0.0	-	0.0	2.8	0.1	0.0	0.1
3/2+3/1	797	797	-	-	-	0.6	0.4	-	1.0	4.5	2.2	0.4	2.6
3/3	109	109	-	-	-	0.1	0.0	-	0.1	3.7	0.5	0.0	0.6
4/2+4/1	87	87	174	0	0	0.0	0.1	-	0.1	2.4	0.1	0.1	0.1
5/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	313	313	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	134	134	-	-	-	0.7	0.3	-	1.0	27.9	1.7	0.3	2.0
8/2	135	135	-	-	-	0.7	0.3	-	1.0	27.7	1.7	0.3	2.1
9/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	538	538	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	11	11	-	-	-	0.1	0.0	-	0.1	30.3	0.2	0.0	0.2
10/2	4	4	-	-	-	0.0	0.0	-	0.0	30.7	0.1	0.0	0.1
11/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	139	139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**217**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	78	78	78	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	40	40	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	146	146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	139	139	139	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

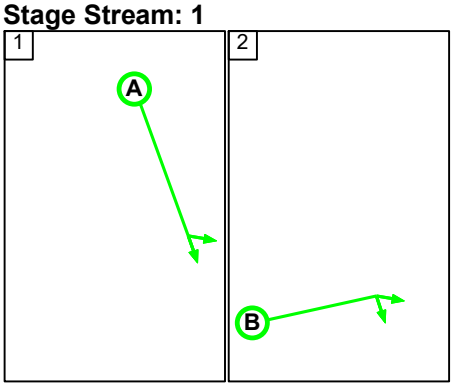
C1	Stream: 1 PRC for Signalled Lanes (%):	135.2	Total Delay for Signalled Lanes (pcuHr):	3.80	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	106.4	Total Delay for Signalled Lanes (pcuHr):	1.23	Cycle Time (s):	60
	PRC Over All Lanes (%):	106.4	Total Delay Over All Lanes(pcuHr):	5.29		

Full Input Data And Results

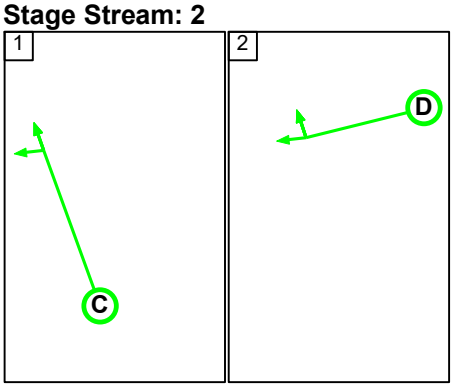
Scenario 7: '28RC 07:00-08:00' (FG77: '28RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

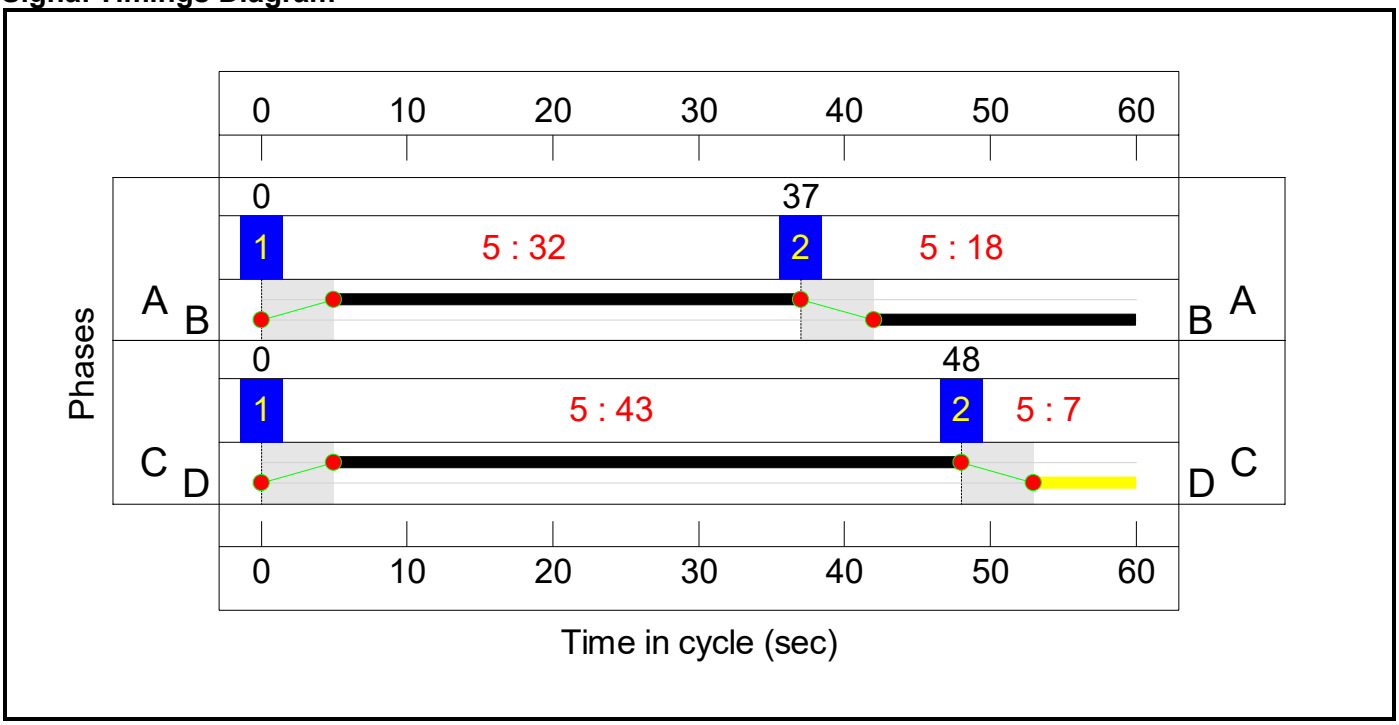
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	0	48

Full Input Data And Results

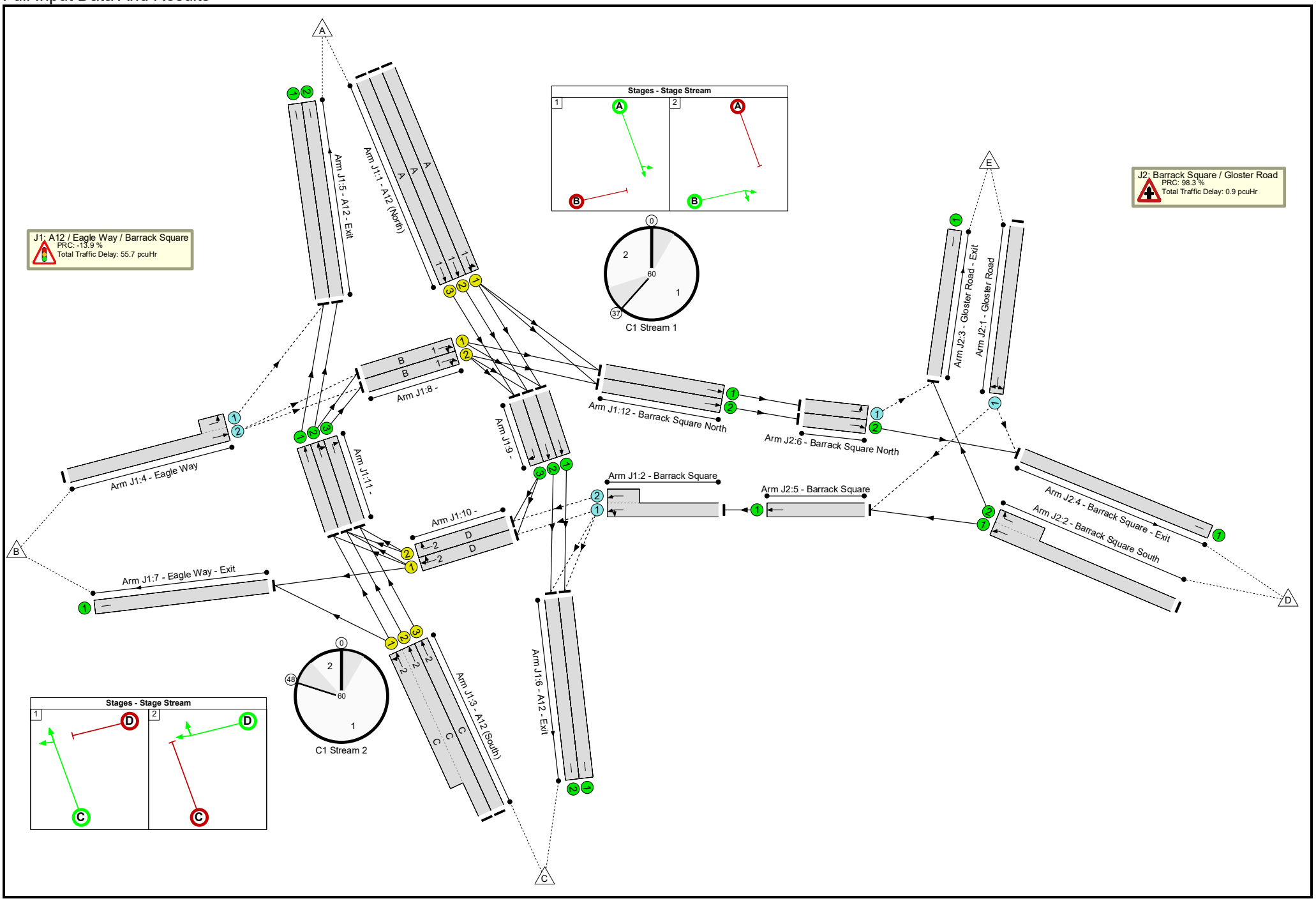
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.5%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.5%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	740	1838	1011	73.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	802	1958	1077	74.5%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	4	1828	1005	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	304	1994:1862	503+116	49.1 : 49.1%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1874	1828:1828	914+914	102.5 : 102.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	348	1828	1341	26.0%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	226	Inf :1821	342+102	50.9 : 50.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	754	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	835	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	991	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	375	1764	559	66.0%
8/2	Right Ahead	U	1	N/A	B		1	18	-	405	1764	559	72.5%
9/1	Ahead	U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	895	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	57	1764	235	24.2%
10/2	Right	U	2	N/A	D		1	7	-	57	1764	235	24.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	921	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1012	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**45.4%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	237	Inf	522	45.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	119	1800:1800	1709+91	6.6 : 6.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	342	Inf	998	33.6%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1633**	**0**	**0**	**13.3**	**43.3**	**0.0**	**56.5**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1060**	**0**	**0**	**13.1**	**42.6**	**0.0**	**55.7**	**-**	**-**	**-**	**-**
1/1	740	740	-	-	-	2.1	1.4	-	3.4	16.8	9.3	1.4	10.6
1/2	802	802	-	-	-	2.3	1.4	-	3.7	16.8	10.0	1.4	11.5
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.1	0.0	0.0	0.0
2/1+2/2	304	304	608	0	0	0.4	0.5	-	0.9	10.6	2.3	0.5	2.7
3/2+3/1	1874	1828	-	-	-	3.9	36.0	-	39.9	76.6	41.2	36.0	77.2
3/3	348	348	-	-	-	0.3	0.2	-	0.4	4.5	1.8	0.2	2.0
4/2+4/1	226	226	452	0	0	0.4	0.5	-	0.9	14.2	2.1	0.5	2.6
5/1	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	369	369	-	-	-	1.4	1.0	-	2.4	23.3	5.0	1.0	6.0
8/2	405	405	-	-	-	1.8	1.3	-	3.0	27.1	5.9	1.3	7.2
9/1	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	895	895	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	57	57	-	-	-	0.3	0.2	-	0.5	28.7	0.8	0.2	1.0
10/2	57	57	-	-	-	0.3	0.2	-	0.5	30.6	0.8	0.2	1.0
11/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	989	989	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**573**	**0**	**0**	**0.2**	**0.7**	**0.0**	**0.9**	**-**	**-**	**-**	**-**
1/1	237	237	237	0	0	0.0	0.4	-	0.4	6.3	0.0	0.4	0.4
2/1+2/2	119	119	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	336	336	336	0	0	0.2	0.3	-	0.4	4.5	4.5	0.3	4.7
6/2	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

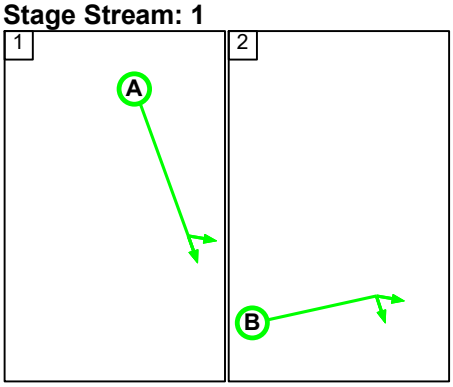
C1	Stream: 1 PRC for Signalled Lanes (%):	20.8	Total Delay for Signalled Lanes (pcuHr):	12.63	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-13.9	Total Delay for Signalled Lanes (pcuHr):	41.27	Cycle Time (s):	60
	PRC Over All Lanes (%):	-13.9	Total Delay Over All Lanes(pcuHr):	56.54		

Full Input Data And Results

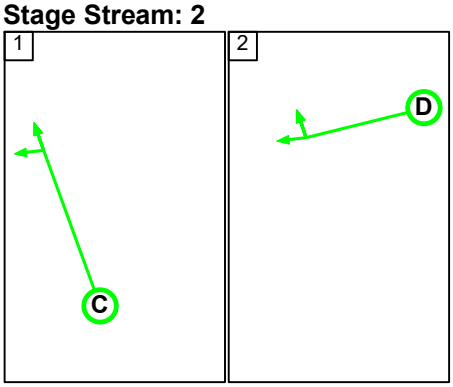
Scenario 8: '28RC 08:00-09:00' (FG78: '28RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

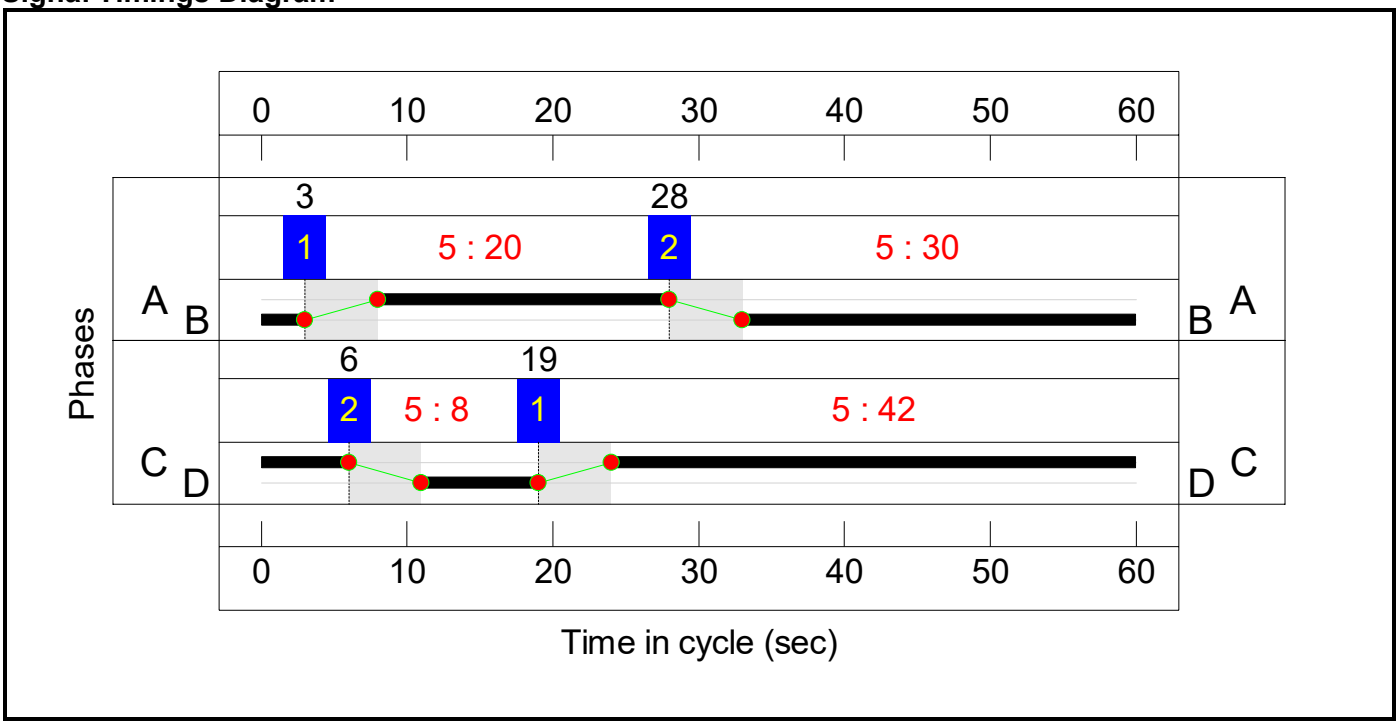
Stage	1	2
Duration	20	30
Change Point	3	28

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	19	6

Full Input Data And Results

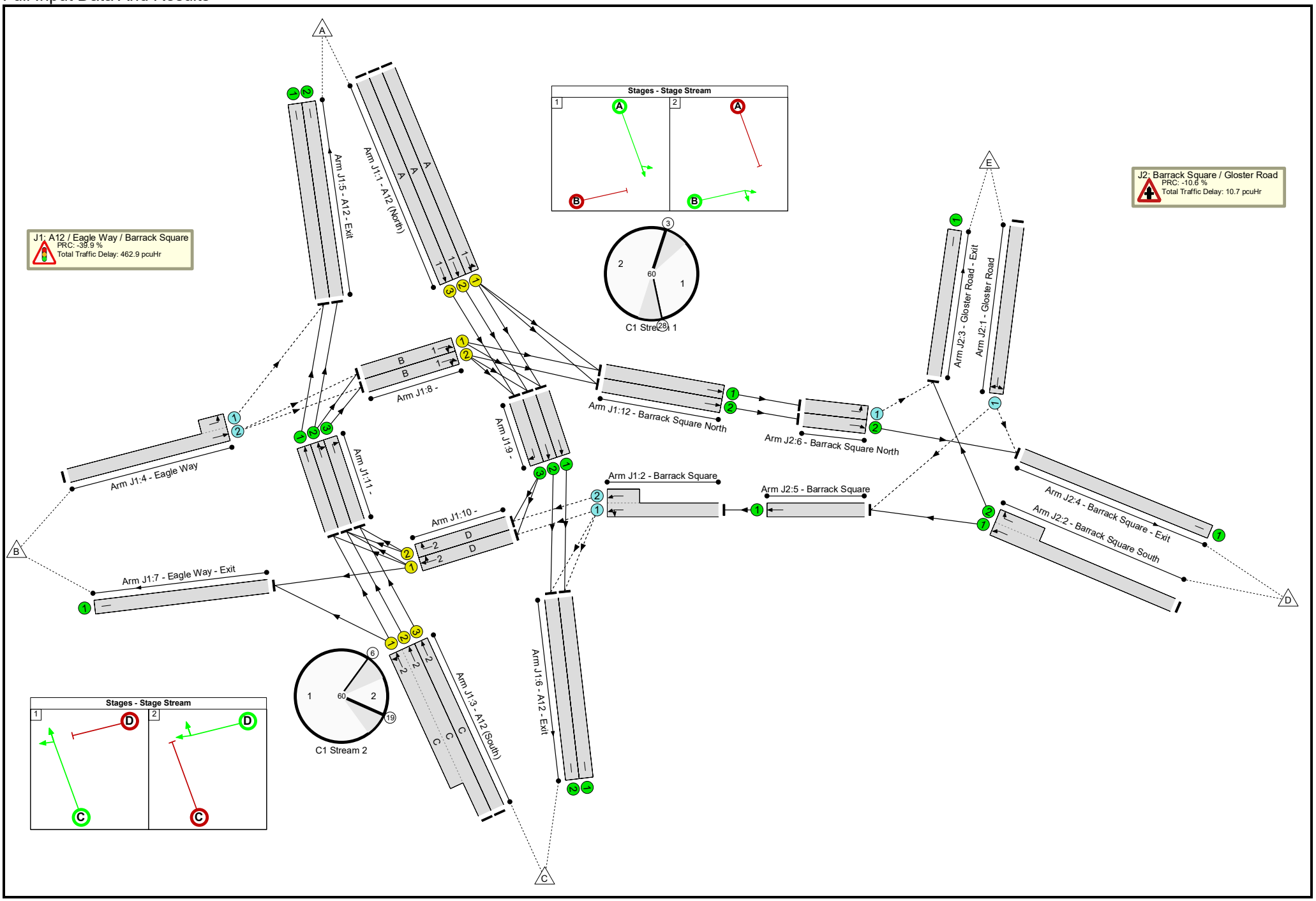
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	20	-	805	1842	645	124.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	20	-	859	1958	685	125.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	20	-	22	1828	640	3.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	630	1994:1862	570+167	85.4 : 85.4%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	42	-	2301	1828:1828	914+914	125.9 : 125.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	586	1828	1310	44.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	250	Inf :1821	281+89	67.7 : 67.7%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1165	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1024	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	969	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1176	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	30	-	405	1764	911	37.6%
8/2	Right Ahead	U	1	N/A	B		1	30	-	674	1764	911	74.0%
9/1	Ahead	U	N/A	N/A	-		-	-	-	770	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	978	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	8	-	112	1764	265	42.3%
10/2	Right	U	2	N/A	D		1	8	-	143	1764	265	54.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1105	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1327	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	586	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**99.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	433	Inf	435	99.5%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	281	1800:1800	1736+64	15.6 : 15.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	630	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	382	Inf	996	31.4%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2506**	**0**	**0**	**45.7**	**427.8**	**0.0**	**473.6**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1760**	**0**	**0**	**45.2**	**417.6**	**0.0**	**462.9**	**-**	**-**	**-**	**-**
1/1	805	645	-	-	-	8.8	82.6	-	91.4	408.7	16.1	82.6	98.7
1/2	859	685	-	-	-	9.5	89.3	-	98.7	413.8	17.2	89.3	106.5
1/3	22	22	-	-	-	0.1	0.0	-	0.1	15.9	0.2	0.0	0.3
2/1+2/2	630	630	1260	0	0	1.6	2.8	-	4.4	25.2	6.9	2.8	9.7
3/2+3/1	2301	1828	-	-	-	20.1	238.9	-	259.0	405.3	56.2	238.9	295.1
3/3	586	586	-	-	-	0.6	0.4	-	1.0	6.0	4.1	0.4	4.5
4/2+4/1	250	250	500	0	0	0.6	1.0	-	1.7	24.1	2.6	1.0	3.7
5/1	945	945	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	850	850	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	827	827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	108	108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	343	343	-	-	-	0.8	0.3	-	1.1	11.5	2.8	0.3	3.1
8/2	674	674	-	-	-	1.7	1.4	-	3.1	16.8	8.9	1.4	10.3
9/1	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	112	112	-	-	-	0.6	0.4	-	0.9	30.1	1.6	0.4	2.0
10/2	143	143	-	-	-	0.8	0.6	-	1.4	34.6	2.2	0.6	2.8
11/1	885	885	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1090	1090	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	586	586	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	313	313	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	601	601	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**746**	**0**	**0**	**0.5**	**10.2**	**0.0**	**10.7**	**-**	**-**	**-**	**-**
1/1	433	433	433	0	0	0.5	9.9	-	10.4	86.3	7.0	9.9	16.9
2/1+2/2	281	281	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	675	675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	630	630	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	313	313	313	0	0	0.0	0.2	-	0.2	2.7	1.4	0.2	1.7
6/2	601	601	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

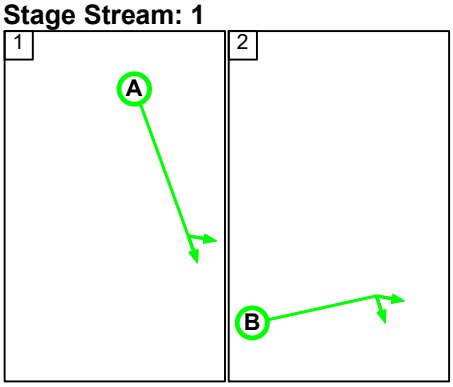
C1	Stream: 1 PRC for Signalled Lanes (%):	-39.3	Total Delay for Signalled Lanes (pcuHr):	194.47	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-39.9	Total Delay for Signalled Lanes (pcuHr):	262.31	Cycle Time (s): 60
	PRC Over All Lanes (%):	-39.9	Total Delay Over All Lanes(pcuHr):	473.57	

Full Input Data And Results

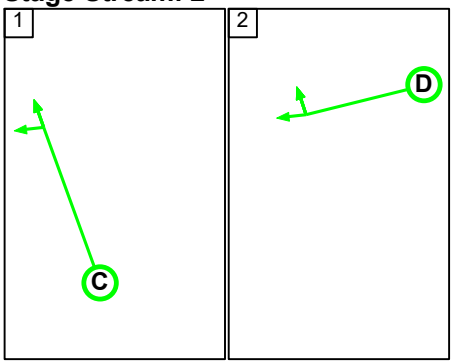
Scenario 9: '28RC 15:00-16:00' (FG79: '28RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

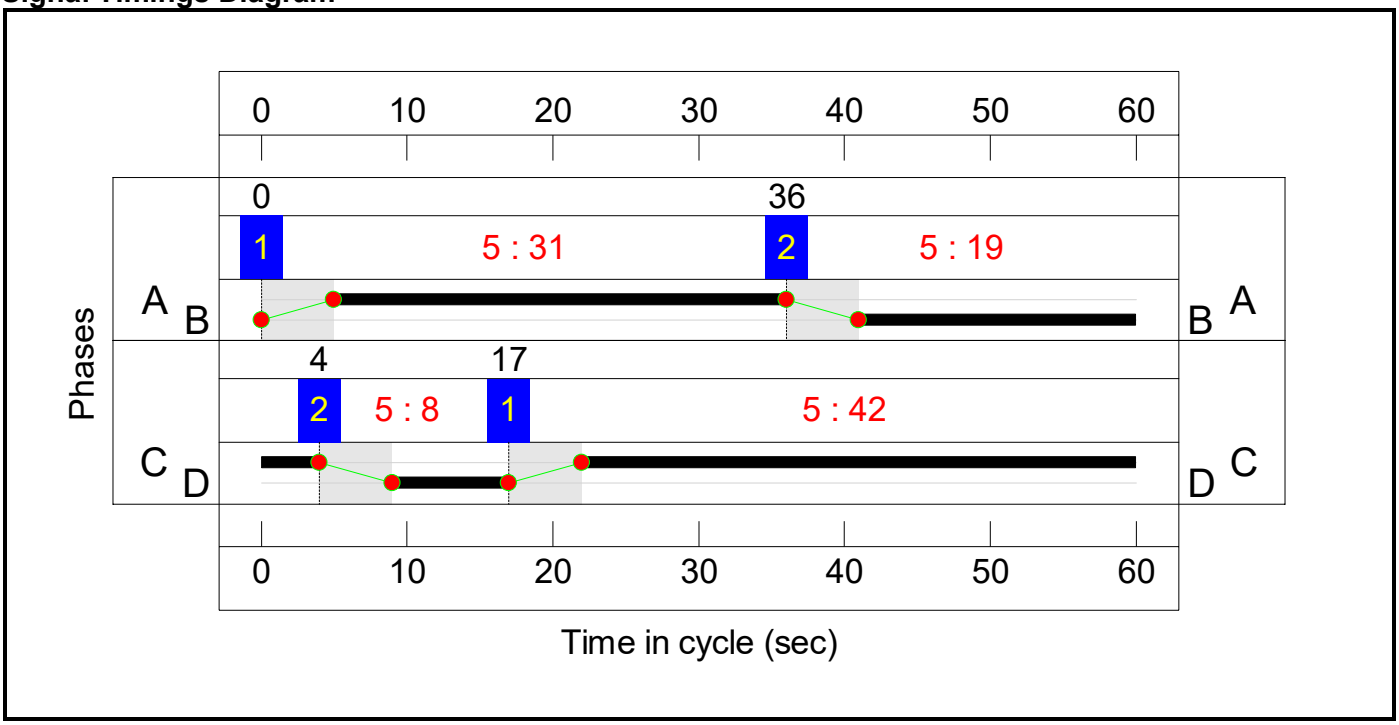
Stage	1	2
Duration	31	19
Change Point	0	36

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	17	4

Full Input Data And Results

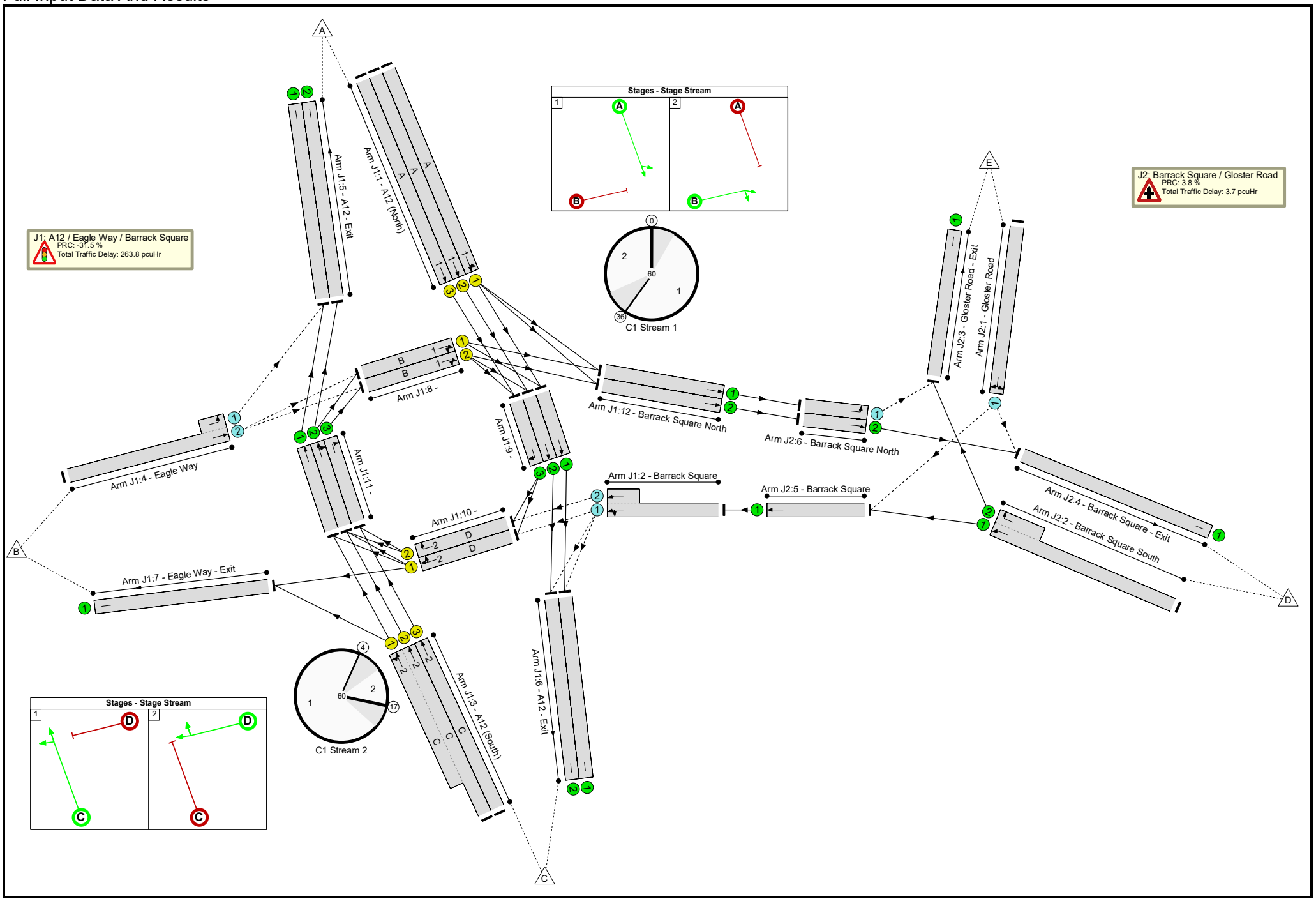
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.3%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.3%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	31	-	826	1853	988	83.6%
1/2	A12 (North) Ahead	U	1	N/A	A		1	31	-	881	1958	1044	84.4%
1/3	A12 (North) Ahead	U	1	N/A	A		1	31	-	56	1828	975	5.7%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	760	1994:1862	480+175	116.0 : 116.0%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	42	-	2163	1828:1828	923+905	118.3 : 118.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	111	1828	1310	8.5%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	218	Inf :1821	367+159	41.4 : 41.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1031	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1001	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	924	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1245	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	19	-	384	1764	588	57.5%
8/2	Right Ahead	U	1	N/A	B		1	19	-	175	1764	588	29.8%
9/1	Ahead	U	N/A	N/A	-		-	-	-	666	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	989	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	8	-	99	1764	265	35.2%
10/2	Right	U	2	N/A	D		1	8	-	203	1764	265	66.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	965	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1297	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	111	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	172	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	426	Inf	491	86.7%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	402	1800:1800	1576+224	22.3 : 22.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	760	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	439	Inf	983	40.0%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	172	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2566**	**0**	**0**	**30.0**	**237.5**	**0.0**	**267.5**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1747**	**0**	**0**	**29.8**	**234.0**	**0.0**	**263.8**	**-**	**-**	**-**	**-**
1/1	826	826	-	-	-	2.7	2.5	-	5.2	22.6	11.5	2.5	13.9
1/2	881	881	-	-	-	2.9	2.6	-	5.5	22.6	12.2	2.6	14.9
1/3	56	56	-	-	-	0.1	0.0	-	0.1	8.7	0.4	0.0	0.5
2/1+2/2	760	655	1311	0	0	5.4	55.7	-	61.1	289.5	23.2	55.7	78.9
3/2+3/1	2163	1828	-	-	-	15.0	170.7	-	185.6	309.0	51.1	170.7	221.7
3/3	111	111	-	-	-	0.1	0.0	-	0.1	4.1	0.6	0.0	0.6
4/2+4/1	218	218	436	0	0	0.2	0.4	-	0.6	9.6	1.2	0.4	1.6
5/1	882	882	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	888	888	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1210	1210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	338	338	-	-	-	1.4	0.7	-	2.1	22.0	4.2	0.7	4.8
8/2	175	175	-	-	-	0.8	0.2	-	1.0	19.9	2.2	0.2	2.4
9/1	666	666	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	989	989	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	93	93	-	-	-	0.6	0.3	-	0.9	33.2	1.2	0.3	1.5
10/2	175	175	-	-	-	0.6	1.0	-	1.6	32.9	2.6	1.0	3.6
11/1	816	816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1100	1100	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	111	111	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	172	172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**819**	**0**	**0**	**0.2**	**3.5**	**0.0**	**3.7**	**-**	**-**	**-**	**-**
1/1	426	426	426	0	0	0.0	3.0	-	3.0	25.2	0.4	3.0	3.3
2/1+2/2	402	402	-	-	-	0.0	0.1	-	0.1	1.3	0.0	0.1	0.1
3/1	443	443	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	760	760	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	393	393	393	0	0	0.2	0.3	-	0.6	5.0	5.0	0.3	5.3
6/2	172	172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

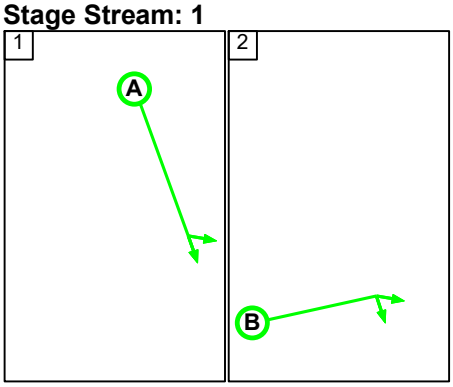
C1	Stream: 1 PRC for Signalled Lanes (%):	6.7	Total Delay for Signalled Lanes (pcuHr):	13.87	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-31.5	Total Delay for Signalled Lanes (pcuHr):	188.22	Cycle Time (s):	60
	PRC Over All Lanes (%):	-31.5	Total Delay Over All Lanes(pcuHr):	267.47		

Full Input Data And Results

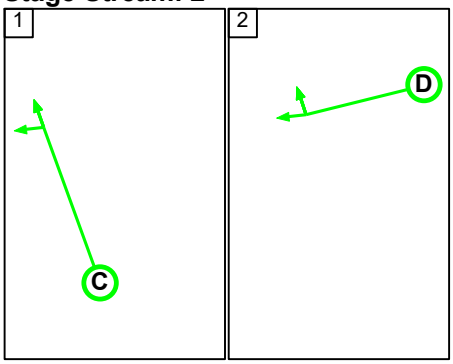
Scenario 10: '28RC 17:00-18:00' (FG80: '28RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

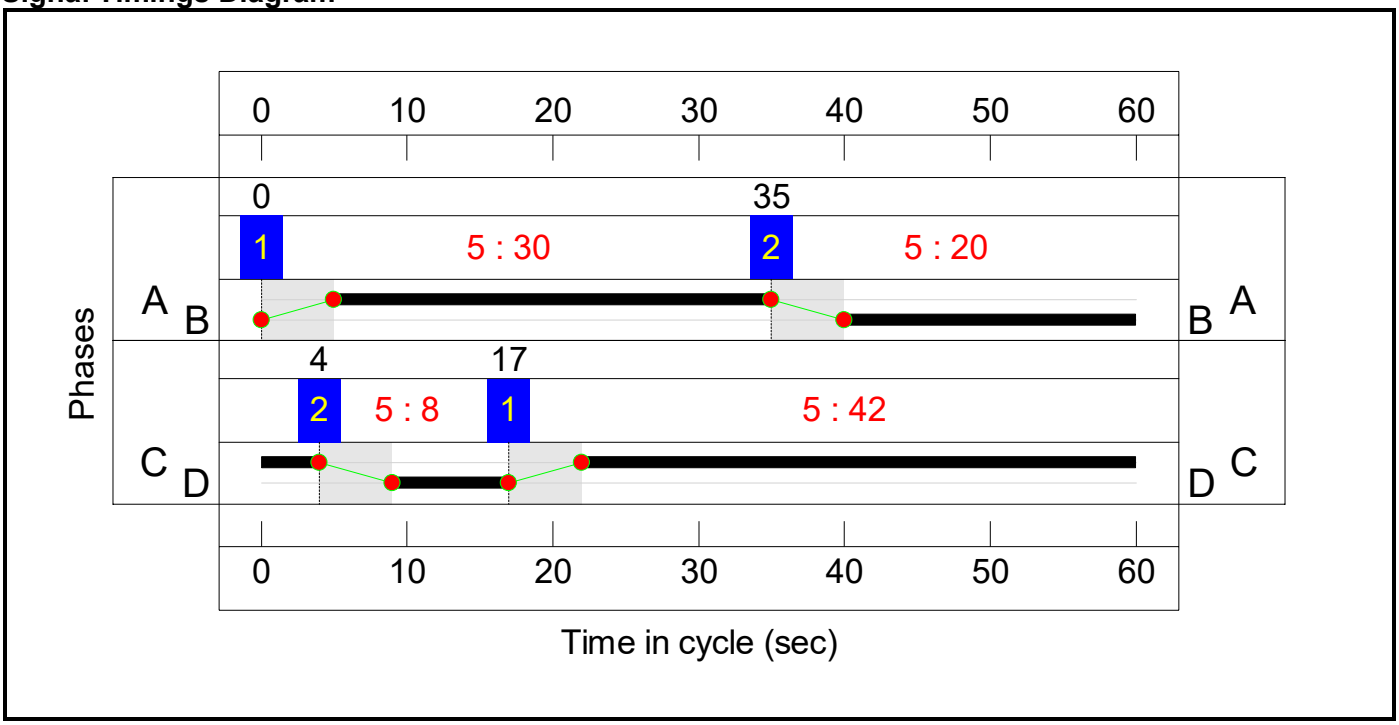
Stage	1	2
Duration	30	20
Change Point	0	35

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	17	4

Full Input Data And Results

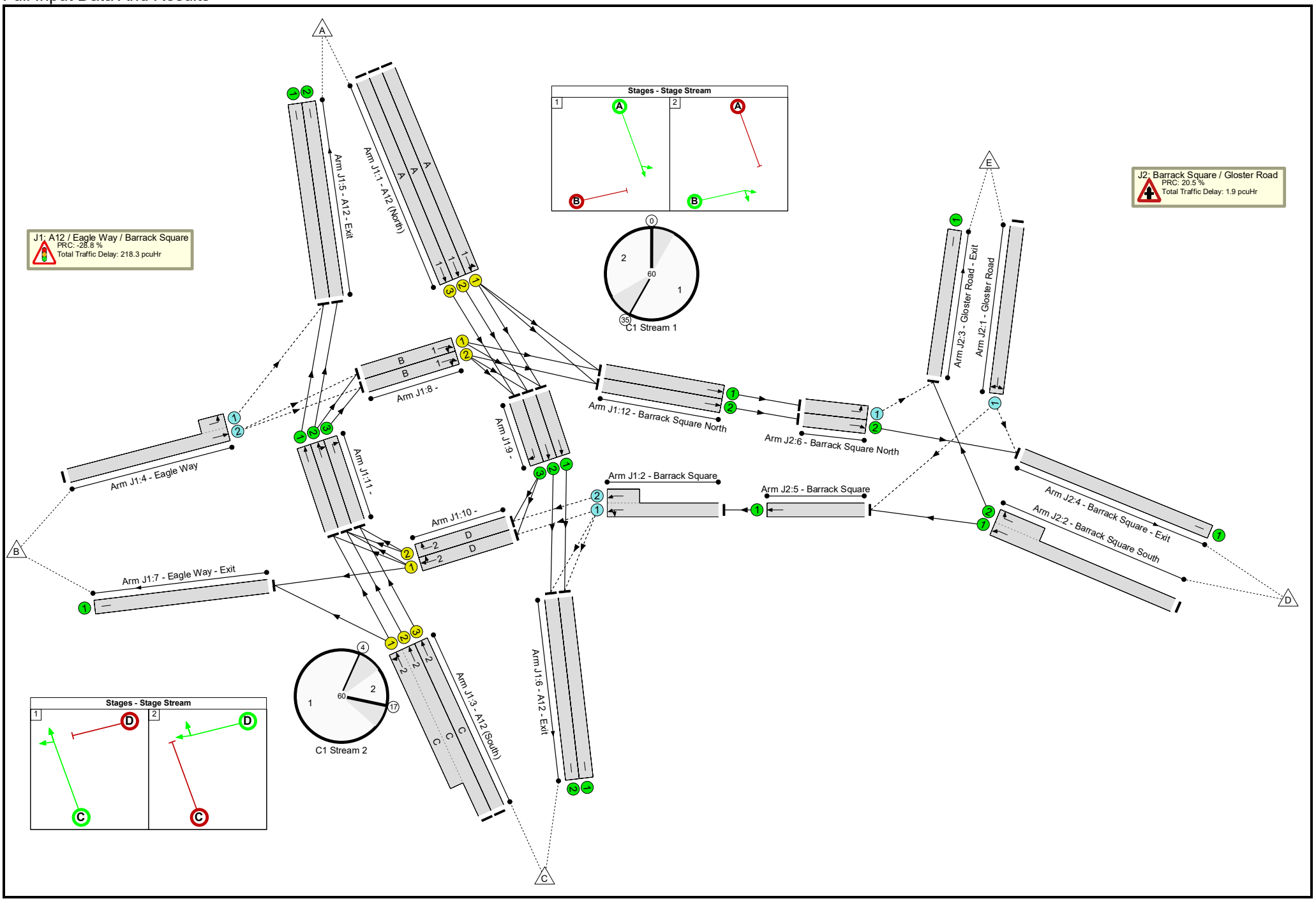
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.0%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.0%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	30	-	815	1852	957	85.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	30	-	871	1958	1012	86.1%
1/3	A12 (North) Ahead	U	1	N/A	A		1	30	-	70	1828	944	7.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	762	1994:1862	484+173	116.0 : 116.0%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	42	-	2076	1828:1828	916+912	113.6 : 113.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	101	1828	1310	7.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	174	Inf :1821	379+140	33.5 : 33.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	932	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1003	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	916	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1230	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	20	-	306	1764	617	44.9%
8/2	Right Ahead	U	1	N/A	B		1	20	-	161	1764	617	26.1%
9/1	Ahead	U	N/A	N/A	-		-	-	-	666	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	980	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	70	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	8	-	131	1764	265	46.3%
10/2	Right	U	2	N/A	D		1	8	-	201	1764	265	65.5%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	885	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1242	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	101	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	142	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	364	Inf	487	74.7%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	442	1800:1800	1649+151	24.6 : 24.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	149	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	365	Inf	988	34.1%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	142	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2363**	**0**	**0**	**26.5**	**193.8**	**0.0**	**220.3**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1662**	**0**	**0**	**26.4**	**191.9**	**0.0**	**218.3**	**-**	**-**	**-**	**-**
1/1	815	815	-	-	-	2.8	2.8	-	5.6	24.7	11.5	2.8	14.3
1/2	871	871	-	-	-	3.1	3.0	-	6.0	24.9	12.6	3.0	15.6
1/3	70	70	-	-	-	0.1	0.0	-	0.2	9.4	0.6	0.0	0.6
2/1+2/2	762	657	1314	0	0	5.5	55.8	-	61.3	289.7	23.3	55.8	79.2
3/2+3/1	2076	1828	-	-	-	11.7	128.1	-	139.8	242.4	48.0	128.1	176.0
3/3	101	101	-	-	-	0.1	0.0	-	0.1	4.0	0.5	0.0	0.5
4/2+4/1	174	174	348	0	0	0.1	0.3	-	0.4	8.3	0.9	0.3	1.1
5/1	826	826	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	882	882	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1196	1196	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	277	277	-	-	-	1.0	0.4	-	1.4	18.1	3.0	0.4	3.4
8/2	161	161	-	-	-	0.6	0.2	-	0.8	17.8	1.9	0.2	2.1
9/1	666	666	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	980	980	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	70	70	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	123	123	-	-	-	0.8	0.4	-	1.2	35.3	1.6	0.4	2.0
10/2	173	173	-	-	-	0.6	0.9	-	1.5	32.2	2.6	0.9	3.5
11/1	779	779	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1090	1090	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	101	101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	142	142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**700**	**0**	**0**	**0.1**	**1.9**	**0.0**	**1.9**	**-**	**-**	**-**	**-**
1/1	364	364	364	0	0	0.0	1.4	-	1.4	14.3	0.0	1.4	1.4
2/1+2/2	442	442	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/1	373	373	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	149	149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	336	336	336	0	0	0.1	0.3	-	0.3	3.7	3.2	0.3	3.4
6/2	142	142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

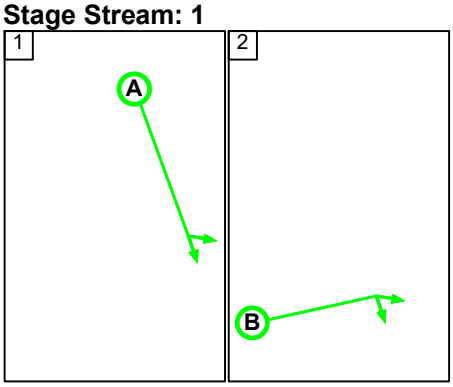
C1	Stream: 1 PRC for Signalled Lanes (%):	4.5	Total Delay for Signalled Lanes (pcuHr):	14.00	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-26.2	Total Delay for Signalled Lanes (pcuHr):	142.63	Cycle Time (s):	60
	PRC Over All Lanes (%):	-28.8	Total Delay Over All Lanes(pcuHr):	220.29		

Full Input Data And Results

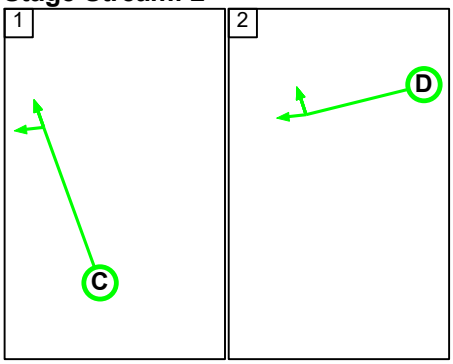
Scenario 11: '28PC 06:00-07:00' (FG81: '28PC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

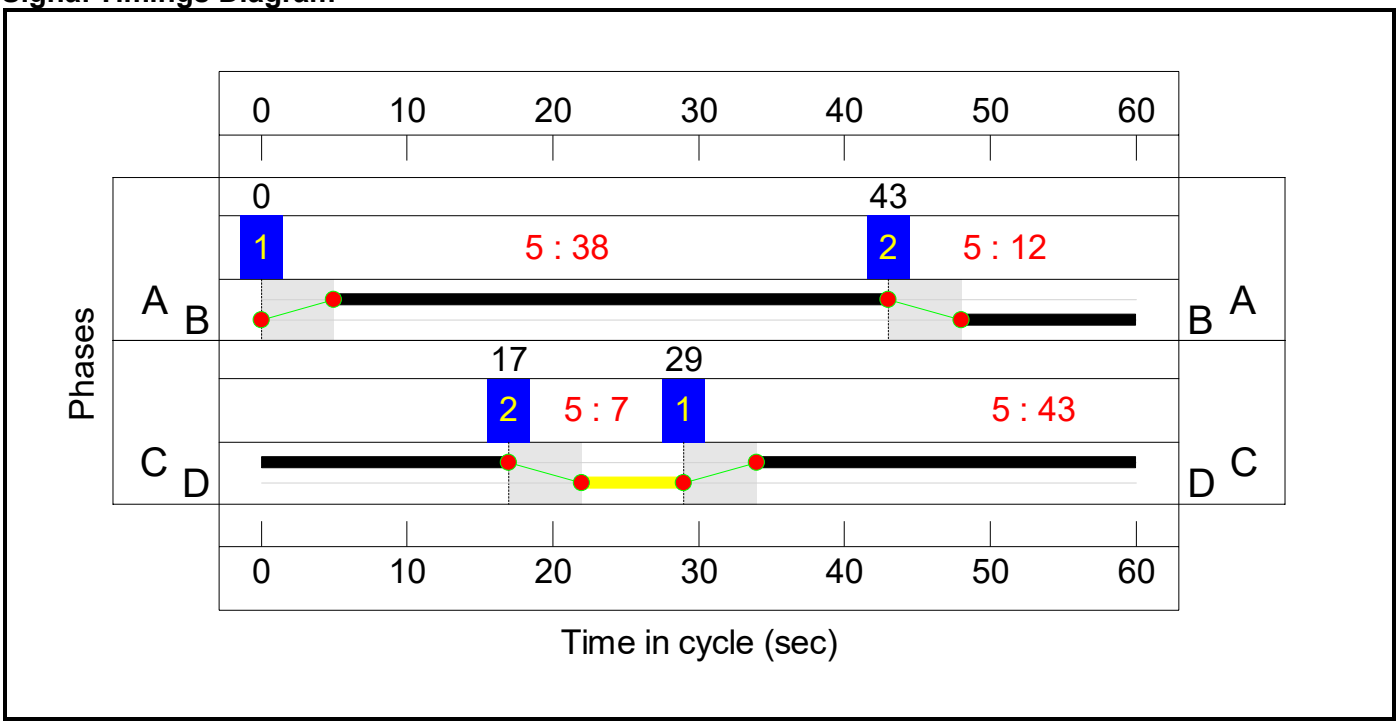
Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	29	17

Full Input Data And Results

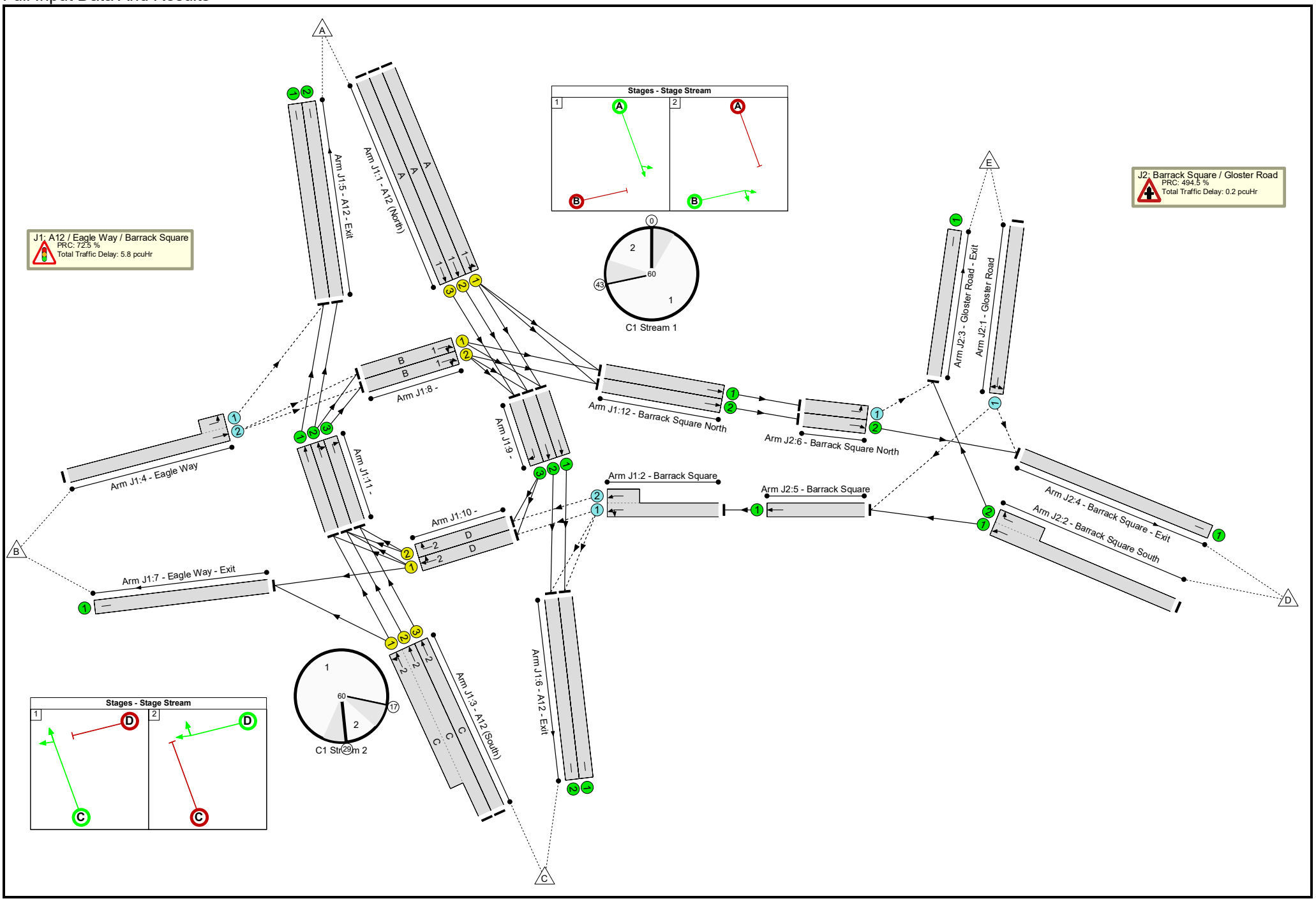
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**52.2%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**52.2%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	38	-	443	1842	1197	37.0%
1/2	A12 (North) Ahead	U	1	N/A	A		1	38	-	494	1958	1273	38.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	38	-	2	1828	1188	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	67	1994:1862	685+44	9.2 : 9.2%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	954	1828:1828	914+914	52.2 : 52.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	124	1828	1341	9.3%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	93	Inf :1821	652+146	11.7 : 11.7%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	481	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	571	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	12	-	148	1764	382	38.7%
8/2	Right Ahead	U	1	N/A	B		1	12	-	150	1764	382	39.2%
9/1	Ahead	U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	12	1764	235	5.1%
10/2	Right	U	2	N/A	D		1	7	-	4	1764	235	1.7%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	481	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	151	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	120	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**15.1%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	86	Inf	640	13.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	44	1800:1800	1514+286	2.4 : 2.4%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	158	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	176	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	151	Inf	997	15.1%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	120	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**557**	**0**	**0**	**3.8**	**2.2**	**0.0**	**5.9**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**320**	**0**	**0**	**3.8**	**2.0**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
1/1	443	443	-	-	-	0.6	0.3	-	0.9	7.2	3.3	0.3	3.6
1/2	494	494	-	-	-	0.7	0.3	-	1.0	7.2	3.8	0.3	4.2
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.4	0.0	0.0	0.0
2/1+2/2	67	67	134	0	0	0.0	0.1	-	0.1	2.9	0.1	0.1	0.1
3/2+3/1	954	954	-	-	-	0.8	0.5	-	1.3	4.9	2.8	0.5	3.3
3/3	124	124	-	-	-	0.1	0.1	-	0.1	3.8	0.6	0.1	0.6
4/2+4/1	93	93	186	0	0	0.0	0.1	-	0.1	2.8	0.1	0.1	0.2
5/1	481	481	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	148	148	-	-	-	0.8	0.3	-	1.1	26.3	1.8	0.3	2.2
8/2	150	150	-	-	-	0.8	0.3	-	1.1	26.2	2.0	0.3	2.4
9/1	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	12	12	-	-	-	0.1	0.0	-	0.1	30.6	0.2	0.0	0.2
10/2	4	4	-	-	-	0.0	0.0	-	0.0	30.8	0.1	0.0	0.1
11/1	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	481	481	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	151	151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	120	120	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**237**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	86	86	86	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	44	44	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	158	158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	176	176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	151	151	151	0	0	0.0	0.1	-	0.1	2.2	0.9	0.1	1.0
6/2	120	120	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

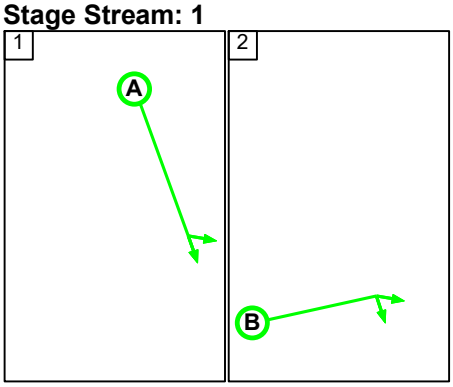
C1	Stream: 1 PRC for Signalled Lanes (%):	129.3	Total Delay for Signalled Lanes (pcuHr):	4.05	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	72.5	Total Delay for Signalled Lanes (pcuHr):	1.58	Cycle Time (s):	60
	PRC Over All Lanes (%):	72.5	Total Delay Over All Lanes(pcuHr):	5.94		

Full Input Data And Results

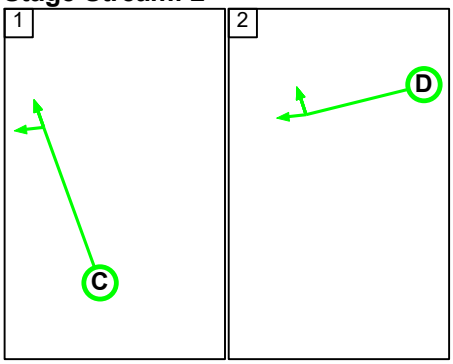
Scenario 12: '28PC 07:00-08:00' (FG82: '28PC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

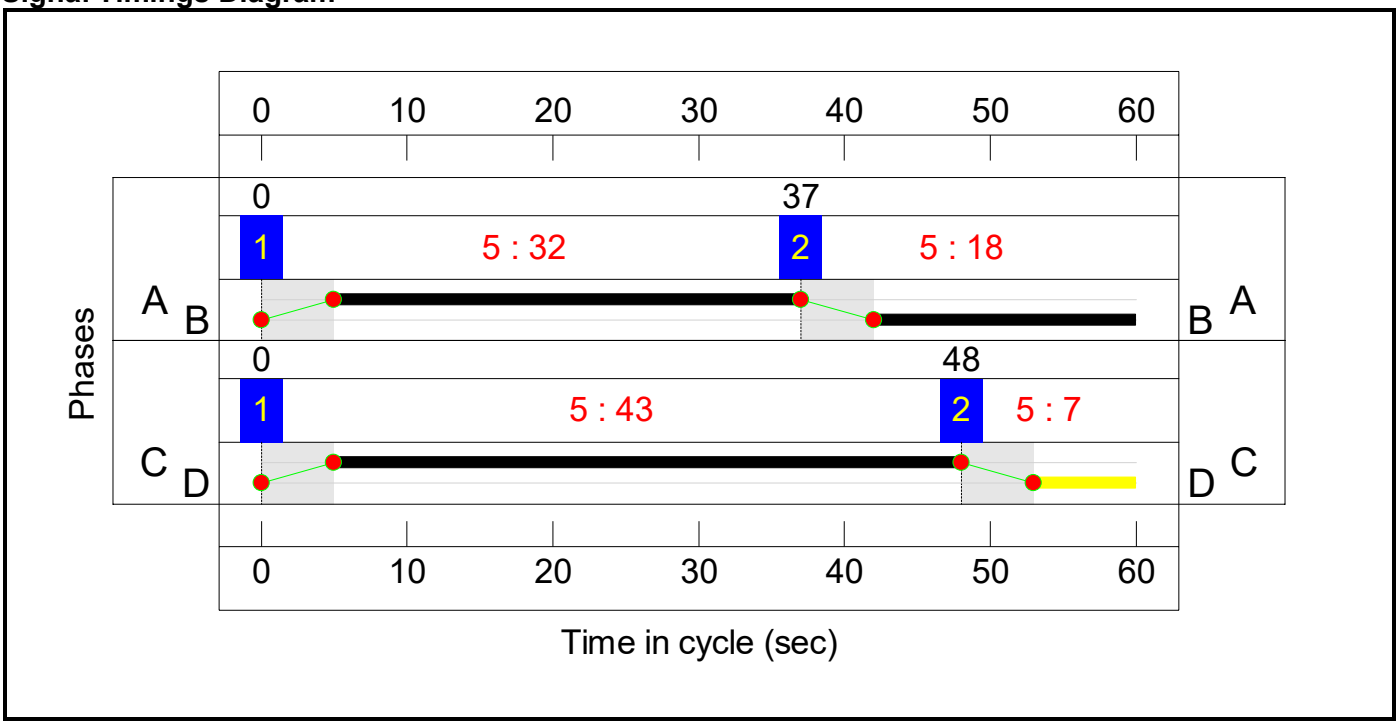
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	0	48

Full Input Data And Results

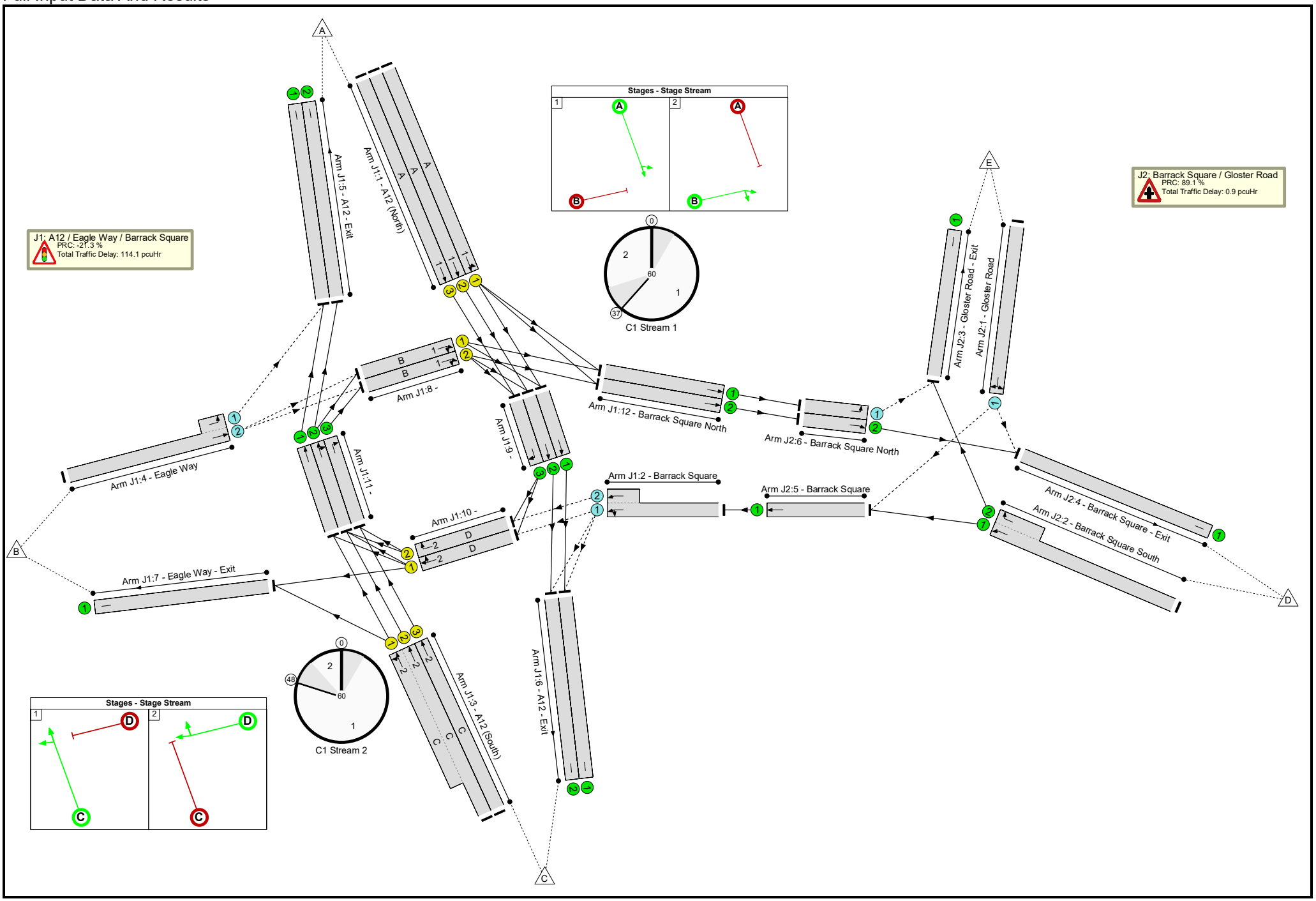
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.1%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.1%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	744	1839	1011	73.6%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	806	1958	1077	74.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	4	1828	1005	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	320	1994:1862	499+113	52.3 : 52.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1995	1828:1828	920+908	109.1 : 109.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	367	1828	1341	27.4%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	232	Inf :1821	338+98	53.3 : 53.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1027	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1006	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	390	1764	559	65.8%
8/2	Right Ahead	U	1	N/A	B		1	18	-	425	1764	559	76.1%
9/1	Ahead	U	N/A	N/A	-		-	-	-	742	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	903	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	58	1764	235	24.7%
10/2	Right	U	2	N/A	D		1	7	-	59	1764	235	25.1%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	975	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1081	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**47.6%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	246	Inf	517	47.6%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	127	1800:1800	1715+85	7.1 : 7.1%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	412	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	320	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	355	Inf	998	33.3%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1683**	**0**	**0**	**18.1**	**96.8**	**0.0**	**115.0**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1104**	**0**	**0**	**18.0**	**96.1**	**0.0**	**114.1**	**-**	**-**	**-**	**-**
1/1	744	744	-	-	-	2.1	1.4	-	3.5	16.9	9.3	1.4	10.7
1/2	806	806	-	-	-	2.3	1.5	-	3.8	16.9	10.1	1.5	11.5
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.1	0.0	0.0	0.0
2/1+2/2	320	320	640	0	0	0.5	0.5	-	1.0	11.3	2.5	0.5	3.0
3/2+3/1	1995	1828	-	-	-	8.4	89.1	-	97.5	175.9	44.9	89.1	134.0
3/3	367	367	-	-	-	0.3	0.2	-	0.5	4.5	2.0	0.2	2.2
4/2+4/1	232	232	464	0	0	0.4	0.6	-	1.0	15.3	2.2	0.6	2.8
5/1	947	947	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	751	751	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1006	1006	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	53	53	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	368	368	-	-	-	1.5	1.0	-	2.4	23.8	5.0	1.0	6.0
8/2	425	425	-	-	-	1.9	1.6	-	3.4	29.2	6.2	1.6	7.8
9/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	903	903	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	58	58	-	-	-	0.3	0.2	-	0.5	28.6	0.8	0.2	1.0
10/2	59	59	-	-	-	0.3	0.2	-	0.5	30.7	0.9	0.2	1.0
11/1	895	895	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	997	997	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	333	333	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**579**	**0**	**0**	**0.2**	**0.7**	**0.0**	**0.9**	**-**	**-**	**-**	**-**
1/1	246	246	246	0	0	0.0	0.5	-	0.5	6.6	0.0	0.5	0.5
2/1+2/2	127	127	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	412	412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	320	320	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	333	333	333	0	0	0.2	0.2	-	0.4	4.4	4.3	0.2	4.6
6/2	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

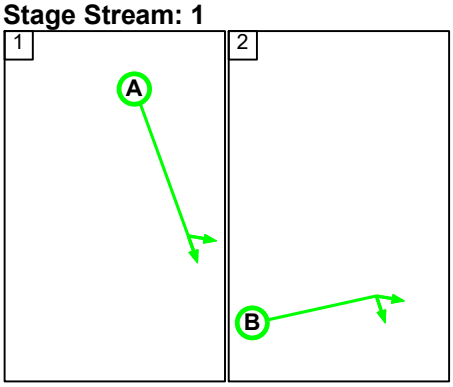
C1	Stream: 1 PRC for Signalled Lanes (%):	18.3	Total Delay for Signalled Lanes (pcuHr):	13.16	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-21.3	Total Delay for Signalled Lanes (pcuHr):	98.93	Cycle Time (s): 60
	PRC Over All Lanes (%):	-21.3	Total Delay Over All Lanes(pcuHr):	114.97	

Full Input Data And Results

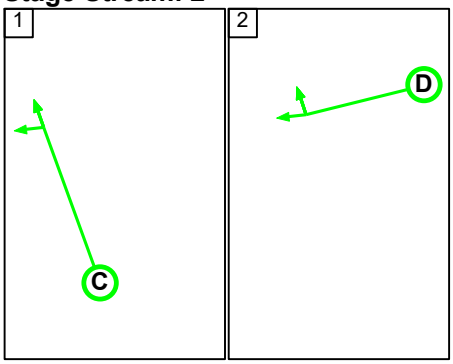
Scenario 13: '28PC 08:00-09:00' (FG83: '28PC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

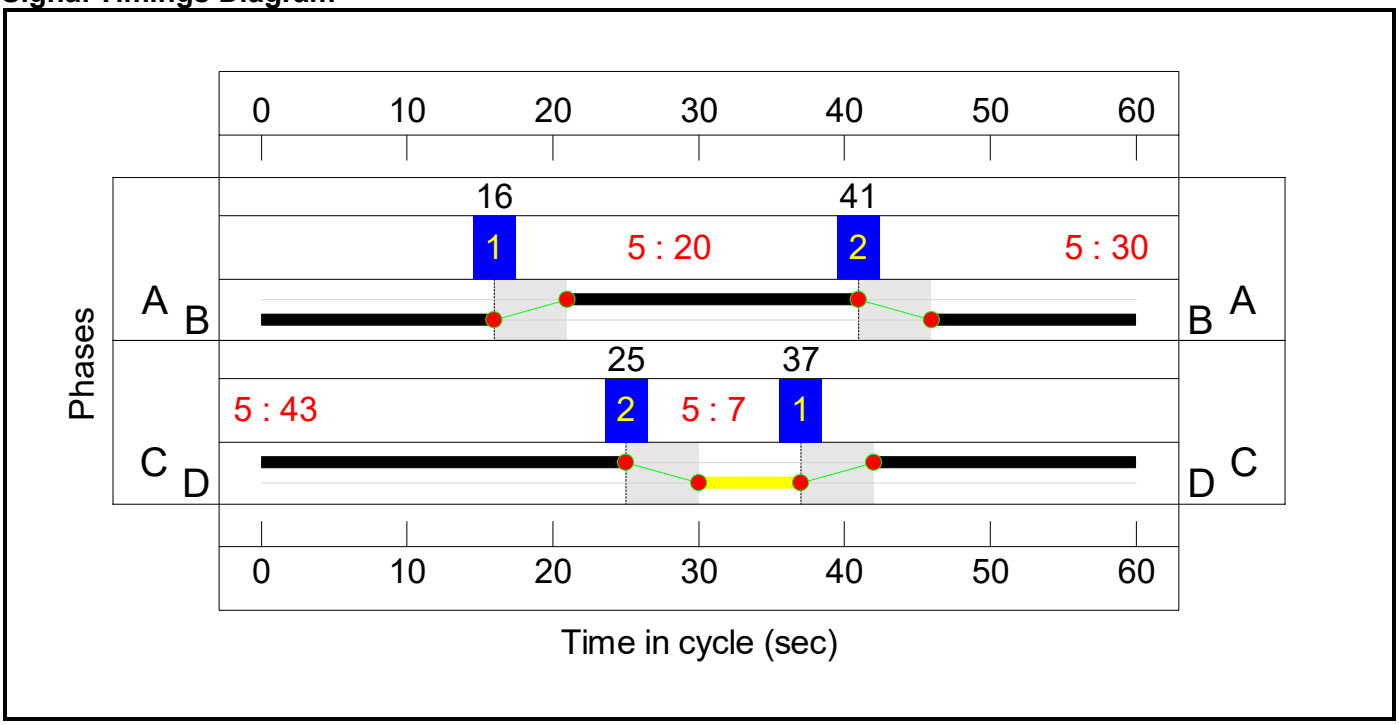
Stage	1	2
Duration	20	30
Change Point	16	41

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	37	25

Full Input Data And Results

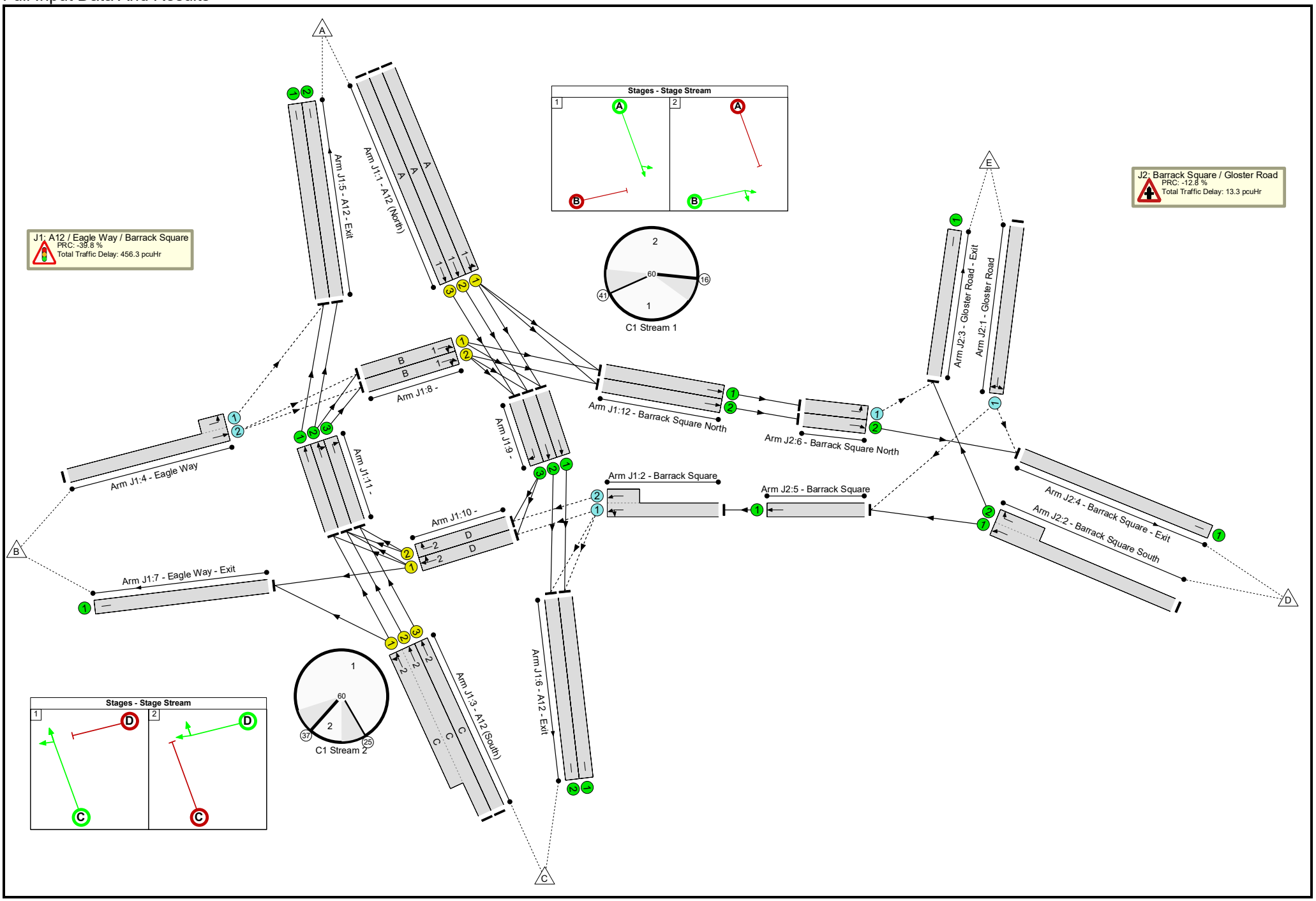
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.8%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.8%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	20	-	808	1843	645	125.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	20	-	862	1958	685	125.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	20	-	22	1828	640	3.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	628	1994:1862	568+104	92.5 : 93.4%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2280	1828:1828	926+902	124.7 : 124.7%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	597	1828	1341	44.5%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	256	Inf :1821	274+84	71.6 : 71.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1157	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	992	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	979	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1188	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	30	-	415	1764	911	38.8%
8/2	Right Ahead	U	1	N/A	B		1	30	-	687	1764	911	75.4%
9/1	Ahead	U	N/A	N/A	-		-	-	-	775	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	984	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	145	1764	235	61.4%
10/2	Right	U	2	N/A	D		1	7	-	97	1764	235	41.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1097	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1301	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	389	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	624	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**101.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	441	Inf	434	101.5%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	273	1800:1800	1734+66	15.2 : 15.2%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	700	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	389	Inf	996	32.2%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	624	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2512**	**0**	**0**	**44.0**	**425.5**	**0.0**	**469.6**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1757**	**0**	**0**	**43.3**	**412.9**	**0.0**	**456.3**	**-**	**-**	**-**	**-**
1/1	808	645	-	-	-	8.3	83.9	-	92.2	410.8	16.2	83.9	100.1
1/2	862	685	-	-	-	8.9	90.7	-	99.7	416.2	17.3	90.7	108.0
1/3	22	22	-	-	-	0.1	0.0	-	0.1	15.9	0.2	0.0	0.3
2/1+2/2	623	623	1245	0	0	1.8	5.2	-	7.0	40.7	7.9	5.2	13.2
3/2+3/1	2280	1828	-	-	-	19.1	228.5	-	247.6	390.9	58.3	228.5	286.8
3/3	597	597	-	-	-	0.5	0.4	-	0.9	5.6	3.8	0.4	4.2
4/2+4/1	256	256	512	0	0	0.7	1.2	-	1.9	26.6	2.8	1.2	4.1
5/1	949	949	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	832	832	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1009	1009	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	108	108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	354	354	-	-	-	0.9	0.3	-	1.2	12.0	3.2	0.3	3.5
8/2	687	687	-	-	-	1.8	1.5	-	3.3	17.5	8.5	1.5	10.0
9/1	631	631	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	807	807	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	144	144	-	-	-	0.7	0.8	-	1.4	36.0	2.2	0.8	3.0
10/2	97	97	-	-	-	0.6	0.3	-	0.9	34.4	1.5	0.3	1.9
11/1	889	889	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1072	1072	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	321	321	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**755**	**0**	**0**	**0.7**	**12.6**	**0.0**	**13.3**	**-**	**-**	**-**	**-**
1/1	441	434	434	0	0	0.7	12.3	-	13.0	106.0	15.2	12.3	27.5
2/1+2/2	273	273	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	331	331	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	321	321	321	0	0	0.0	0.2	-	0.3	2.8	1.8	0.2	2.0
6/2	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

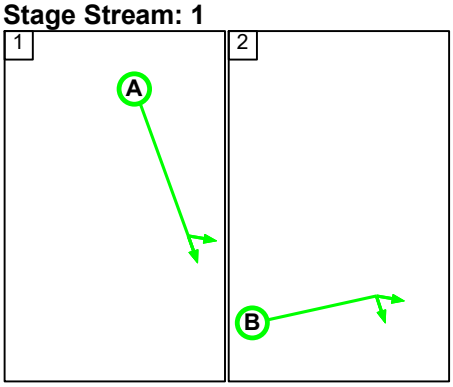
C1	Stream: 1 PRC for Signalled Lanes (%):	-39.8	Total Delay for Signalled Lanes (pcuHr):	196.48	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-38.6	Total Delay for Signalled Lanes (pcuHr):	250.85	Cycle Time (s): 60
	PRC Over All Lanes (%):	-39.8	Total Delay Over All Lanes(pcuHr):	469.58	

Full Input Data And Results

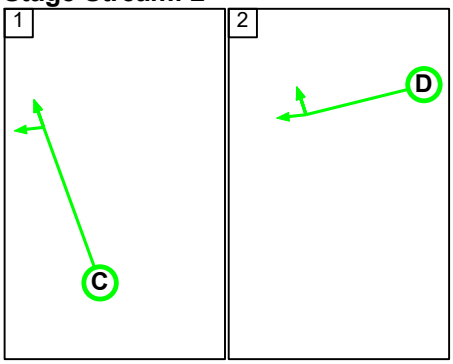
Scenario 14: '28PC 15:00-16:00' (FG84: '28PC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

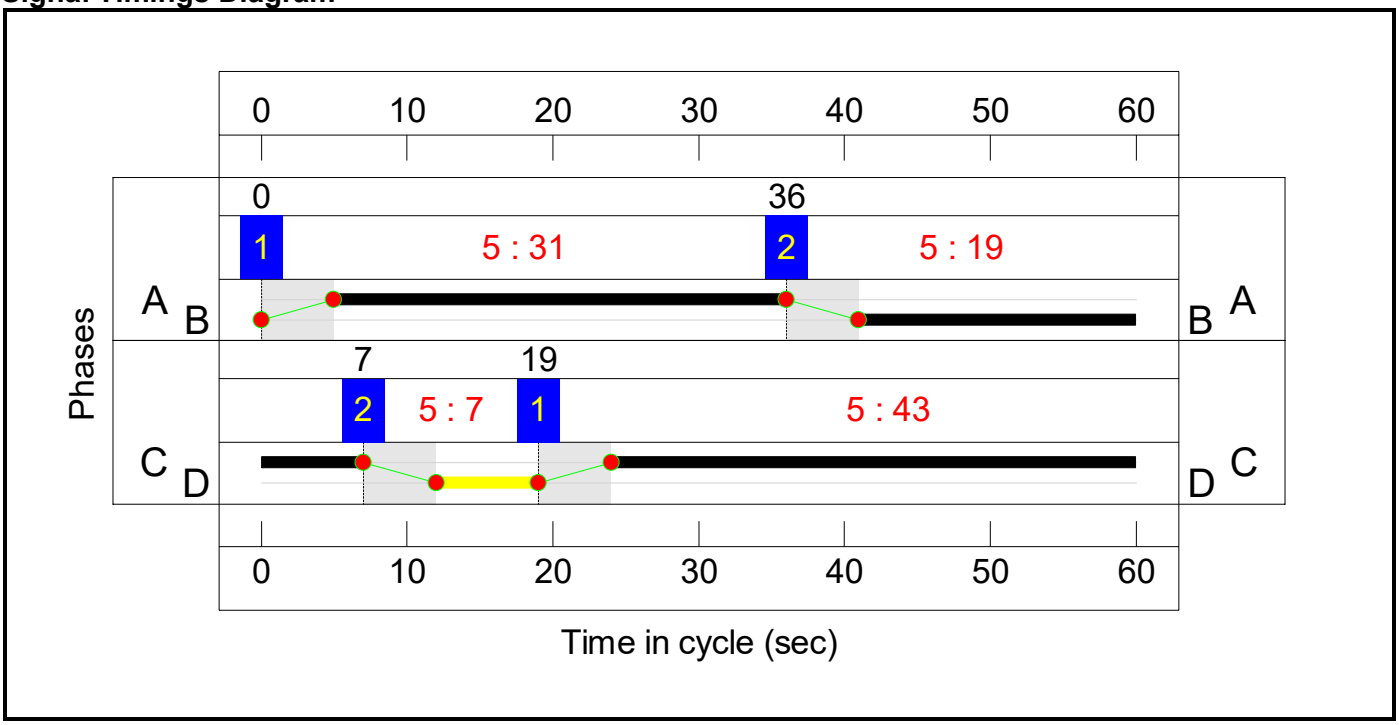
Stage	1	2
Duration	31	19
Change Point	0	36

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	19	7

Full Input Data And Results

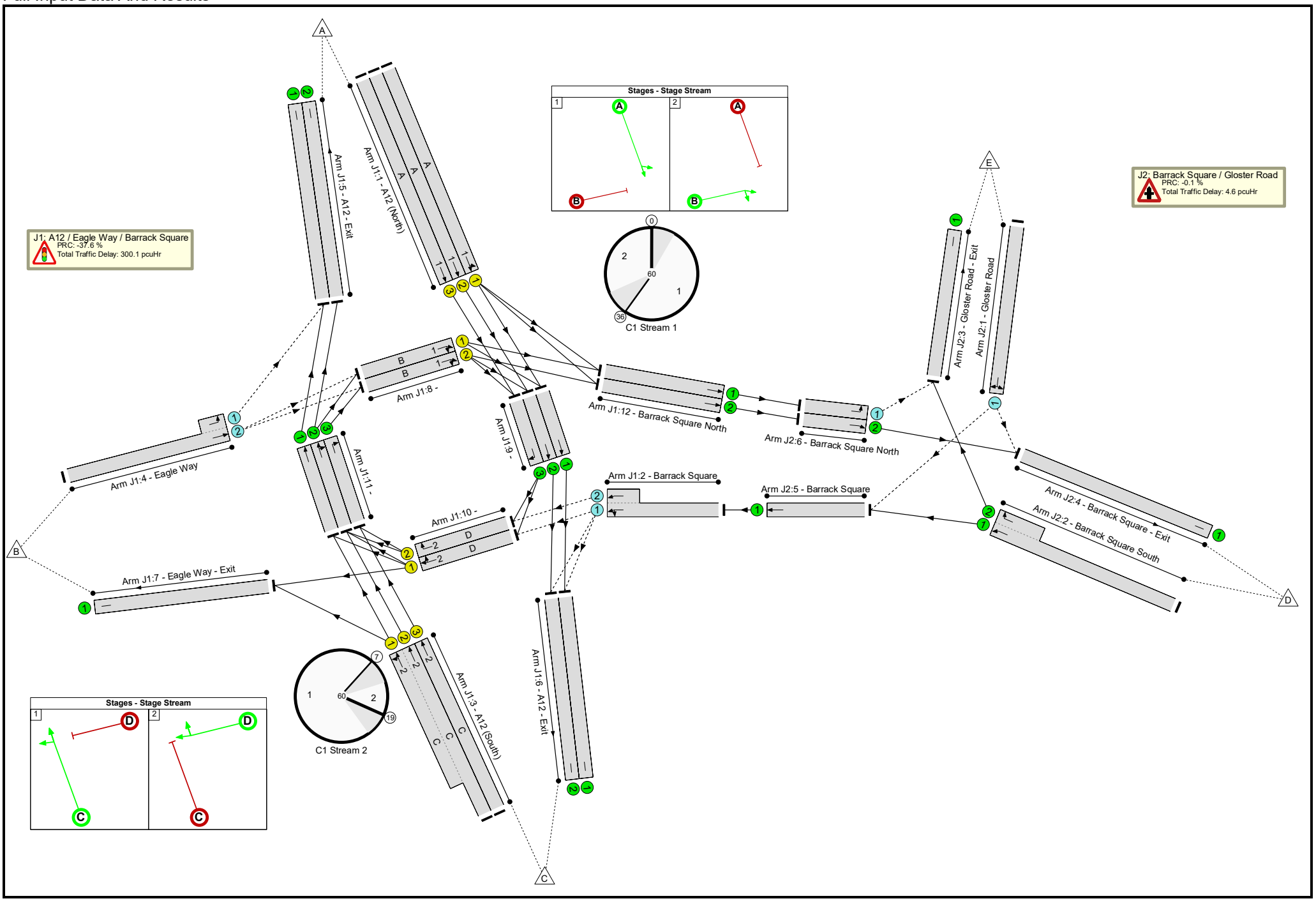
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**123.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**123.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	31	-	851	1853	988	86.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	31	-	908	1958	1044	87.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	31	-	56	1828	975	5.7%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	781	1994:1862	467+164	123.9 : 123.9%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2184	1828:1828	923+905	119.5 : 119.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	121	1828	1341	9.0%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	224	Inf :1821	364+152	43.4 : 43.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1043	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1006	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	952	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1284	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	205	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	19	-	395	1764	588	58.7%
8/2	Right Ahead	U	1	N/A	B		1	19	-	188	1764	588	32.0%
9/1	Ahead	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1020	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	105	1764	235	40.6%
10/2	Right	U	2	N/A	D		1	7	-	203	1764	235	69.7%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	977	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	121	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**90.1%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	439	Inf	487	90.1%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	412	1800:1800	1577+223	22.9 : 22.9%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	781	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	453	Inf	983	41.0%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2552**	**0**	**0**	**32.5**	**272.2**	**0.0**	**304.7**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1709**	**0**	**0**	**32.3**	**267.8**	**0.0**	**300.1**	**-**	**-**	**-**	**-**
1/1	851	851	-	-	-	2.9	3.0	-	5.8	24.7	12.1	3.0	15.0
1/2	908	908	-	-	-	3.1	3.2	-	6.3	24.8	13.1	3.2	16.3
1/3	56	56	-	-	-	0.1	0.0	-	0.1	8.7	0.4	0.0	0.5
2/1+2/2	781	631	1261	0	0	7.1	77.7	-	84.8	391.0	24.1	77.7	101.9
3/2+3/1	2184	1828	-	-	-	15.5	181.0	-	196.5	323.9	52.6	181.0	233.6
3/3	121	121	-	-	-	0.1	0.0	-	0.1	3.8	0.6	0.0	0.6
4/2+4/1	224	224	448	0	0	0.2	0.4	-	0.6	9.7	1.3	0.4	1.7
5/1	884	884	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	836	836	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	901	901	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1233	1233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	179	179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	345	345	-	-	-	1.5	0.7	-	2.2	23.1	4.4	0.7	5.1
8/2	188	188	-	-	-	0.8	0.2	-	1.1	20.5	2.4	0.2	2.6
9/1	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	1020	1020	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	96	96	-	-	-	0.5	0.3	-	0.9	32.3	1.1	0.3	1.5
10/2	164	164	-	-	-	0.6	1.1	-	1.7	36.6	2.5	1.1	3.6
11/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1090	1090	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**842**	**0**	**0**	**0.2**	**4.4**	**0.0**	**4.6**	**-**	**-**	**-**	**-**
1/1	439	439	439	0	0	0.0	3.9	-	3.9	32.0	0.9	3.9	4.8
2/1+2/2	412	412	-	-	-	0.0	0.1	-	0.1	1.3	0.0	0.1	0.1
3/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	781	781	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	403	403	403	0	0	0.2	0.3	-	0.6	5.2	5.2	0.3	5.6
6/2	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

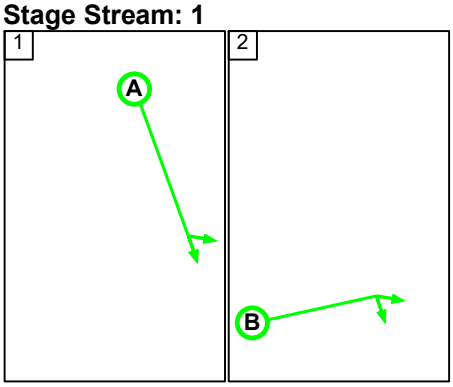
C1	Stream: 1 PRC for Signalled Lanes (%):	3.5	Total Delay for Signalled Lanes (pcuHr):	15.50	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-32.7	Total Delay for Signalled Lanes (pcuHr):	199.13	Cycle Time (s):	60
	PRC Over All Lanes (%):	-37.6	Total Delay Over All Lanes(pcuHr):	304.71		

Full Input Data And Results

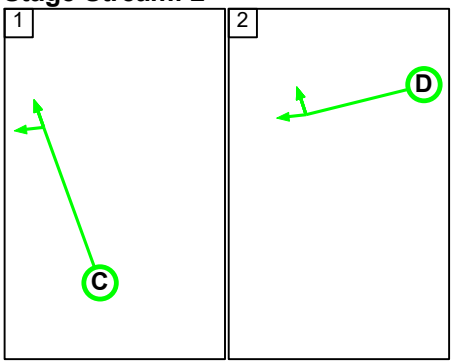
Scenario 15: '28PC 17:00-18:00' (FG85: '28PC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

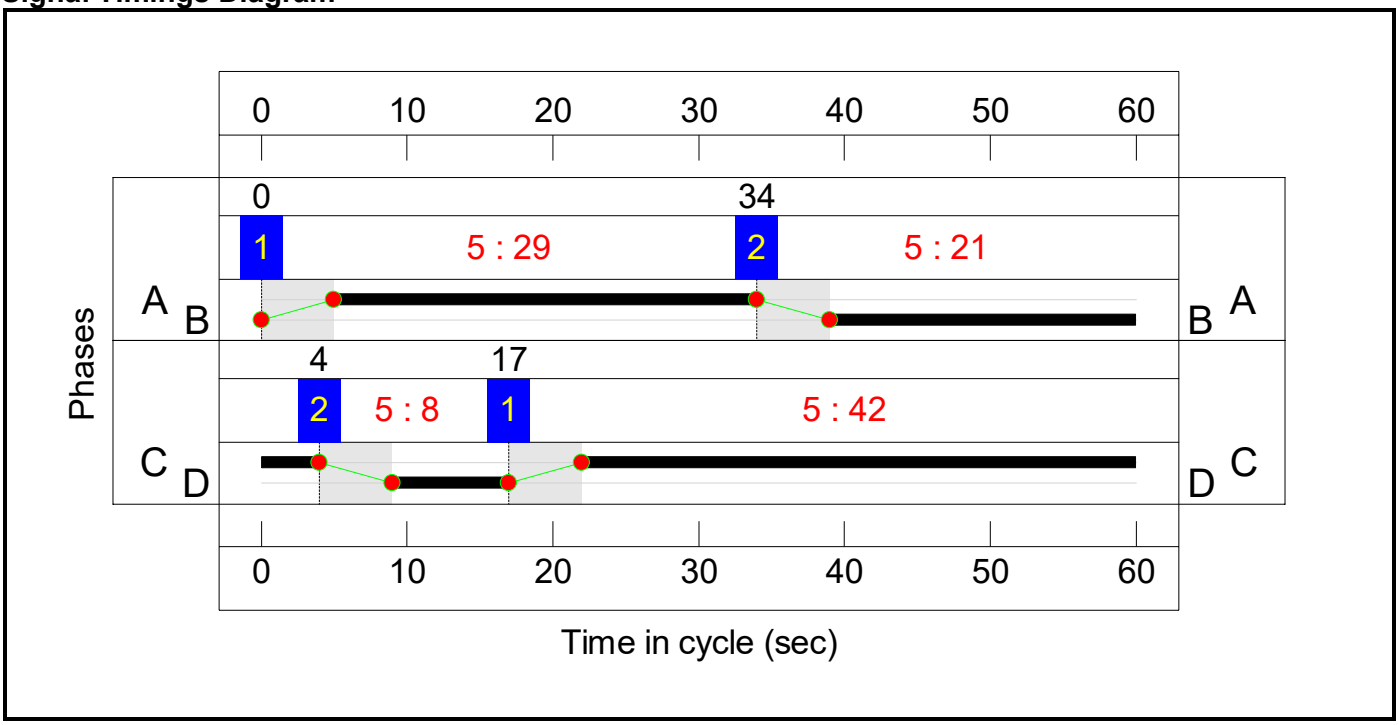
Stage	1	2
Duration	29	21
Change Point	0	34

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	17	4

Full Input Data And Results

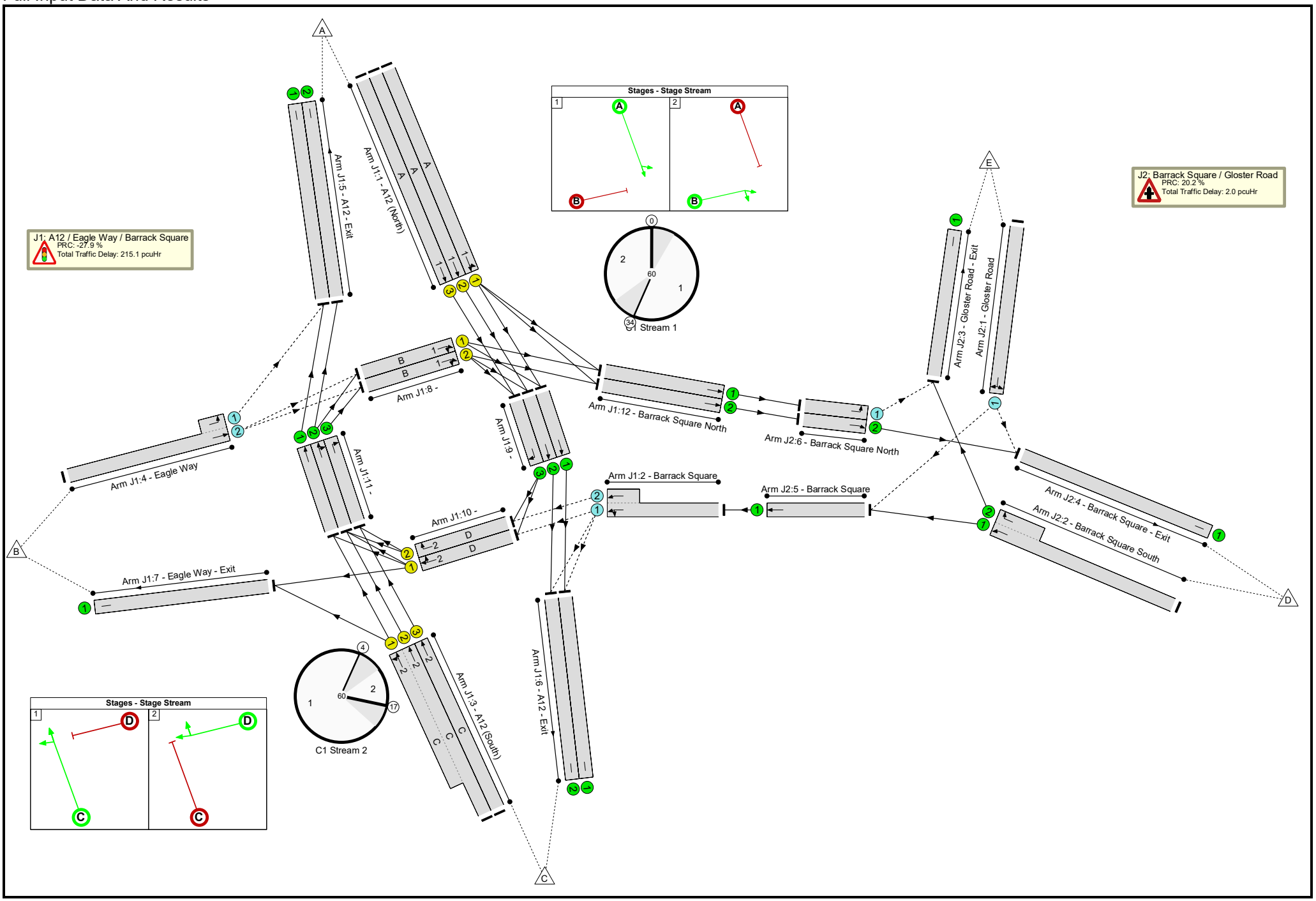
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**115.1%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**115.1%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	29	-	822	1851	926	88.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	29	-	873	1958	979	89.2%
1/3	A12 (North) Ahead	U	1	N/A	A		1	29	-	70	1828	914	7.7%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	762	1994:1862	485+177	115.1 : 115.1%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	42	-	2070	1828:1828	914+914	113.2 : 113.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	99	1828	1310	7.6%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	174	Inf :1821	379+140	33.5 : 33.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	930	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	999	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	923	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1230	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	21	-	307	1764	647	43.1%
8/2	Right Ahead	U	1	N/A	B		1	21	-	159	1764	647	24.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	673	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	981	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	70	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	8	-	129	1764	265	45.8%
10/2	Right	U	2	N/A	D		1	8	-	204	1764	265	67.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	883	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1239	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	99	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	141	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.8%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	365	Inf	488	74.8%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	441	1800:1800	1649+151	24.5 : 24.5%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	148	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	366	Inf	988	34.2%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	141	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2375**	**0**	**0**	**26.6**	**190.5**	**0.0**	**217.0**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1672**	**0**	**0**	**26.5**	**188.6**	**0.0**	**215.1**	**-**	**-**	**-**	**-**
1/1	822	822	-	-	-	3.1	3.7	-	6.8	29.7	12.1	3.7	15.8
1/2	873	873	-	-	-	3.3	3.8	-	7.1	29.4	13.1	3.8	16.9
1/3	70	70	-	-	-	0.2	0.0	-	0.2	10.0	0.6	0.0	0.6
2/1+2/2	762	662	1324	0	0	5.3	53.6	-	59.0	278.6	23.4	53.6	77.0
3/2+3/1	2070	1828	-	-	-	11.5	125.1	-	136.6	237.6	47.8	125.1	172.9
3/3	99	99	-	-	-	0.1	0.0	-	0.1	4.0	0.5	0.0	0.5
4/2+4/1	174	174	348	0	0	0.1	0.3	-	0.4	8.3	0.9	0.3	1.1
5/1	827	827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1197	1197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	279	279	-	-	-	0.9	0.4	-	1.3	17.0	2.8	0.4	3.2
8/2	159	159	-	-	-	0.6	0.2	-	0.7	16.8	1.8	0.2	2.0
9/1	673	673	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	981	981	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	70	70	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	121	121	-	-	-	0.8	0.4	-	1.2	35.4	1.6	0.4	2.0
10/2	177	177	-	-	-	0.6	1.0	-	1.6	33.1	2.7	1.0	3.7
11/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1091	1091	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	99	99	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	141	141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**703**	**0**	**0**	**0.1**	**1.9**	**0.0**	**2.0**	**-**	**-**	**-**	**-**
1/1	365	365	365	0	0	0.0	1.5	-	1.5	14.3	0.0	1.5	1.5
2/1+2/2	441	441	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	148	148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	338	338	338	0	0	0.1	0.3	-	0.3	3.6	3.1	0.3	3.4
6/2	141	141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

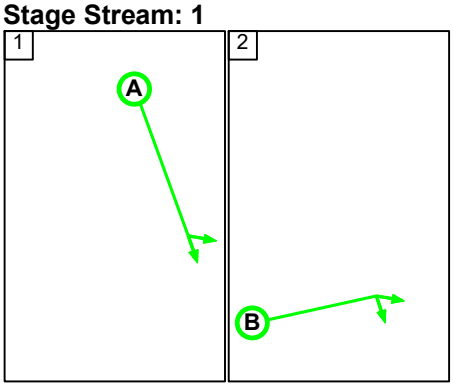
C1	Stream: 1 PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	16.16	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-25.8	Total Delay for Signalled Lanes (pcuHr):	139.55	Cycle Time (s):	60
	PRC Over All Lanes (%):	-27.9	Total Delay Over All Lanes(pcuHr):	217.04		

Full Input Data And Results

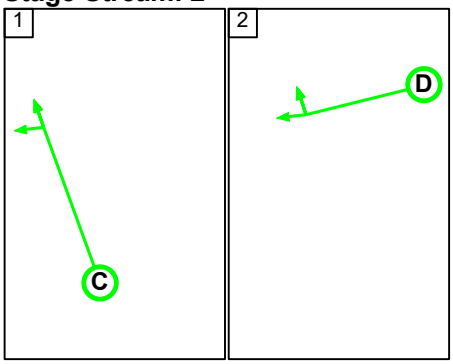
Scenario 16: '34RC 06:00-07:00' (FG86: '34RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

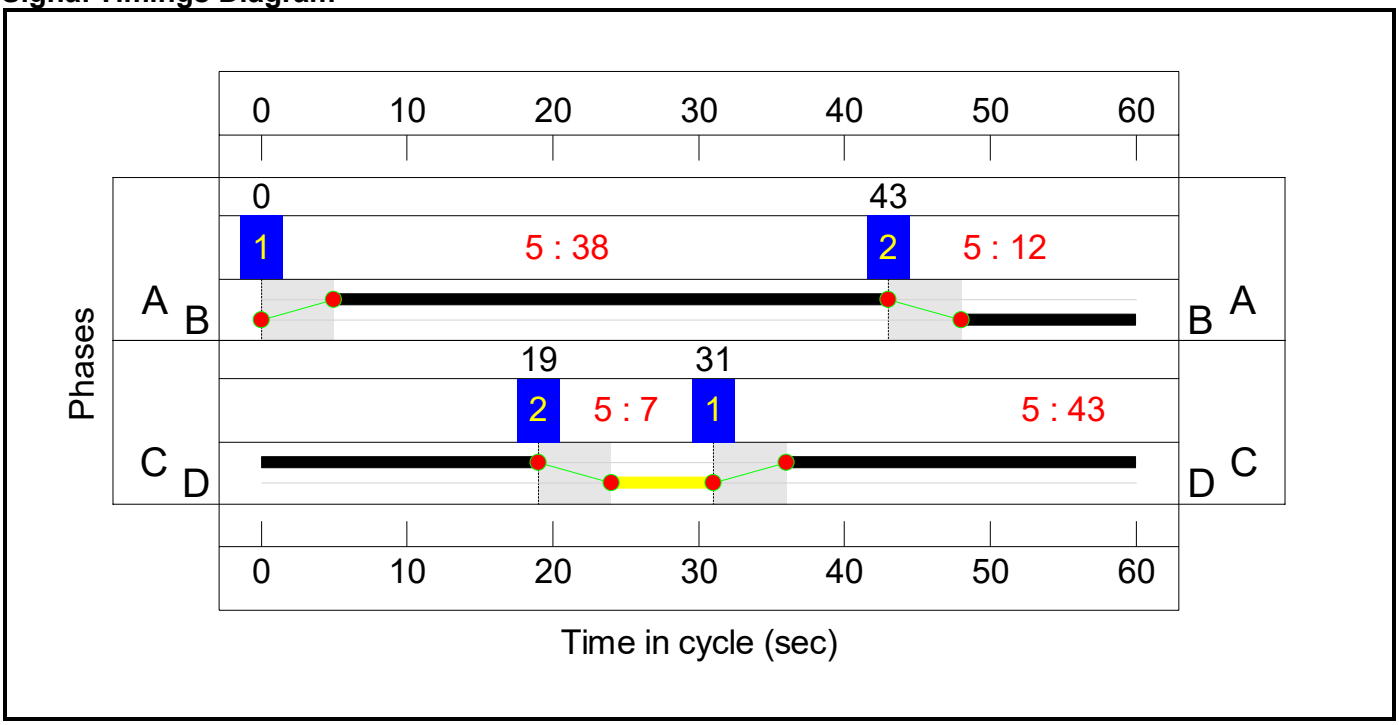
Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	31	19

Full Input Data And Results

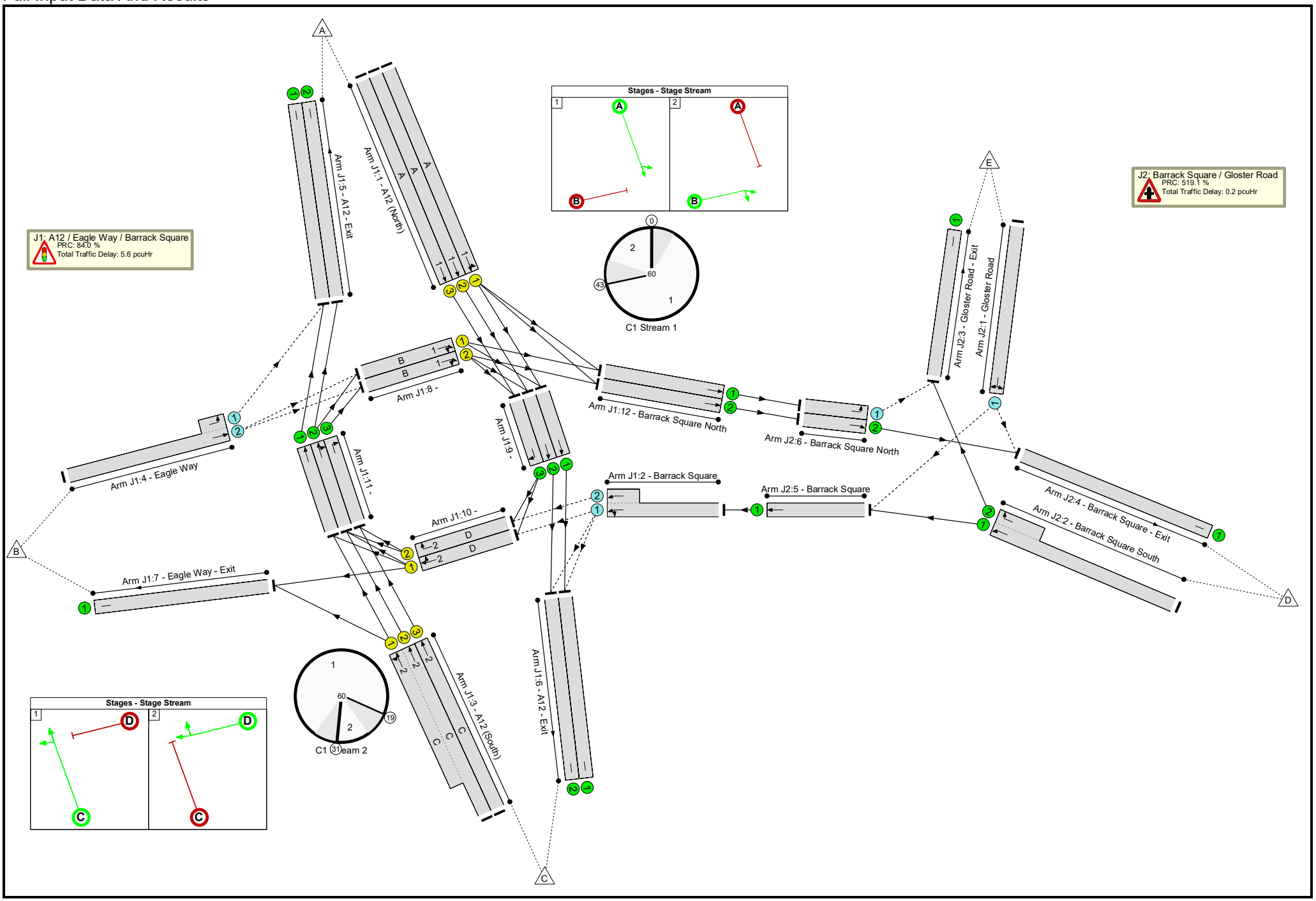
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**48.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**48.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	38	-	457	1841	1197	38.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	38	-	509	1958	1273	40.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	38	-	2	1828	1188	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	63	1994:1862	676+46	8.7 : 8.7%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	894	1828:1828	914+914	48.9 : 48.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	117	1828	1341	8.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	92	Inf :1821	673+164	11.0 : 11.0%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	12	-	141	1764	382	36.9%
8/2	Right Ahead	U	1	N/A	B		1	12	-	144	1764	382	37.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	11	1764	235	4.7%
10/2	Right	U	2	N/A	D		1	7	-	4	1764	235	1.7%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	451	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	117	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	82	Inf	643	12.8%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	42	1800:1800	1500+300	2.3 : 2.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	63	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	145	Inf	997	14.5%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**537**	**0**	**0**	**3.7**	**2.1**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**310**	**0**	**0**	**3.7**	**1.9**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
1/1	457	457	-	-	-	0.6	0.3	-	0.9	7.3	3.4	0.3	3.7
1/2	509	509	-	-	-	0.7	0.3	-	1.0	7.3	4.0	0.3	4.3
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.4	0.0	0.0	0.0
2/1+2/2	63	63	126	0	0	0.0	0.0	-	0.1	2.9	0.1	0.0	0.1
3/2+3/1	894	894	-	-	-	0.7	0.5	-	1.2	4.8	2.6	0.5	3.1
3/3	117	117	-	-	-	0.1	0.0	-	0.1	3.8	0.6	0.0	0.6
4/2+4/1	92	92	184	0	0	0.0	0.1	-	0.1	2.6	0.1	0.1	0.1
5/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	24	24	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	141	141	-	-	-	0.7	0.3	-	1.0	26.3	1.7	0.3	2.0
8/2	144	144	-	-	-	0.7	0.3	-	1.0	26.1	1.8	0.3	2.1
9/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	11	11	-	-	-	0.1	0.0	-	0.1	30.3	0.2	0.0	0.2
10/2	4	4	-	-	-	0.0	0.0	-	0.0	30.7	0.1	0.0	0.1
11/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	117	117	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**227**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	82	82	82	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	42	42	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	63	63	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	145	145	145	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

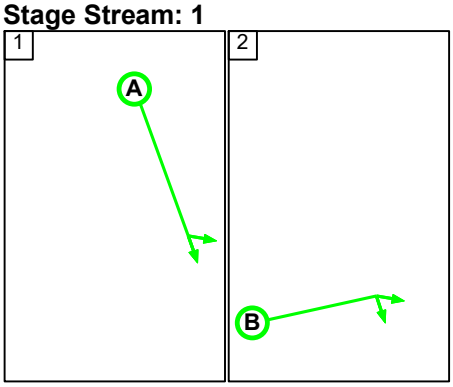
C1	Stream: 1 PRC for Signalled Lanes (%):	125.0	Total Delay for Signalled Lanes (pcuHr):	4.04	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	84.0	Total Delay for Signalled Lanes (pcuHr):	1.43	Cycle Time (s):	60
	PRC Over All Lanes (%):	84.0	Total Delay Over All Lanes(pcuHr):	5.76		

Full Input Data And Results

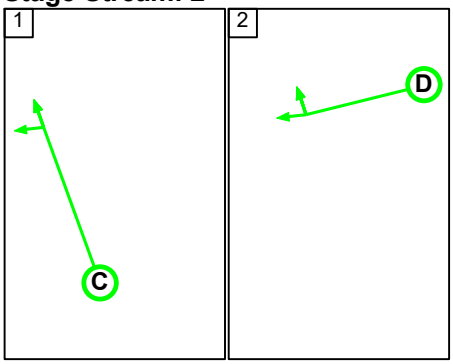
Scenario 17: '34RC 07:00-08:00' (FG87: '34RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

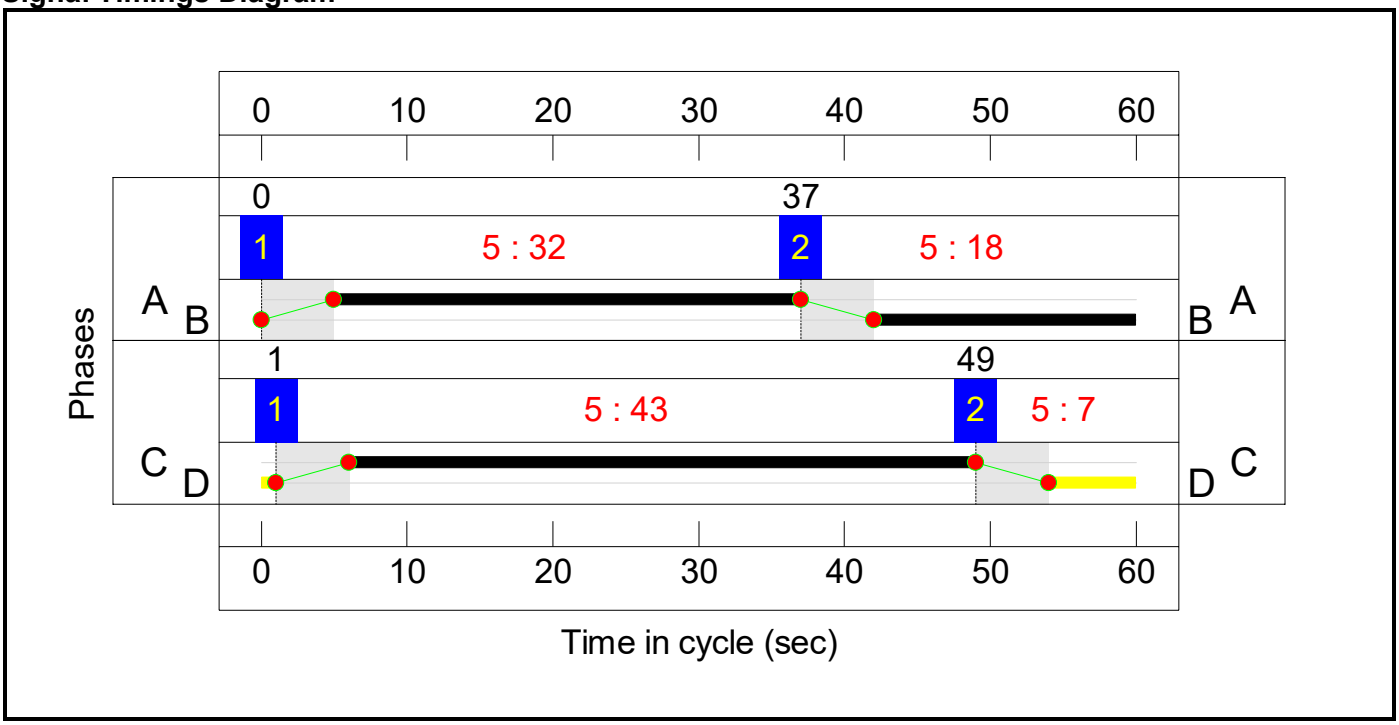
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	1	49

Full Input Data And Results

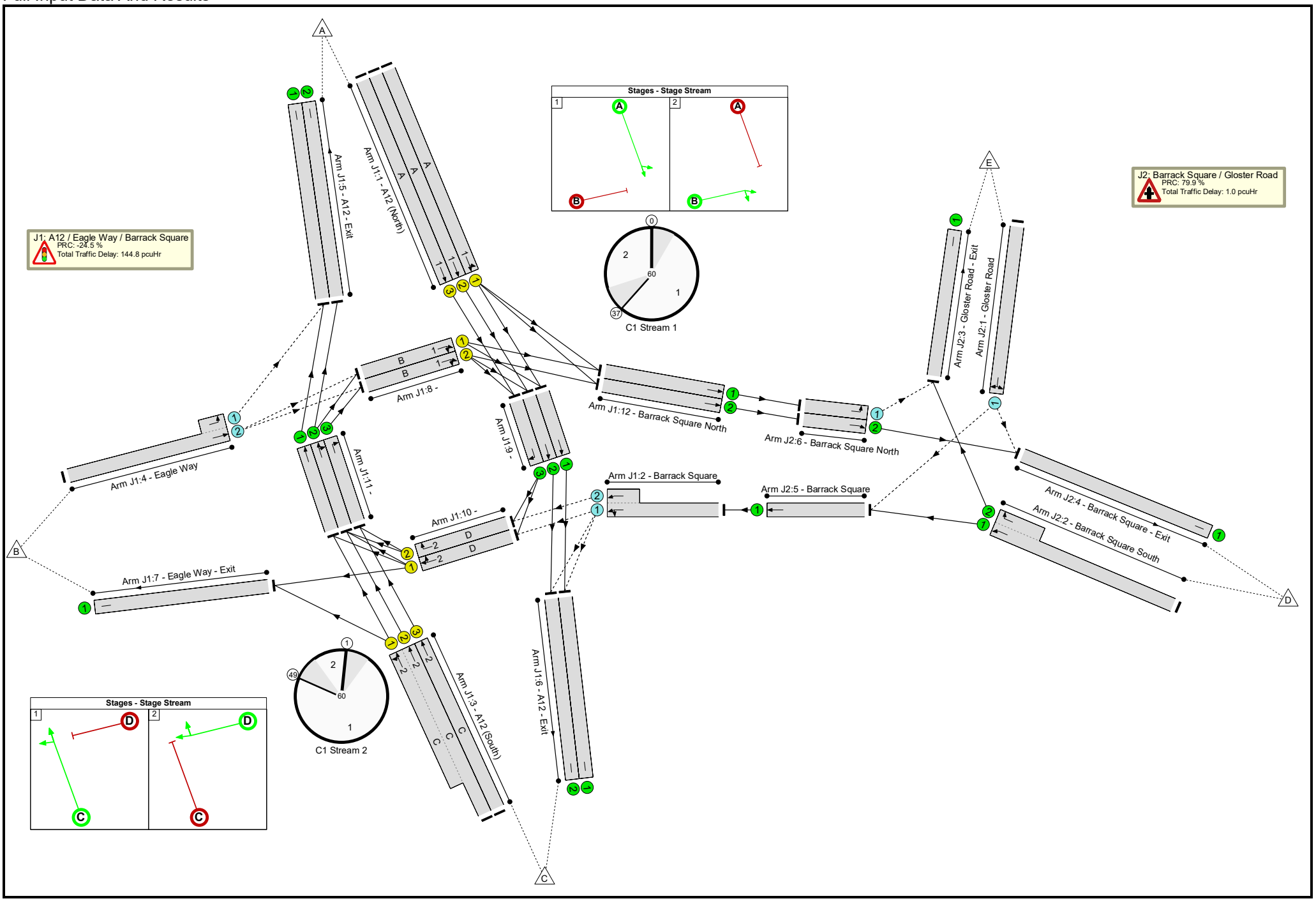
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.0%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.0%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	791	1839	1011	78.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	853	1958	1077	79.2%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	4	1828	1005	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	416	1994:1862	475+160	65.5 : 65.5%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2048	1828:1828	925+903	112.0 : 112.0%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	374	1828	1341	27.9%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	242	Inf :1821	310+89	60.6 : 60.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1066	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	905	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	399	1764	559	66.2%
8/2	Right Ahead	U	1	N/A	B		1	18	-	434	1764	559	77.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	787	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	951	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	92	1764	235	39.1%
10/2	Right	U	2	N/A	D		1	7	-	105	1764	235	44.6%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1012	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1176	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**50.0%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	249	Inf	498	50.0%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	221	1800:1800	1751+49	12.3 : 12.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	359	Inf	998	33.1%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1895**	**0**	**0**	**21.5**	**124.2**	**0.0**	**145.7**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1316**	**0**	**0**	**21.4**	**123.4**	**0.0**	**144.8**	**-**	**-**	**-**	**-**
1/1	791	791	-	-	-	2.3	1.8	-	4.1	18.7	10.3	1.8	12.1
1/2	853	853	-	-	-	2.6	1.9	-	4.4	18.7	11.1	1.9	13.0
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.1	0.0	0.0	0.0
2/1+2/2	416	416	832	0	0	0.8	0.9	-	1.7	15.1	3.5	0.9	4.5
3/2+3/1	2048	1828	-	-	-	10.4	114.5	-	124.9	219.5	46.6	114.5	161.1
3/3	374	374	-	-	-	0.3	0.2	-	0.5	4.5	2.1	0.2	2.3
4/2+4/1	242	242	484	0	0	0.5	0.8	-	1.2	18.2	2.4	0.8	3.1
5/1	961	961	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	53	53	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	370	370	-	-	-	1.5	1.0	-	2.5	24.5	5.1	1.0	6.0
8/2	434	434	-	-	-	2.0	1.7	-	3.7	30.4	6.5	1.7	8.2
9/1	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	92	92	-	-	-	0.5	0.3	-	0.8	30.2	1.2	0.3	1.5
10/2	105	105	-	-	-	0.6	0.4	-	1.0	33.6	1.6	0.4	2.0
11/1	907	907	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1065	1065	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	330	330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**579**	**0**	**0**	**0.1**	**0.8**	**0.0**	**1.0**	**-**	**-**	**-**	**-**
1/1	249	249	249	0	0	0.0	0.5	-	0.5	7.2	0.0	0.5	0.5
2/1+2/2	221	221	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	330	330	330	0	0	0.1	0.2	-	0.4	4.3	4.3	0.2	4.6
6/2	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

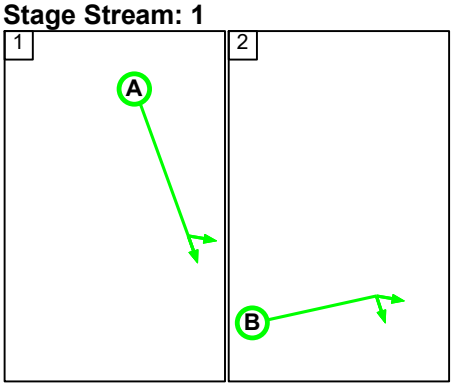
C1	Stream: 1 PRC for Signalled Lanes (%):	13.6	Total Delay for Signalled Lanes (pcuHr):	14.72	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-24.5	Total Delay for Signalled Lanes (pcuHr):	127.08	Cycle Time (s):	60
	PRC Over All Lanes (%):	-24.5	Total Delay Over All Lanes(pcuHr):	145.74		

Full Input Data And Results

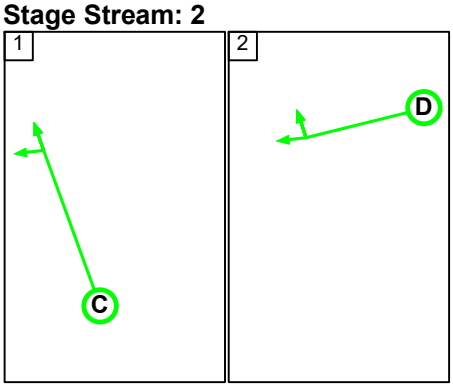
Scenario 18: '34RC 08:00-09:00' (FG88: '34RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

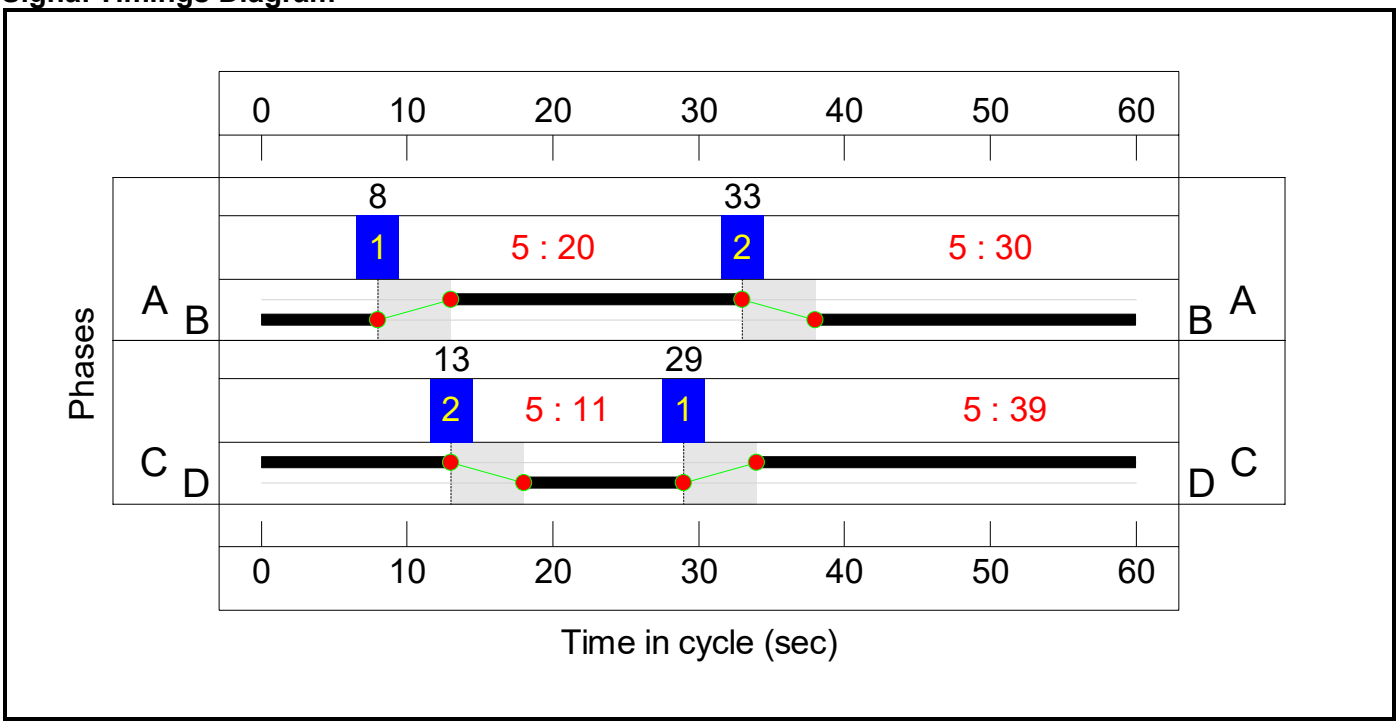
Stage	1	2
Duration	20	30
Change Point	8	33

Stage Stream: 2

Stage	1	2
Duration	39	11
Change Point	29	13

Full Input Data And Results

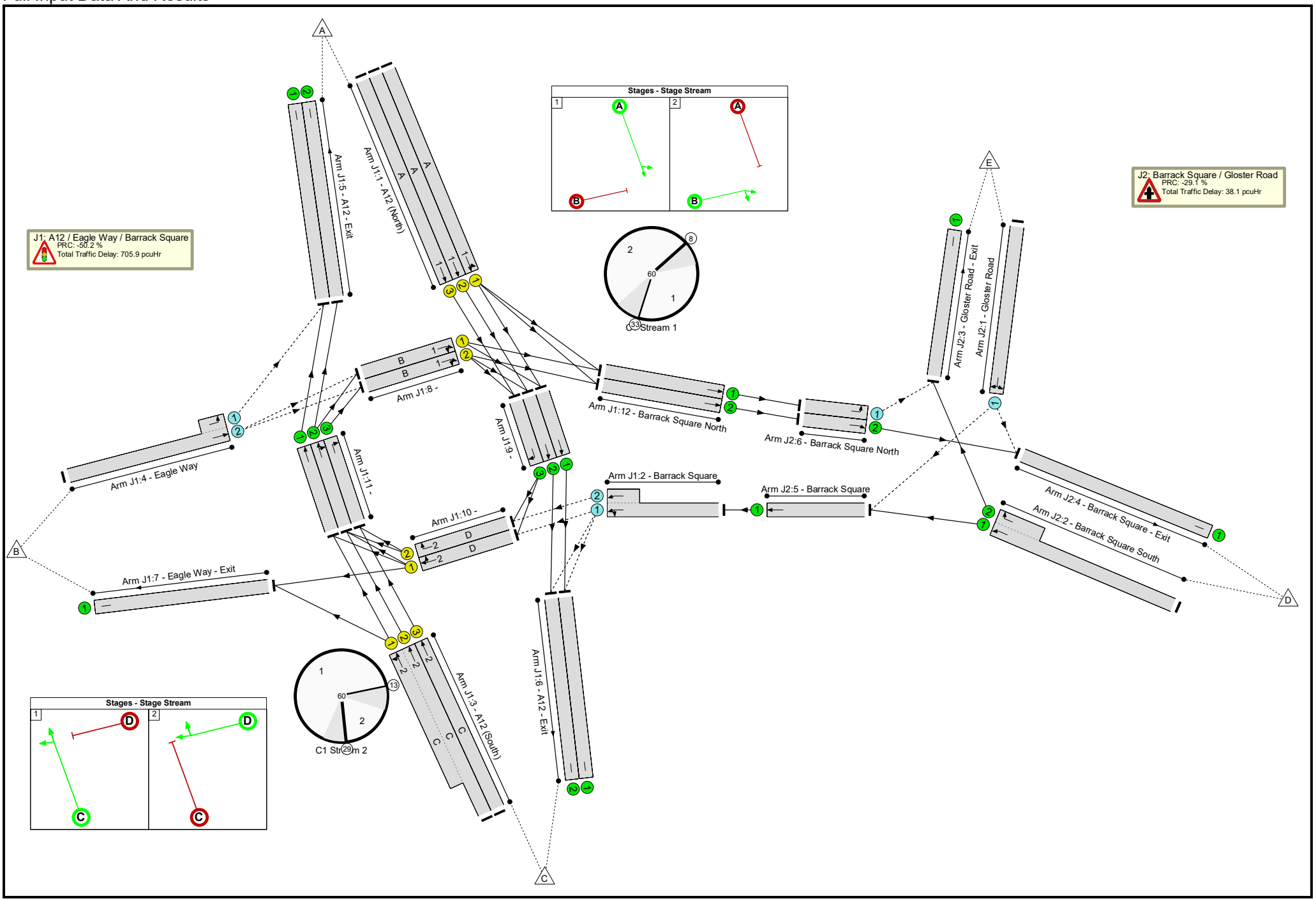
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**135.2%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**135.2%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	20	-	870	1844	645	134.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	20	-	926	1958	685	135.1%
1/3	A12 (North) Ahead	U	1	N/A	A		1	20	-	22	1828	640	3.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	830	1994:1862	565+25	131.7 : 135.2%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	39	-	2435	1828:1828	920+908	133.2 : 133.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	39	-	621	1828	1219	51.0%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	272	Inf :1821	286+86	73.1 : 73.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1355	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1103	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1047	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1273	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	130	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	30	-	436	1764	911	39.1%
8/2	Right Ahead	U	1	N/A	B		1	30	-	714	1764	911	78.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	826	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1052	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	11	-	375	1764	353	79.0%
10/2	Right	U	2	N/A	D		1	11	-	35	1764	353	7.3%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1292	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1423	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**116.2%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	457	Inf	393	116.2%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	462	1800:1800	1757+43	25.7 : 25.7%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	742	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	830	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	404	Inf	996	31.6%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2433**	**0**	**0**	**64.9**	**679.1**	**0.0**	**744.0**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1725**	**0**	**0**	**62.2**	**643.7**	**0.0**	**705.9**	**-**	**-**	**-**	**-**
1/1	870	645	-	-	-	10.6	114.2	-	124.8	516.6	18.2	114.2	132.4
1/2	926	685	-	-	-	11.4	122.2	-	133.6	519.4	19.4	122.2	141.7
1/3	22	22	-	-	-	0.1	0.0	-	0.1	15.9	0.2	0.0	0.3
2/1+2/2	777	590	1181	0	0	8.7	95.9	-	104.6	484.6	25.6	95.9	121.5
3/2+3/1	2435	1828	-	-	-	26.1	305.5	-	331.6	490.2	60.6	305.5	366.1
3/3	621	621	-	-	-	0.9	0.5	-	1.4	8.1	5.2	0.5	5.7
4/2+4/1	272	272	544	0	0	0.8	1.3	-	2.2	28.6	3.0	1.3	4.3
5/1	1029	1029	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	784	784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	965	965	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	102	102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	356	356	-	-	-	0.8	0.3	-	1.1	11.6	3.1	0.3	3.4
8/2	714	714	-	-	-	1.7	1.8	-	3.4	17.3	6.4	1.8	8.2
9/1	630	630	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	811	811	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	279	279	-	-	-	1.1	1.8	-	2.9	37.8	4.5	1.8	6.3
10/2	26	26	-	-	-	0.1	0.0	-	0.1	15.8	0.3	0.0	0.3
11/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1064	1064	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	315	315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**709**	**0**	**0**	**2.6**	**35.5**	**0.0**	**38.1**	**-**	**-**	**-**	**-**
1/1	457	393	393	0	0	2.6	35.1	-	37.7	297.0	22.9	35.1	57.9
2/1+2/2	462	462	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	315	315	315	0	0	0.0	0.2	-	0.2	2.7	1.4	0.2	1.7
6/2	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

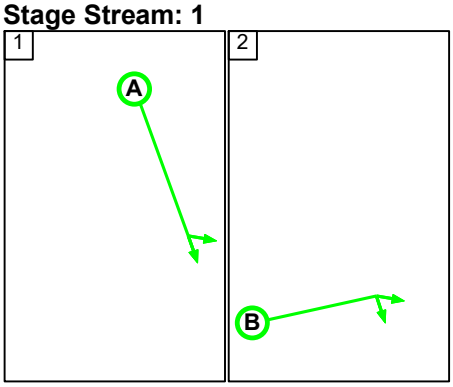
C1	Stream: 1 PRC for Signalled Lanes (%):	-50.1	Total Delay for Signalled Lanes (pcuHr):	263.13	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-48.0	Total Delay for Signalled Lanes (pcuHr):	335.98	Cycle Time (s): 60
	PRC Over All Lanes (%):	-50.2	Total Delay Over All Lanes(pcuHr):	744.02	

Full Input Data And Results

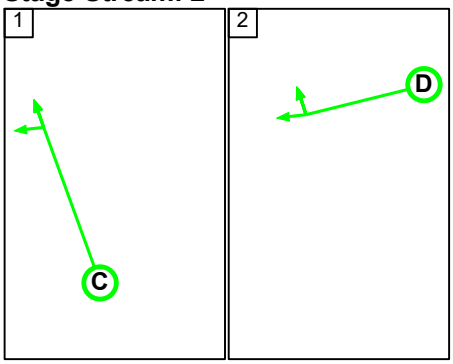
Scenario 19: '34RC 15:00-16:00' (FG89: '34RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

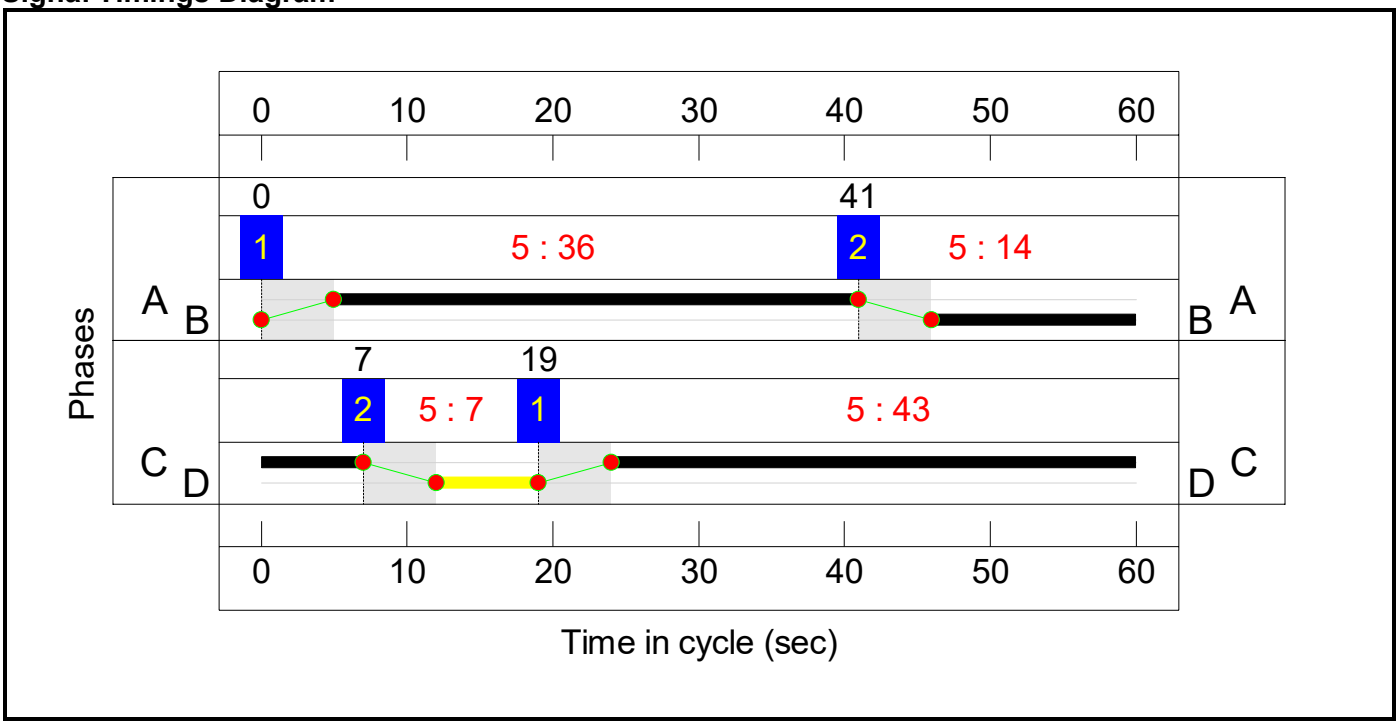
Stage	1	2
Duration	36	14
Change Point	0	41

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	19	7

Full Input Data And Results

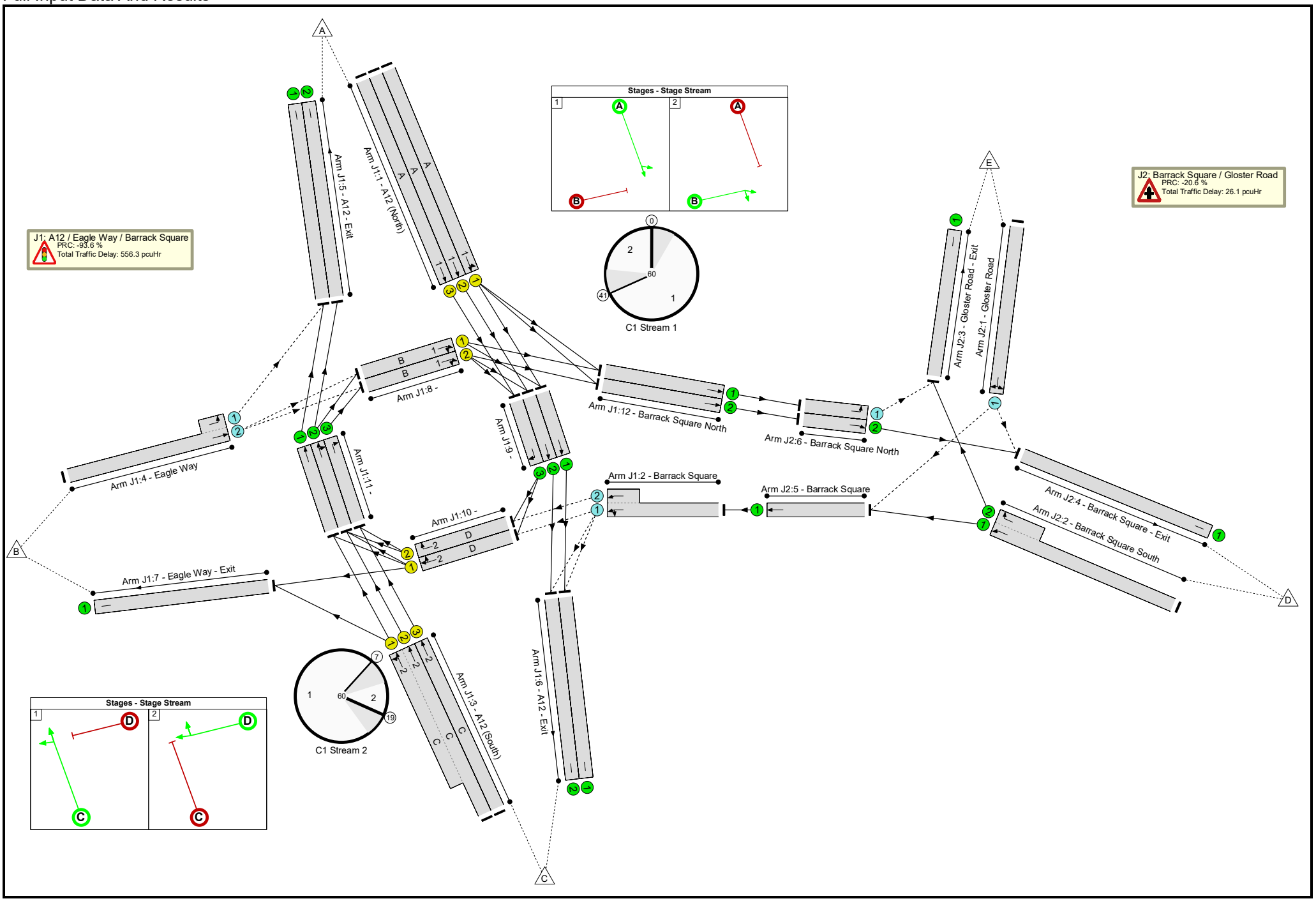
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**174.3%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**174.3%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	36	-	987	1864	1149	85.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	36	-	1067	1958	1207	88.4%
1/3	A12 (North) Ahead	U	1	N/A	A		1	36	-	58	1828	1127	5.1%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	910	1994:1862	388+119	171.8 : 174.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2445	1828:1828	943+885	133.8 : 133.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	169	1828	1341	12.6%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	245	Inf :1821	356+137	49.7 : 49.7%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1175	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1182	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1483	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	14	-	425	1764	441	77.7%
8/2	Right Ahead	U	1	N/A	B		1	14	-	248	1764	441	56.2%
9/1	Ahead	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1192	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	58	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	173	1764	235	52.2%
10/2	Right	U	2	N/A	D		1	7	-	213	1764	235	51.1%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1107	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1509	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	169	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**108.6%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	472	Inf	435	108.6%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	513	1800:1800	1607+193	28.5 : 28.5%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	542	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	910	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	487	Inf	982	41.2%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2347**	**0**	**0**	**52.5**	**529.9**	**0.0**	**582.4**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1508**	**0**	**0**	**50.6**	**505.7**	**0.0**	**556.3**	**-**	**-**	**-**	**-**
1/1	987	987	-	-	-	2.6	2.9	-	5.5	20.1	13.2	2.9	16.1
1/2	1067	1067	-	-	-	2.9	3.6	-	6.5	21.9	14.8	3.6	18.4
1/3	58	58	-	-	-	0.1	0.0	-	0.1	6.3	0.4	0.0	0.4
2/1+2/2	874	509	1018	0	0	15.1	184.7	-	199.8	822.9	39.2	184.7	223.9
3/2+3/1	2445	1828	-	-	-	25.2	310.5	-	335.7	494.3	62.0	310.5	372.5
3/3	169	169	-	-	-	0.1	0.1	-	0.2	3.9	0.8	0.1	0.9
4/2+4/1	245	245	490	0	0	0.3	0.5	-	0.8	11.7	1.7	0.5	2.2
5/1	889	889	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	875	875	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1354	1354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	342	342	-	-	-	1.9	1.7	-	3.6	38.1	5.1	1.7	6.8
8/2	248	248	-	-	-	1.4	0.6	-	2.1	30.1	3.6	0.6	4.2
9/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	1192	1192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	58	58	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	123	123	-	-	-	0.6	0.5	-	1.1	33.5	1.6	0.5	2.1
10/2	120	120	-	-	-	0.4	0.5	-	0.9	26.0	1.6	0.5	2.1
11/1	821	821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1083	1083	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	169	169	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**839**	**0**	**0**	**1.9**	**24.2**	**0.0**	**26.1**	**-**	**-**	**-**	**-**
1/1	472	435	435	0	0	1.6	23.6	-	25.2	192.3	23.6	23.6	47.2
2/1+2/2	513	513	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	874	874	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	404	404	404	0	0	0.3	0.4	-	0.7	5.9	5.3	0.4	5.7
6/2	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

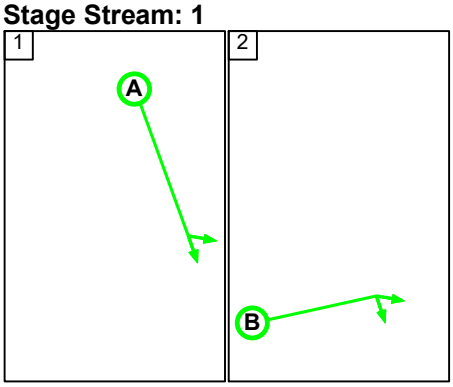
C1	Stream: 1 PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	17.79	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-48.6	Total Delay for Signalled Lanes (pcuHr):	337.89	Cycle Time (s):	60
	PRC Over All Lanes (%):	-93.6	Total Delay Over All Lanes(pcuHr):	582.39		

Full Input Data And Results

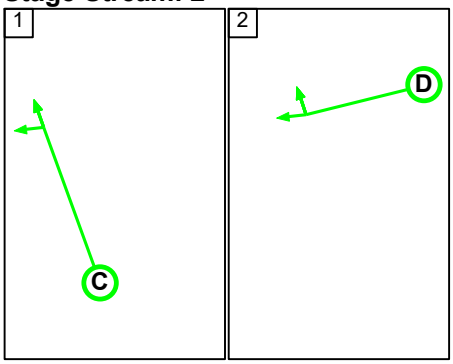
Scenario 20: '34RC 17:00-18:00' (FG90: '34RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

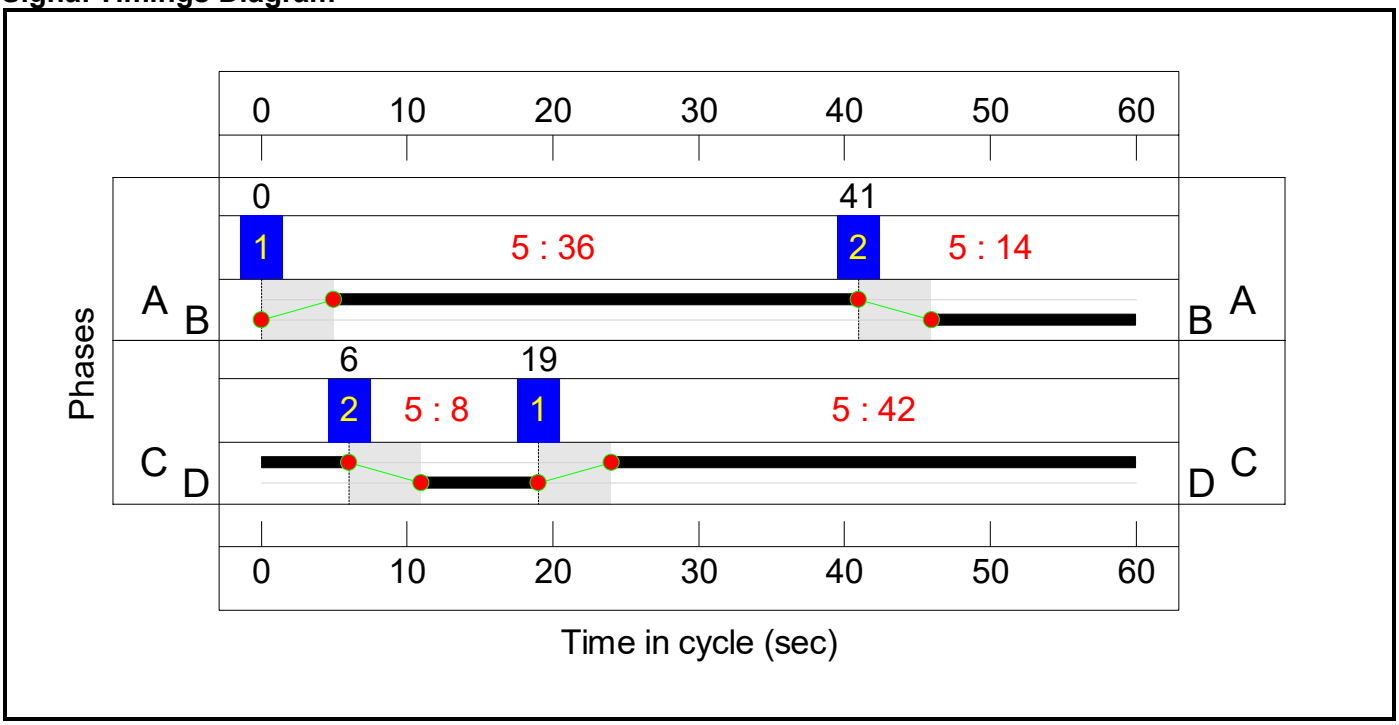
Stage	1	2
Duration	36	14
Change Point	0	41

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	19	6

Full Input Data And Results

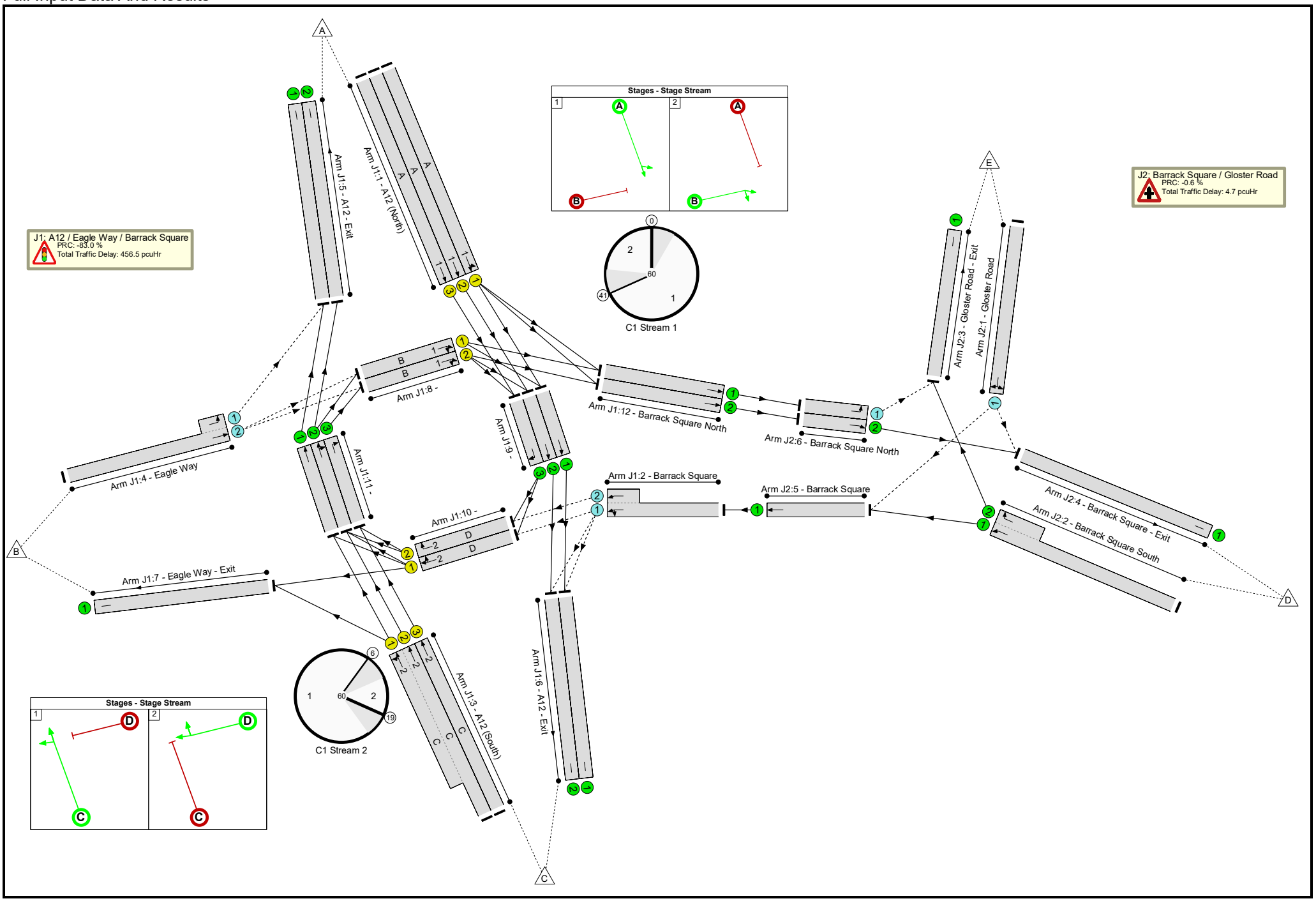
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**164.7%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**164.7%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	36	-	1000	1860	1147	87.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	36	-	1058	1958	1207	87.6%
1/3	A12 (North) Ahead	U	1	N/A	A		1	36	-	73	1828	1127	6.5%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	900	1994:1862	385+162	164.7 : 164.7%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	42	-	2274	1828:1828	920+908	124.4 : 124.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	154	1828	1310	11.8%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	190	Inf :1821	367+128	38.4 : 38.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1029	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1028	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1454	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	295	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	14	-	331	1764	441	63.5%
8/2	Right Ahead	U	1	N/A	B		1	14	-	223	1764	441	50.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	751	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1179	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	73	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	8	-	155	1764	265	46.4%
10/2	Right	U	2	N/A	D		1	8	-	266	1764	265	61.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	980	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1420	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	154	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**90.6%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	393	Inf	434	90.6%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	554	1800:1800	1670+130	30.8 : 30.8%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	294	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	395	Inf	987	34.9%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2210**	**0**	**0**	**43.5**	**417.7**	**0.0**	**461.2**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1473**	**0**	**0**	**43.3**	**413.2**	**0.0**	**456.5**	**-**	**-**	**-**	**-**
1/1	1000	1000	-	-	-	2.6	3.3	-	5.9	21.3	13.6	3.3	16.9
1/2	1058	1058	-	-	-	2.8	3.4	-	6.2	21.1	14.7	3.4	18.1
1/3	73	73	-	-	-	0.1	0.0	-	0.1	6.3	0.5	0.0	0.5
2/1+2/2	900	546	1093	0	0	14.6	178.0	-	192.6	770.4	40.0	178.0	218.0
3/2+3/1	2274	1828	-	-	-	19.1	225.5	-	244.6	387.3	55.2	225.5	280.7
3/3	154	154	-	-	-	0.1	0.1	-	0.2	4.2	0.8	0.1	0.8
4/2+4/1	190	190	380	0	0	0.2	0.3	-	0.5	9.8	1.1	0.3	1.4
5/1	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	919	919	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1346	1346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	239	239	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	280	280	-	-	-	1.5	0.9	-	2.3	30.0	4.0	0.9	4.8
8/2	223	223	-	-	-	1.2	0.5	-	1.8	28.4	3.2	0.5	3.7
9/1	751	751	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	1179	1179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	73	73	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	123	123	-	-	-	0.6	0.4	-	1.1	31.4	1.5	0.4	1.9
10/2	162	162	-	-	-	0.4	0.8	-	1.2	27.1	2.2	0.8	3.0
11/1	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1087	1087	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	154	154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	344	344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**737**	**0**	**0**	**0.2**	**4.5**	**0.0**	**4.7**	**-**	**-**	**-**	**-**
1/1	393	393	393	0	0	0.0	4.0	-	4.0	36.8	1.1	4.0	5.1
2/1+2/2	554	554	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	900	900	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	344	344	344	0	0	0.2	0.3	-	0.4	4.5	4.2	0.3	4.5
6/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

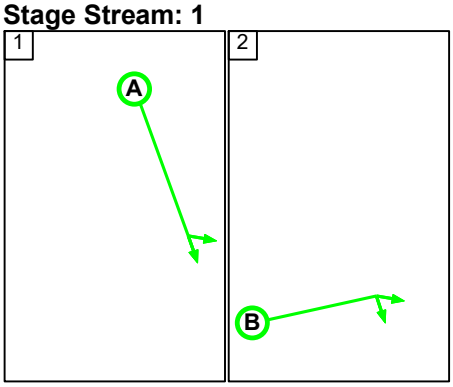
C1	Stream: 1 PRC for Signalled Lanes (%):	2.7	Total Delay for Signalled Lanes (pcuHr):	16.33	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-38.2	Total Delay for Signalled Lanes (pcuHr):	247.10	Cycle Time (s): 60
	PRC Over All Lanes (%):	-83.0	Total Delay Over All Lanes(pcuHr):	461.21	

Full Input Data And Results

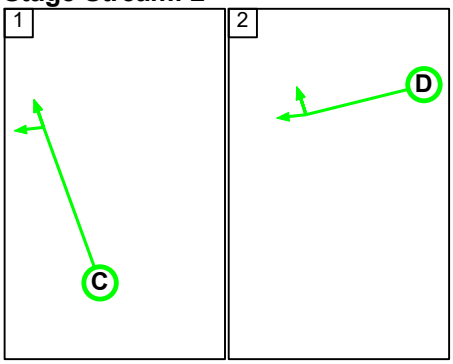
Scenario 21: '34OP 06:00-07:00' (FG91: '34OP 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

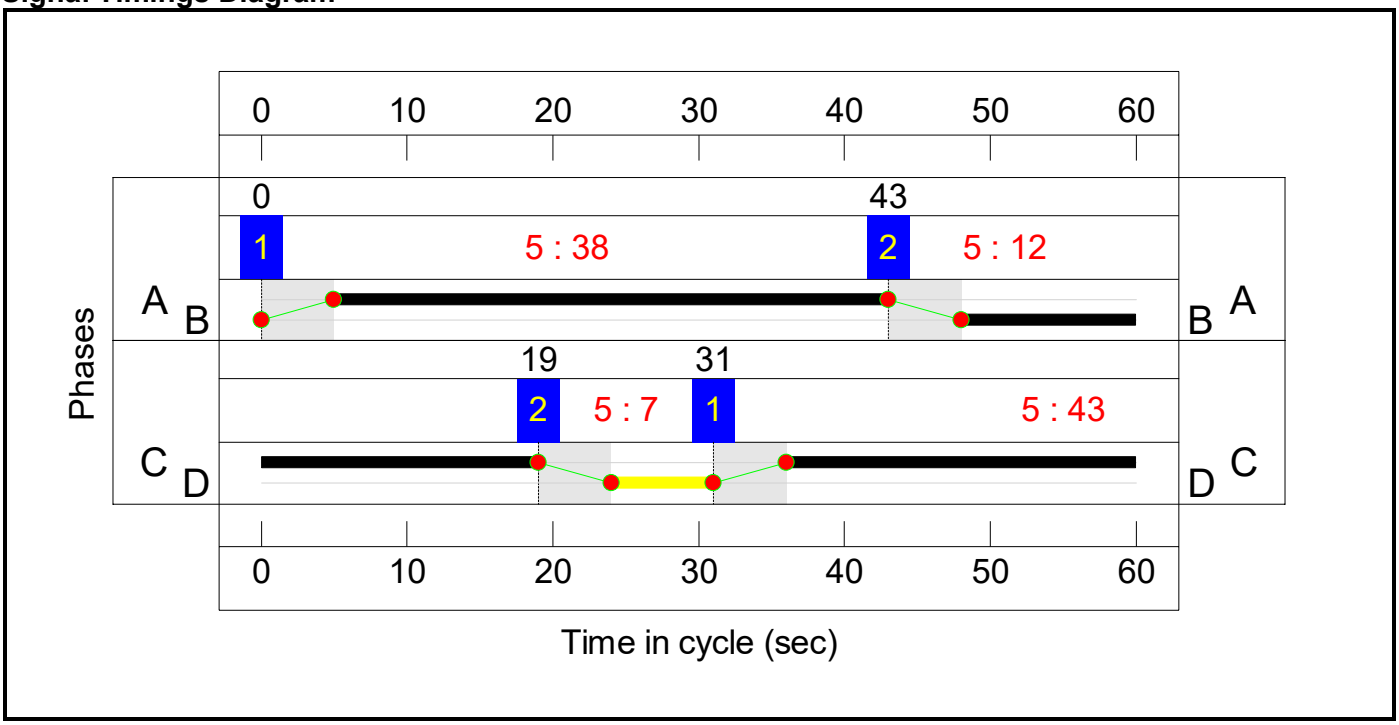
Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	31	19

Full Input Data And Results

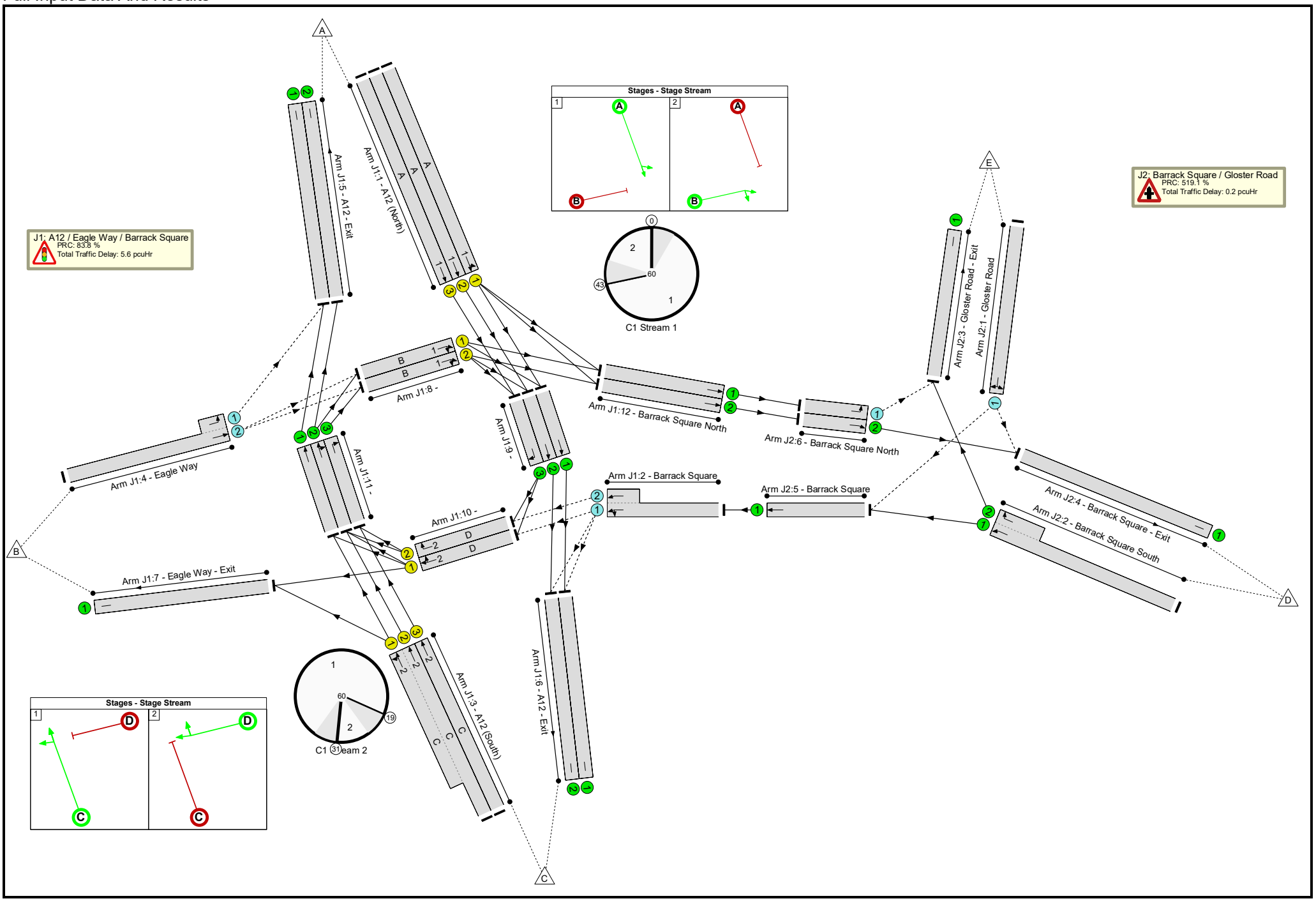
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**49.0%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**49.0%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	38	-	458	1841	1197	38.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	38	-	509	1958	1273	40.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	38	-	2	1828	1188	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	63	1994:1862	676+46	8.7 : 8.7%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	895	1828:1828	915+913	49.0 : 49.0%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	117	1828	1341	8.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	92	Inf :1821	673+164	11.0 : 11.0%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	12	-	141	1764	382	36.9%
8/2	Right Ahead	U	1	N/A	B		1	12	-	144	1764	382	37.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	11	1764	235	4.7%
10/2	Right	U	2	N/A	D		1	7	-	4	1764	235	1.7%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	117	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	82	Inf	643	12.8%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	42	1800:1800	1500+300	2.3 : 2.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	63	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	145	Inf	997	14.5%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**537**	**0**	**0**	**3.7**	**2.1**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**310**	**0**	**0**	**3.7**	**1.9**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
1/1	458	458	-	-	-	0.6	0.3	-	0.9	7.3	3.4	0.3	3.7
1/2	509	509	-	-	-	0.7	0.3	-	1.0	7.3	4.0	0.3	4.3
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.4	0.0	0.0	0.0
2/1+2/2	63	63	126	0	0	0.0	0.0	-	0.1	2.9	0.1	0.0	0.1
3/2+3/1	895	895	-	-	-	0.7	0.5	-	1.2	4.8	2.6	0.5	3.1
3/3	117	117	-	-	-	0.1	0.0	-	0.1	3.8	0.6	0.0	0.6
4/2+4/1	92	92	184	0	0	0.0	0.1	-	0.1	2.6	0.1	0.1	0.1
5/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	24	24	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	141	141	-	-	-	0.7	0.3	-	1.0	26.3	1.7	0.3	2.0
8/2	144	144	-	-	-	0.7	0.3	-	1.0	26.1	1.8	0.3	2.1
9/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	11	11	-	-	-	0.1	0.0	-	0.1	30.3	0.2	0.0	0.2
10/2	4	4	-	-	-	0.0	0.0	-	0.0	30.7	0.1	0.0	0.1
11/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	117	117	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**227**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	82	82	82	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	42	42	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	63	63	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	145	145	145	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

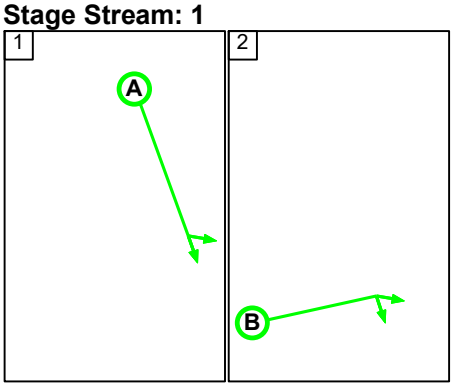
C1	Stream: 1 PRC for Signalled Lanes (%):	125.0	Total Delay for Signalled Lanes (pcuHr):	4.05	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	83.8	Total Delay for Signalled Lanes (pcuHr):	1.43	Cycle Time (s):	60
	PRC Over All Lanes (%):	83.8	Total Delay Over All Lanes(pcuHr):	5.77		

Full Input Data And Results

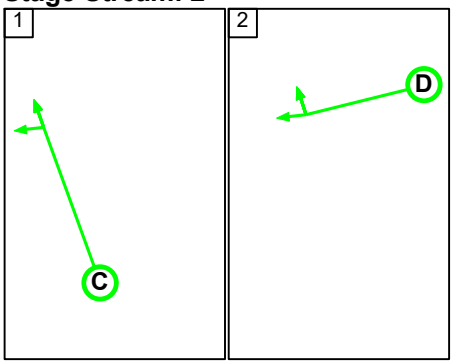
Scenario 22: '34OP 07:00-08:00' (FG92: '34OP 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

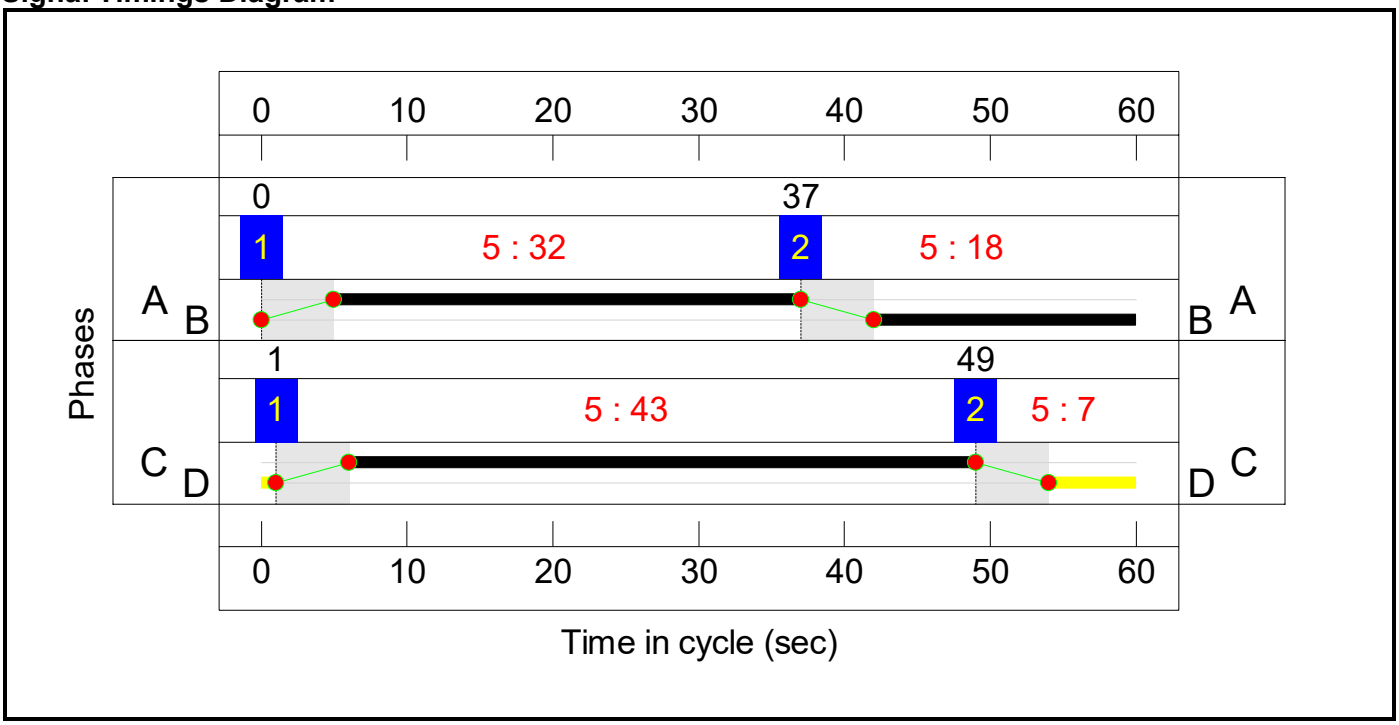
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	1	49

Full Input Data And Results

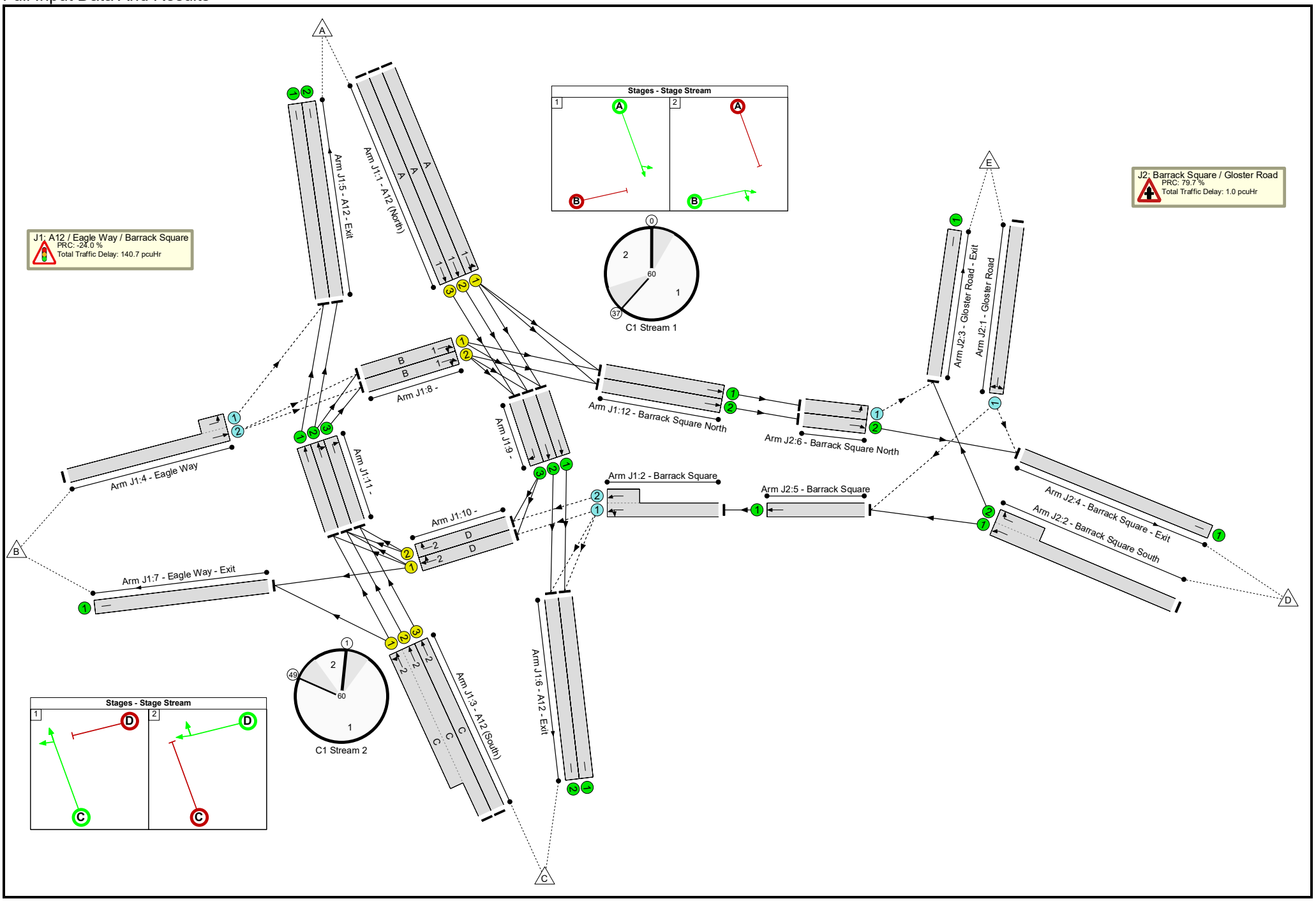
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.6%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.6%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	791	1839	1011	78.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	853	1958	1077	79.2%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	4	1828	1005	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	420	1994:1862	475+162	65.9 : 65.9%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2040	1828:1828	924+904	111.6 : 111.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	374	1828	1341	27.9%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	242	Inf :1821	309+89	60.8 : 60.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1064	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	903	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1062	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	399	1764	559	66.4%
8/2	Right Ahead	U	1	N/A	B		1	18	-	434	1764	559	77.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	787	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	951	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	94	1764	235	40.0%
10/2	Right	U	2	N/A	D		1	7	-	107	1764	235	45.5%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1010	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1174	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**50.1%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	249	Inf	497	50.1%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	225	1800:1800	1752+48	12.5 : 12.5%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	359	Inf	998	33.2%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1904**	**0**	**0**	**21.3**	**120.4**	**0.0**	**141.7**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1324**	**0**	**0**	**21.1**	**119.6**	**0.0**	**140.7**	**-**	**-**	**-**	**-**
1/1	791	791	-	-	-	2.3	1.8	-	4.1	18.7	10.3	1.8	12.1
1/2	853	853	-	-	-	2.6	1.9	-	4.4	18.7	11.1	1.9	13.0
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.1	0.0	0.0	0.0
2/1+2/2	420	420	840	0	0	0.8	1.0	-	1.8	15.2	3.7	1.0	4.6
3/2+3/1	2040	1828	-	-	-	10.1	110.6	-	120.7	213.0	46.3	110.6	156.9
3/3	374	374	-	-	-	0.3	0.2	-	0.5	4.5	2.1	0.2	2.3
4/2+4/1	242	242	484	0	0	0.5	0.8	-	1.2	18.3	2.4	0.8	3.1
5/1	963	963	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1062	1062	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	53	53	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	371	371	-	-	-	1.6	1.0	-	2.5	24.6	5.1	1.0	6.1
8/2	434	434	-	-	-	2.0	1.7	-	3.7	30.4	6.5	1.7	8.2
9/1	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	94	94	-	-	-	0.5	0.3	-	0.8	30.4	1.2	0.3	1.6
10/2	107	107	-	-	-	0.6	0.4	-	1.0	33.8	1.6	0.4	2.0
11/1	909	909	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1067	1067	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	331	331	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**580**	**0**	**0**	**0.1**	**0.8**	**0.0**	**1.0**	**-**	**-**	**-**	**-**
1/1	249	249	249	0	0	0.0	0.5	-	0.5	7.2	0.0	0.5	0.5
2/1+2/2	225	225	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	331	331	331	0	0	0.1	0.2	-	0.4	4.3	4.3	0.2	4.6
6/2	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

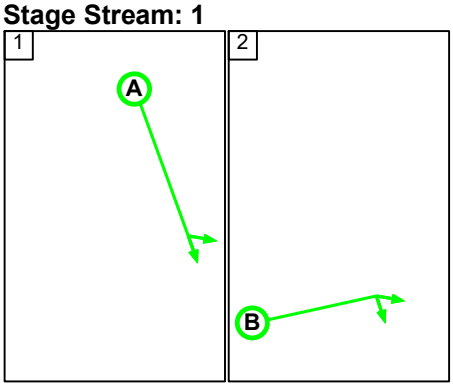
C1	Stream: 1 PRC for Signalled Lanes (%):	13.6	Total Delay for Signalled Lanes (pcuHr):	14.73	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-24.0	Total Delay for Signalled Lanes (pcuHr):	122.97	Cycle Time (s):	60
	PRC Over All Lanes (%):	-24.0	Total Delay Over All Lanes(pcuHr):	141.68		

Full Input Data And Results

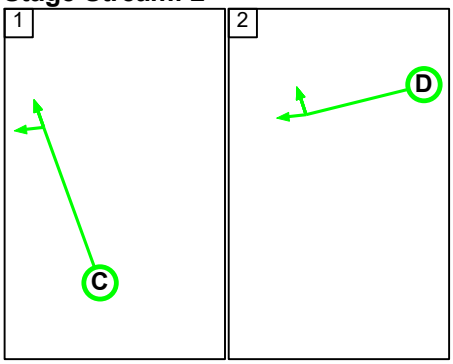
Scenario 23: '34OP 08:00-09:00' (FG93: '34OP 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

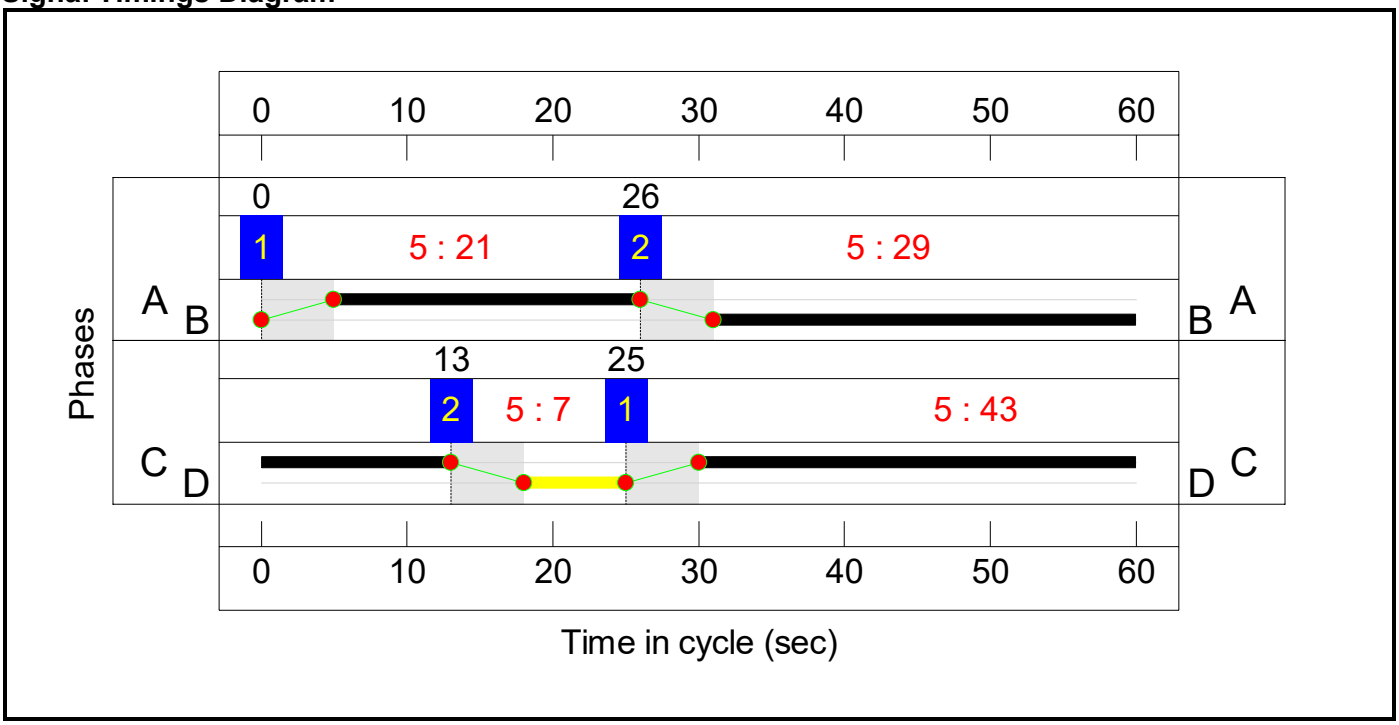
Stage	1	2
Duration	21	29
Change Point	0	26

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	25	13

Full Input Data And Results

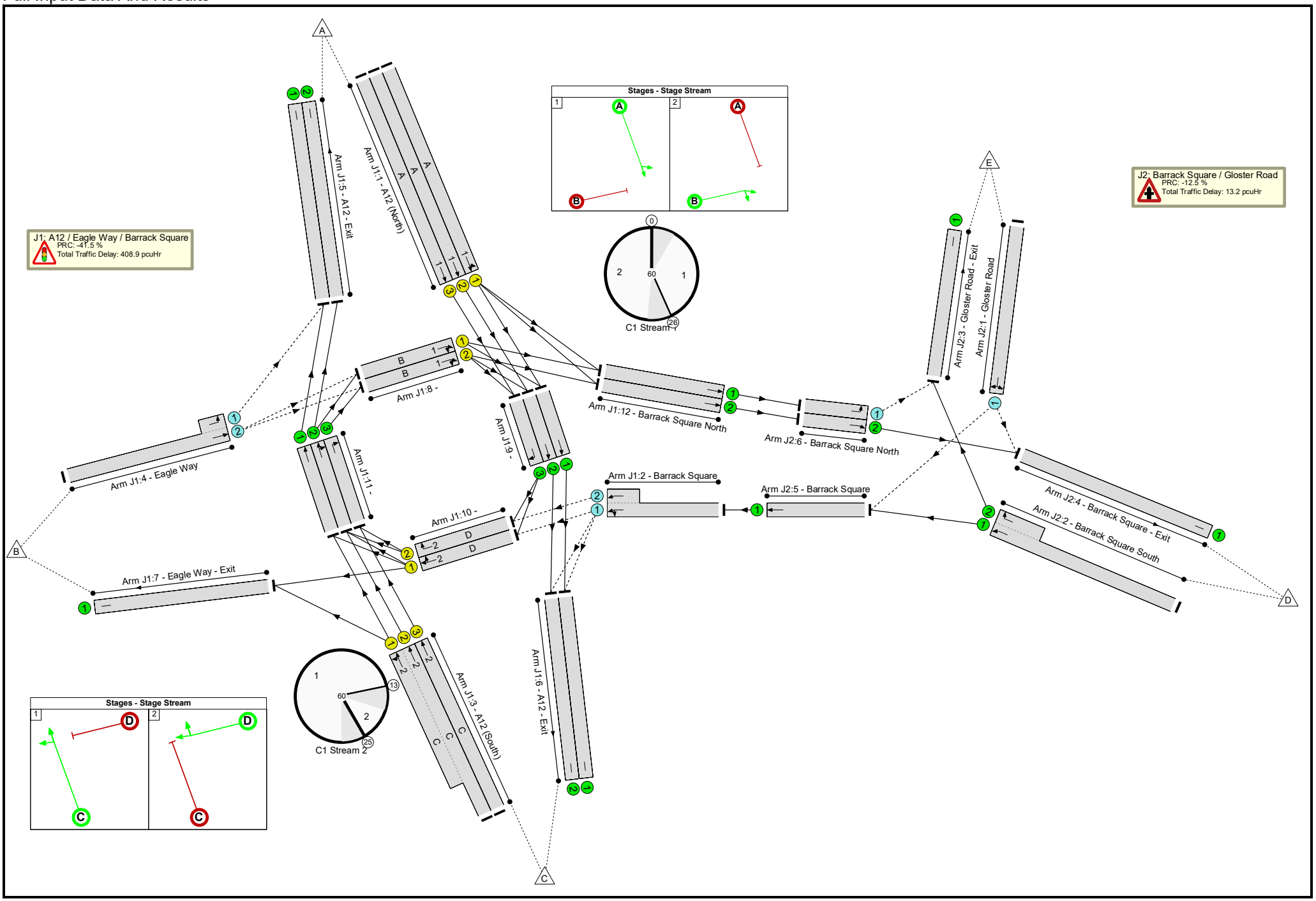
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.3%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.3%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	21	-	858	1845	677	126.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	21	-	914	1958	718	127.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	21	-	22	1828	670	3.3%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	497	1994:1862	548+44	83.2 : 83.2%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2158	1828:1828	914+914	118.1 : 118.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	616	1828	1341	46.0%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	273	Inf :1821	324+97	64.8 : 64.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1061	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	795	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1032	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1256	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	130	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	29	-	438	1764	882	44.1%
8/2	Right Ahead	U	1	N/A	B		1	29	-	709	1764	882	80.4%
9/1	Ahead	U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	49	1764	235	20.7%
10/2	Right	U	2	N/A	D		1	7	-	37	1764	235	15.6%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	998	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1116	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**101.2%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	458	Inf	452	101.2%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	128	1800:1800	1645+155	7.1 : 7.1%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	497	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	405	Inf	996	35.0%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2332**	**0**	**0**	**41.7**	**380.4**	**0.0**	**422.1**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1531**	**0**	**0**	**41.0**	**367.9**	**0.0**	**408.9**	**-**	**-**	**-**	**-**
1/1	858	677	-	-	-	9.7	93.1	-	102.8	431.1	17.3	93.1	110.4
1/2	914	718	-	-	-	10.4	100.3	-	110.7	436.1	18.5	100.3	118.8
1/3	22	22	-	-	-	0.1	0.0	-	0.1	15.1	0.2	0.0	0.2
2/1+2/2	492	492	985	0	0	1.4	2.4	-	3.8	27.8	6.5	2.4	8.8
3/2+3/1	2158	1828	-	-	-	14.5	168.2	-	182.7	304.8	52.2	168.2	220.4
3/3	616	616	-	-	-	0.6	0.4	-	1.0	5.7	4.1	0.4	4.5
4/2+4/1	273	273	546	0	0	0.7	0.9	-	1.7	21.8	2.9	0.9	3.8
5/1	908	908	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	679	679	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1058	1058	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	117	117	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	389	389	-	-	-	1.0	0.4	-	1.4	13.0	3.8	0.4	4.2
8/2	709	709	-	-	-	2.1	2.0	-	4.1	20.6	7.0	2.0	9.0
9/1	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	49	49	-	-	-	0.2	0.1	-	0.4	26.2	0.7	0.1	0.8
10/2	37	37	-	-	-	0.3	0.1	-	0.4	34.9	0.6	0.1	0.7
11/1	845	845	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	349	349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**801**	**0**	**0**	**0.7**	**12.5**	**0.0**	**13.2**	**-**	**-**	**-**	**-**
1/1	458	452	452	0	0	0.7	12.2	-	12.9	101.1	17.7	12.2	29.9
2/1+2/2	128	128	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	349	349	349	0	0	0.0	0.3	-	0.3	3.1	2.4	0.3	2.7
6/2	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

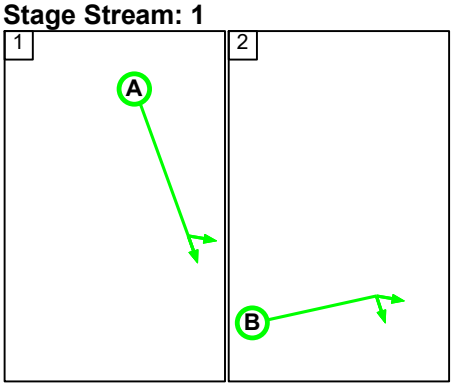
C1	Stream: 1 PRC for Signalled Lanes (%):	-41.5	Total Delay for Signalled Lanes (pcuHr):	219.03	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-31.2	Total Delay for Signalled Lanes (pcuHr):	184.39	Cycle Time (s):	60
	PRC Over All Lanes (%):	-41.5	Total Delay Over All Lanes(pcuHr):	422.08		

Full Input Data And Results

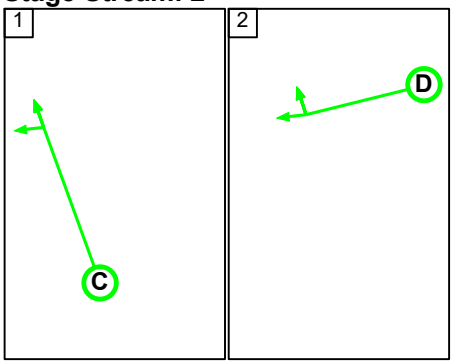
Scenario 24: '34OP 15:00-16:00' (FG94: '34OP 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

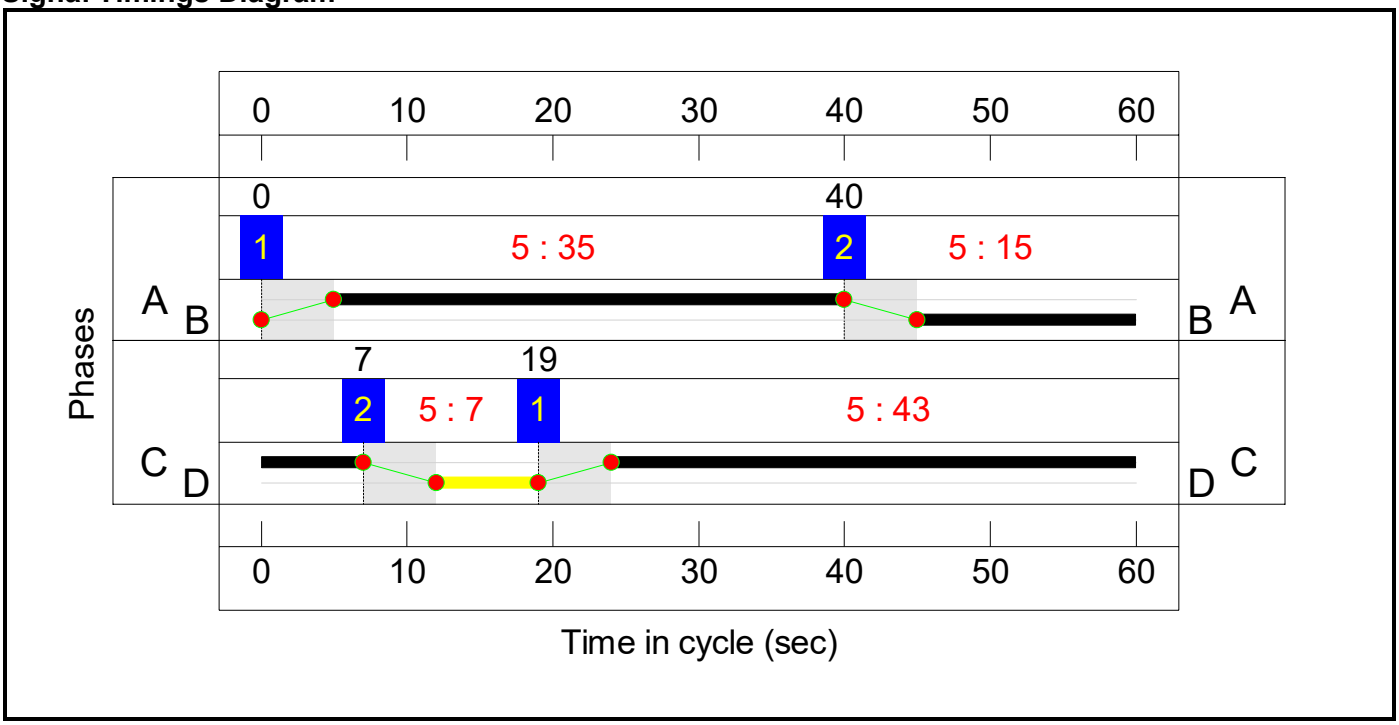
Stage	1	2
Duration	35	15
Change Point	0	40

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	19	7

Full Input Data And Results

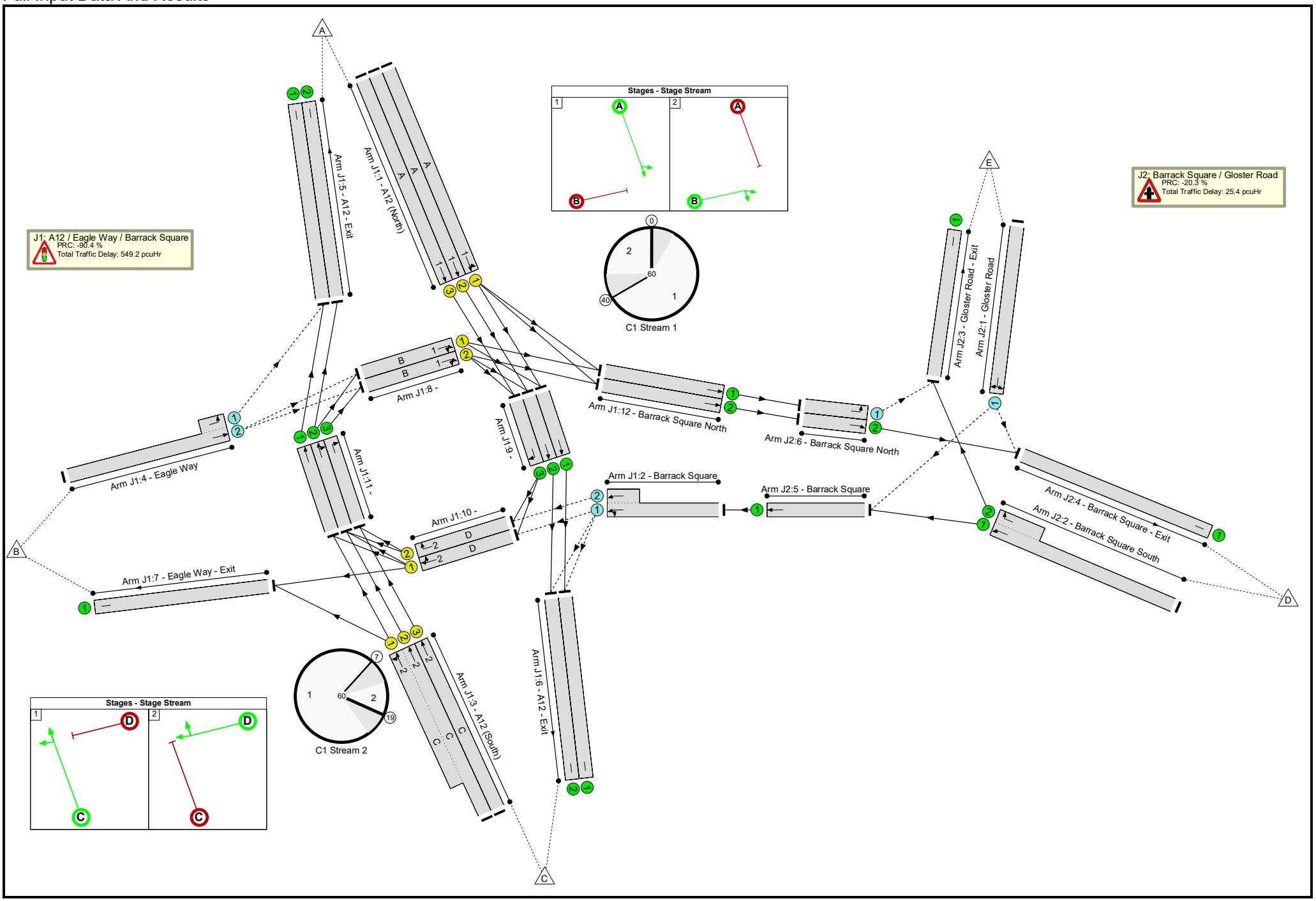
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**171.3%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**171.3%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	35	-	995	1864	1118	89.0%
1/2	A12 (North) Ahead	U	1	N/A	A		1	35	-	1049	1958	1175	89.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	35	-	58	1828	1097	5.3%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	908	1994:1862	395+121	168.8 : 171.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2439	1828:1828	935+893	133.4 : 133.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	167	1828	1341	12.5%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	244	Inf :1821	356+137	49.5 : 49.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1183	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1013	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1462	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	15	-	423	1764	470	72.6%
8/2	Right Ahead	U	1	N/A	B		1	15	-	246	1764	470	52.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1173	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	58	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	173	1764	235	52.7%
10/2	Right	U	2	N/A	D		1	7	-	213	1764	235	52.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1115	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1495	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	334	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**108.2%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	471	Inf	435	108.2%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	512	1800:1800	1607+193	28.4 : 28.4%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	908	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	484	Inf	982	41.0%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	334	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2360**	**0**	**0**	**52.1**	**522.5**	**0.0**	**574.6**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1523**	**0**	**0**	**50.4**	**498.9**	**0.0**	**549.2**	**-**	**-**	**-**	**-**
1/1	995	995	-	-	-	2.8	3.8	-	6.6	24.0	14.1	3.8	17.9
1/2	1049	1049	-	-	-	3.0	3.9	-	6.9	23.8	14.9	3.9	18.8
1/3	58	58	-	-	-	0.1	0.0	-	0.1	6.7	0.4	0.0	0.4
2/1+2/2	874	517	1035	0	0	14.9	180.2	-	195.0	803.6	39.1	180.2	219.3
3/2+3/1	2439	1828	-	-	-	25.0	307.5	-	332.5	490.7	61.8	307.5	369.3
3/3	167	167	-	-	-	0.1	0.1	-	0.2	3.9	0.8	0.1	0.9
4/2+4/1	244	244	488	0	0	0.3	0.5	-	0.8	11.6	1.7	0.5	2.1
5/1	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	833	833	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	887	887	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1337	1337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	168	168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	341	341	-	-	-	1.8	1.3	-	3.1	33.2	5.0	1.3	6.3
8/2	246	246	-	-	-	1.4	0.5	-	1.9	27.9	3.5	0.5	4.1
9/1	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	58	58	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	124	124	-	-	-	0.6	0.6	-	1.2	33.5	1.6	0.6	2.1
10/2	123	123	-	-	-	0.4	0.5	-	0.9	26.2	1.7	0.5	2.2
11/1	830	830	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1077	1077	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	334	334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**837**	**0**	**0**	**1.8**	**23.6**	**0.0**	**25.4**	**-**	**-**	**-**	**-**
1/1	471	435	435	0	0	1.5	23.1	-	24.5	187.4	23.6	23.1	46.6
2/1+2/2	512	512	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	874	874	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	402	402	402	0	0	0.3	0.3	-	0.6	5.7	5.3	0.3	5.6
6/2	334	334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

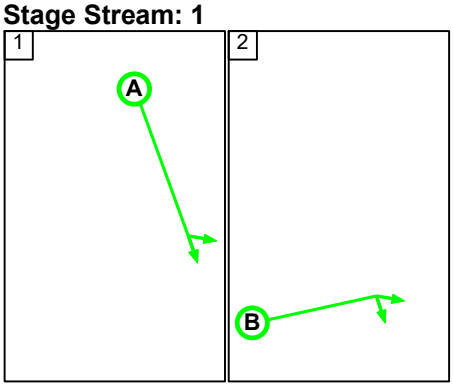
C1	Stream: 1 PRC for Signalled Lanes (%):	0.8	Total Delay for Signalled Lanes (pcuHr):	18.74	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-48.2	Total Delay for Signalled Lanes (pcuHr):	334.71	Cycle Time (s): 60
	PRC Over All Lanes (%):	-90.4	Total Delay Over All Lanes(pcuHr):	574.60	

Full Input Data And Results

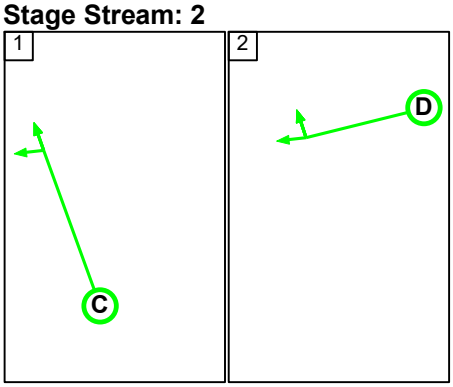
Scenario 25: '34OP 17:00-18:00' (FG95: '34OP 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

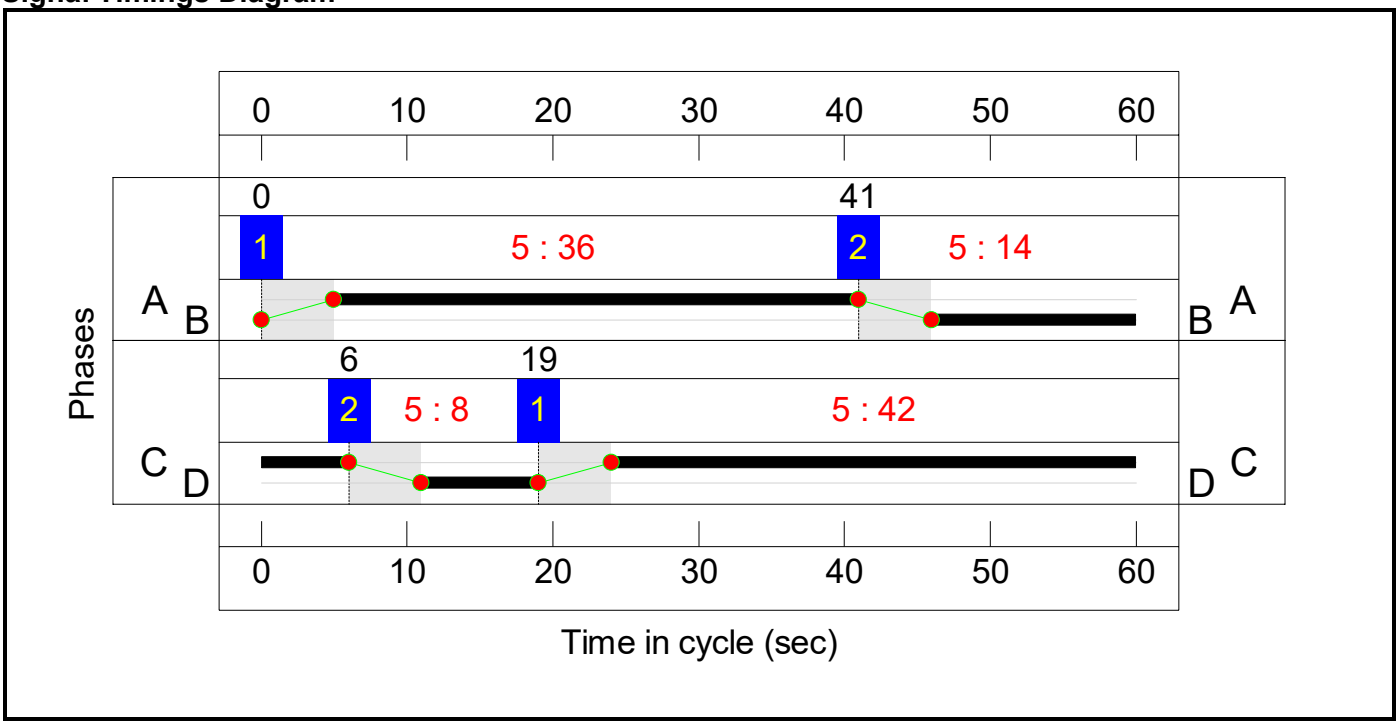
Stage	1	2
Duration	36	14
Change Point	0	41

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	19	6

Full Input Data And Results

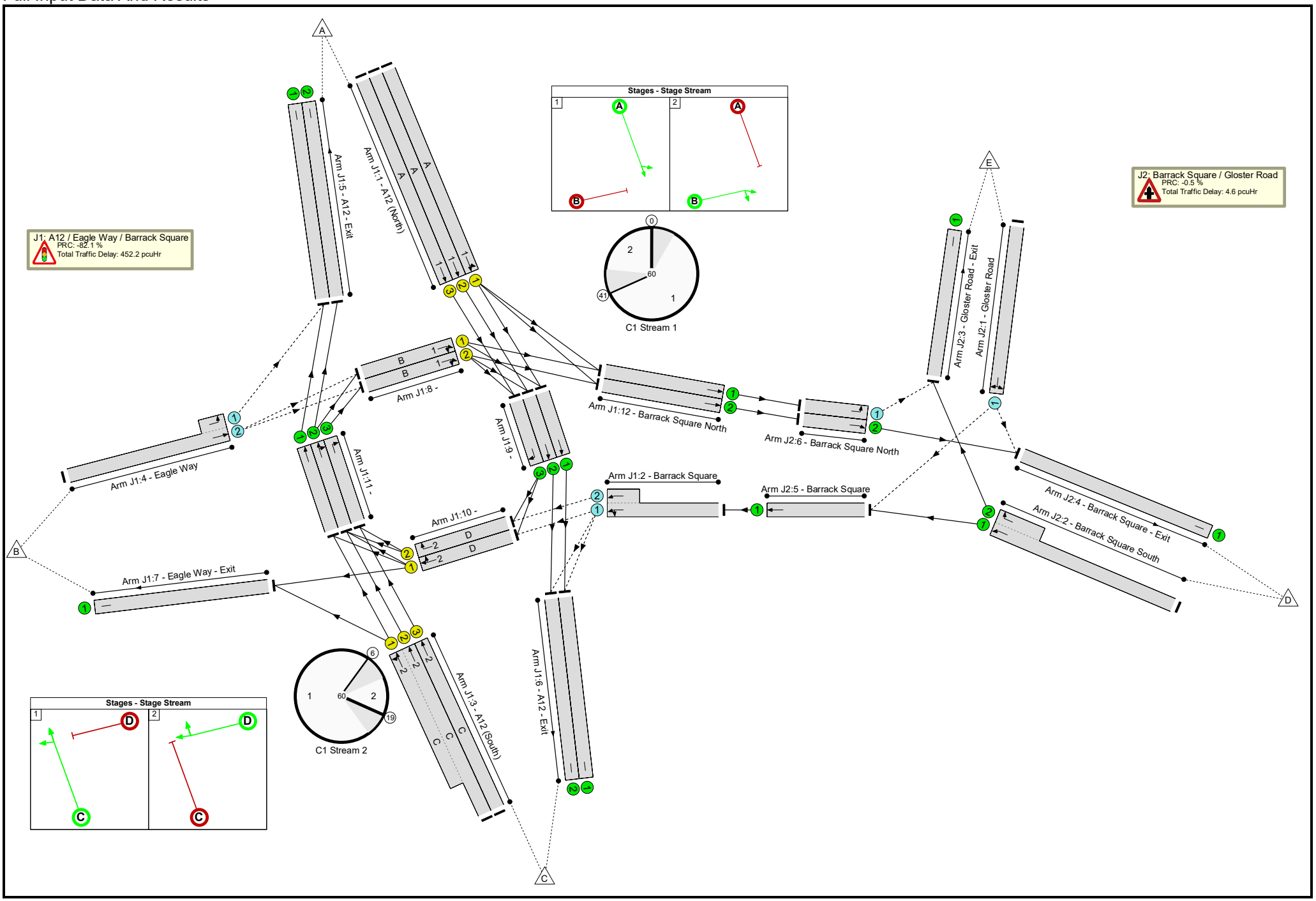
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**163.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**163.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	36	-	1001	1860	1147	87.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	36	-	1061	1958	1207	87.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	36	-	73	1828	1127	6.5%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	898	1994:1862	384+164	163.9 : 163.9%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	42	-	2269	1828:1828	918+910	124.1 : 124.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	153	1828	1310	11.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	190	Inf :1821	367+128	38.4 : 38.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1027	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1157	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1028	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1457	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	295	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	14	-	331	1764	441	63.6%
8/2	Right Ahead	U	1	N/A	B		1	14	-	222	1764	441	50.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	752	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1182	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	73	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	8	-	151	1764	265	45.6%
10/2	Right	U	2	N/A	D		1	8	-	269	1764	265	62.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	978	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1416	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	153	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	286	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**90.4%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	393	Inf	435	90.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	552	1800:1800	1670+130	30.7 : 30.7%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	395	Inf	987	34.9%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	286	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2213**	**0**	**0**	**43.2**	**413.6**	**0.0**	**456.8**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1476**	**0**	**0**	**43.0**	**409.1**	**0.0**	**452.2**	**-**	**-**	**-**	**-**
1/1	1001	1001	-	-	-	2.7	3.3	-	5.9	21.3	13.6	3.3	16.9
1/2	1061	1061	-	-	-	2.8	3.5	-	6.3	21.4	14.7	3.5	18.2
1/3	73	73	-	-	-	0.1	0.0	-	0.1	6.3	0.5	0.0	0.5
2/1+2/2	898	548	1096	0	0	14.4	176.3	-	190.7	764.7	39.9	176.3	216.3
3/2+3/1	2269	1828	-	-	-	18.9	223.0	-	242.0	383.9	55.0	223.0	278.1
3/3	153	153	-	-	-	0.1	0.1	-	0.2	4.2	0.8	0.1	0.8
4/2+4/1	190	190	380	0	0	0.2	0.3	-	0.5	9.7	1.1	0.3	1.4
5/1	836	836	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	878	878	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	920	920	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1350	1350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	239	239	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	281	281	-	-	-	1.5	0.9	-	2.3	30.0	4.0	0.9	4.9
8/2	222	222	-	-	-	1.2	0.5	-	1.7	28.3	3.2	0.5	3.7
9/1	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	1182	1182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	73	73	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	121	121	-	-	-	0.6	0.4	-	1.0	31.3	1.5	0.4	1.9
10/2	164	164	-	-	-	0.5	0.8	-	1.3	27.6	2.2	0.8	3.0
11/1	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1087	1087	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	153	153	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	286	286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**738**	**0**	**0**	**0.2**	**4.5**	**0.0**	**4.6**	**-**	**-**	**-**	**-**
1/1	393	393	393	0	0	0.0	4.0	-	4.0	36.4	1.1	4.0	5.1
2/1+2/2	552	552	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	345	345	345	0	0	0.2	0.3	-	0.4	4.5	4.2	0.3	4.5
6/2	286	286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	16.44	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-37.9	Total Delay for Signalled Lanes (pcuHr):	244.45	Cycle Time (s):	60
	PRC Over All Lanes (%):	-82.1	Total Delay Over All Lanes(pcuHr):	456.79		

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Report generation date: 18/12/2020 10:33:40

»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	0.5	2.3	1.93	0.34	A	1.8	3.7	3.69	0.65	A	4.1	12.1	6.85	0.81	A	2.5	5.5	4.66	0.71	A	1.8	3.5	3.61	0.64	A
B - Eagle Way West	0.1	0.5	3.61	0.05	A	0.3	1.4	7.69	0.26	A	0.8	3.9	13.65	0.45	B	1.7	8.9	28.45	0.64	D	0.8	3.9	18.72	0.45	C
C - A12 South	0.3	1.3	2.08	0.25	A	1.5	2.3	3.97	0.60	A	3.0	6.3	6.88	0.75	A	4.9	22.7	11.09	0.84	B	4.2	16.6	9.26	0.81	A
D - Anson Rd East	0.1	0.5	3.03	0.12	A	0.5	1.9	5.15	0.32	A	0.6	2.9	6.11	0.38	A	4.4	22.7	18.00	0.82	C	5.7	28.8	21.14	0.86	C
2023 Reference Case																									
A - A12 North	0.6	2.6	1.98	0.36	A	2.1	4.6	4.17	0.68	A	4.8	18.1	7.88	0.83	A	2.9	6.4	5.27	0.74	A	2.1	4.4	4.02	0.67	A
B - Eagle Way West	0.1	0.5	3.73	0.06	A	0.5	1.8	9.36	0.32	A	1.5	7.8	23.76	0.61	C	4.2	20.9	65.37	0.84	F	1.1	5.7	23.92	0.54	C
C - A12 South	0.4	1.5	2.11	0.27	A	1.9	3.6	4.64	0.66	A	5.1	23.8	10.59	0.84	B	8.5	43.3	18.27	0.90	C	5.5	26.8	11.72	0.85	B
D - Anson Rd East	0.1	0.5	3.10	0.12	A	0.5	2.2	5.57	0.34	A	0.7	3.1	6.43	0.40	A	5.6	28.4	22.96	0.86	C	4.9	25.3	19.38	0.84	C
2023 Early Years																									
A - A12 North	0.6	2.7	2.00	0.36	A	2.3	5.2	4.50	0.70	A	5.3	22.4	8.65	0.85	A	3.0	6.7	5.53	0.75	A	2.1	4.6	4.22	0.68	A
B - Eagle Way West	0.1	0.5	3.94	0.06	A	0.6	2.9	12.81	0.39	B	2.3	12.3	36.60	0.72	E	5.5	24.8	84.79	0.90	F	1.3	6.7	27.94	0.58	D
C - A12 South	0.5	1.9	2.29	0.32	A	2.9	6.1	6.47	0.75	A	7.7	39.6	15.78	0.89	C	10.4	57.1	22.30	0.92	C	6.6	33.4	13.68	0.87	B
D - Anson Rd East	0.1	0.5	3.12	0.12	A	0.6	2.6	5.89	0.36	A	0.7	3.2	6.67	0.41	A	6.0	31.7	24.73	0.87	C	5.2	26.5	20.52	0.85	C
2028 Reference Case																									
A - A12 North	0.6	2.7	2.02	0.37	A	2.3	5.1	4.48	0.70	A	7.5	38.3	11.83	0.89	B	3.6	7.9	6.23	0.78	A	2.7	6.1	4.90	0.73	A
B - Eagle Way West	0.1	0.5	3.81	0.06	A	0.6	3.0	12.53	0.40	B	4.5	21.8	68.80	0.86	F	14.8	39.3	189.06	1.09	F	2.5	12.6	51.72	0.74	F
C - A12 South	0.4	1.3	2.14	0.29	A	2.7	5.8	5.93	0.73	A	12.2	67.2	23.27	0.94	C	23.2	101.7	43.75	0.98	E	12.5	68.9	24.55	0.94	C
D - Anson Rd East	0.1	0.5	3.14	0.13	A	0.5	2.5	5.85	0.36	A	0.8	3.5	7.45	0.44	A	7.8	42.8	32.39	0.90	D	7.3	39.9	29.40	0.89	D
2028 Peak Construction																									
A - A12 North	0.6	2.7	2.02	0.37	A	2.4	5.2	4.54	0.70	A	7.7	39.3	12.06	0.89	B	4.3	13.8	7.31	0.81	A	2.9	6.7	5.30	0.75	A
B - Eagle Way West	0.1	0.5	4.19	0.07	A	0.9	4.5	17.71	0.48	C	4.8	23.0	74.04	0.87	F	18.9	43.7	237.45	1.15	F	2.5	12.5	51.34	0.74	F
C - A12 South	0.6	2.6	2.41	0.36	A	4.1	14.8	8.37	0.81	A	13.0	71.6	25.52	0.94	D	34.8	116.5	61.59	1.01	F	12.6	69.5	24.85	0.94	C
D - Anson Rd East	0.1	0.5	3.14	0.13	A	0.5	2.5	5.88	0.36	A	0.8	3.5	7.54	0.44	A	10.4	54.2	43.67	0.93	E	8.4	45.8	34.11	0.91	D
2034 Reference Case																									
A - A12 North	0.7	2.5	2.20	0.42	A	5.0	19.7	8.17	0.84	A	18.7	98.4	28.04	0.96	D	14.1	77.9	21.19	0.94	C	5.1	20.3	8.14	0.84	A
B - Eagle Way West	0.1	0.5	4.11	0.07	A	1.3	6.6	24.33	0.57	C	23.2	48.1	295.57	1.20	F	31.1	55.0	451.13	1.25	F	19.0	38.3	401.13	1.17	F
C - A12 South	0.5	2.1	2.29	0.33	A	4.8	21.1	9.58	0.83	A	47.6	132.3	74.82	1.02	F	116.0	197.7	163.52	1.11	F	74.3	157.6	111.13	1.06	F
D - Anson Rd East	0.2	0.5	3.27	0.16	A	0.9	3.5	7.37	0.47	A	1.5	4.5	10.94	0.61	B	25.0	76.5	96.40	1.02	F	294.9	294.9	939.31	1.53	F
2034 Operational Led																									
A - A12 North	0.6	2.8	2.11	0.39	A	2.9	6.4	5.25	0.74	A	14.4	79.2	21.97	0.95	C	8.4	43.9	13.11	0.90	B	4.8	17.5	7.69	0.83	A
B - Eagle Way West	0.1	0.5	4.11	0.07	A	1.0	4.9	18.42	0.50	C	23.0	48.0	293.83	1.20	F	31.1	55.1	449.10	1.25	F	17.9	37.6	379.06	1.16	F
C - A12 South	0.5	2.1	2.29	0.33	A	4.1	14.9	8.17	0.81	A	47.0	131.5	74.29	1.02	F	116.1	197.6	163.75	1.11	F	70.3	153.8	105.82	1.05	F
D - Anson Rd East	0.2	0.5	3.27	0.16	A	0.6	2.7	6.26	0.37	A	1.6	4.8	11.39	0.62	B	18.7	68.6	79.12	1.00	F	279.8	279.8	857.11	1.52	F

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

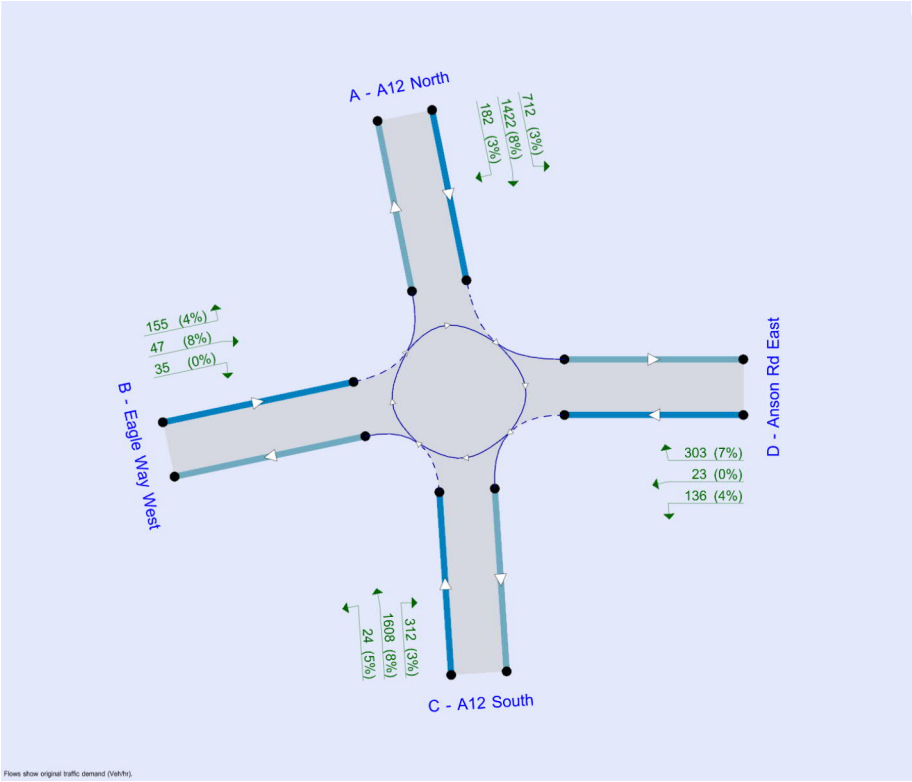
File summary

File Description

Title	A12 / Eagle Way / Anson Rd
Location	52° 3'56.12"N, 1°16'29.45"E
Site number	24
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Anson Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.20	10.40	9.5	38.7	77.6	35.0	
B - Eagle Way West	3.50	6.90	12.7	15.3	77.6	11.0	
C - A12 South	7.50	10.70	34.5	40.2	77.6	33.0	
D - Anson Rd East	4.50	9.80	10.9	40.4	77.6	45.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Queue Calibration	400
B - Eagle Way West	Direct	Queue Calibration	-225
C - A12 South	Direct	Queue Calibration	-425
D - Anson Rd East	Direct	Queue Calibration	-75

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.623	3065
B - Eagle Way West	0.489	1473
C - A12 South	0.684	2638
D - Anson Rd East	0.507	1862

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	869	100.000
B - Eagle Way West		ONE HOUR	✓	51	100.000
C - A12 South		ONE HOUR	✓	530	100.000
D - Anson Rd East		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	671	194
	B - Eagle Way West	27	0	16	8
	C - A12 South	451	1	0	78
	D - Anson Rd East	66	0	77	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East

From	A - A12 North	0	25	7	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	11	0	0	15
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	1.93	0.5	2.3	A	797	1196
B - Eagle Way West	0.05	3.61	0.1	0.5	A	47	70
C - A12 South	0.25	2.08	0.3	1.3	A	486	730
D - Anson Rd East	0.12	3.03	0.1	0.5	A	131	197

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	654	164	77	2841	0.230	653	409	0.0	0.3	1.645	A
B - Eagle Way West	38	10	447	1161	0.033	38	4	0.0	0.0	3.207	A
C - A12 South	399	100	53	2333	0.171	398	574	0.0	0.2	1.860	A
D - Anson Rd East	108	27	519	1467	0.073	107	210	0.0	0.1	2.647	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	781	195	92	2832	0.276	781	489	0.3	0.4	1.754	A
B - Eagle Way West	46	11	535	1115	0.041	46	4	0.0	0.0	3.365	A
C - A12 South	476	119	63	2326	0.205	476	687	0.2	0.3	1.946	A
D - Anson Rd East	129	32	621	1416	0.091	128	252	0.1	0.1	2.795	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	957	239	112	2818	0.340	956	599	0.4	0.5	1.934	A
B - Eagle Way West	56	14	655	1054	0.053	56	6	0.0	0.1	3.608	A
C - A12 South	584	146	77	2316	0.252	583	841	0.3	0.3	2.077	A
D - Anson Rd East	157	39	760	1346	0.117	157	308	0.1	0.1	3.029	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	957	239	112	2818	0.340	957	599	0.5	0.5	1.934	A
B - Eagle Way West	56	14	655	1053	0.053	56	6	0.1	0.1	3.609	A
C - A12 South	584	146	77	2316	0.252	584	841	0.3	0.3	2.077	A
D - Anson Rd East	157	39	761	1345	0.117	157	308	0.1	0.1	3.029	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	781	195	92	2831	0.276	782	489	0.5	0.4	1.758	A
B - Eagle Way West	46	11	535	1115	0.041	46	4	0.1	0.0	3.366	A
C - A12 South	476	119	63	2326	0.205	477	687	0.3	0.3	1.948	A
D - Anson Rd East	129	32	622	1416	0.091	129	252	0.1	0.1	2.799	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	654	164	77	2841	0.230	655	410	0.4	0.3	1.645	A
B - Eagle Way West	38	10	448	1160	0.033	38	4	0.0	0.0	3.211	A
C - A12 South	399	100	53	2333	0.171	399	575	0.3	0.2	1.860	A
D - Anson Rd East	108	27	520	1467	0.073	108	211	0.1	0.1	2.650	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Eagle Way West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C - A12 South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Eagle Way West	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Anson Rd East	0.10	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.03	0.25	0.51	0.51			N/A	N/A

B - Eagle Way West	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	0.34	0.03	0.25	0.45	0.48			N/A	N/A
D - Anson Rd East	0.13	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.03	0.31	1.46	2.30			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.34	0.03	0.32	1.09	1.33			N/A	N/A
D - Anson Rd East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Anson Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Eagle Way West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C - A12 South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1621	100.000
B - Eagle Way West		ONE HOUR	✓	147	100.000
C - A12 South		ONE HOUR	✓	1226	100.000
D - Anson Rd East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	52	1187	381
	B - Eagle Way West	81	0	49	17
	C - A12 South	1051	6	0	169
	D - Anson Rd East	177	2	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	9	0	0	5
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	3.69	1.8	3.7	A	1487	2231
B - Eagle Way West	0.26	7.69	0.3	1.4	A	135	202
C - A12 South	0.60	3.97	1.5	2.3	A	1125	1687
D - Anson Rd East	0.32	5.15	0.5	1.9	A	273	409

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1220	305	176	2810	0.434	1217	983	0.0	0.8	2.257	A
B - Eagle Way West	111	28	1049	880	0.126	110	45	0.0	0.1	4.675	A
C - A12 South	923	231	174	2311	0.399	920	1017	0.0	0.7	2.585	A
D - Anson Rd East	224	56	968	1251	0.179	223	426	0.0	0.2	3.498	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1457	364	211	2788	0.523	1456	1176	0.8	1.1	2.699	A
B - Eagle Way West	132	33	1256	775	0.171	132	54	0.1	0.2	5.602	A
C - A12 South	1102	276	208	2288	0.482	1101	1216	0.7	0.9	3.029	A
D - Anson Rd East	267	67	1158	1156	0.231	267	509	0.2	0.3	4.048	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1785	446	258	2759	0.647	1782	1440	1.1	1.8	3.673	A
B - Eagle Way West	162	40	1537	631	0.256	161	66	0.2	0.3	7.655	A
C - A12 South	1350	337	255	2257	0.598	1348	1488	0.9	1.5	3.948	A
D - Anson Rd East	327	82	1417	1027	0.319	326	623	0.3	0.5	5.137	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1785	446	259	2759	0.647	1785	1442	1.8	1.8	3.695	A
B - Eagle Way West	162	40	1539	630	0.257	162	66	0.3	0.3	7.691	A
C - A12 South	1350	337	255	2257	0.598	1350	1491	1.5	1.5	3.968	A
D - Anson Rd East	327	82	1419	1025	0.319	327	624	0.5	0.5	5.154	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1457	364	212	2788	0.523	1460	1180	1.8	1.1	2.718	A
B - Eagle Way West	132	33	1259	773	0.171	133	54	0.3	0.2	5.631	A
C - A12 South	1102	276	209	2288	0.482	1104	1220	1.5	0.9	3.049	A
D - Anson Rd East	267	67	1161	1154	0.231	268	511	0.5	0.3	4.065	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1220	305	177	2809	0.434	1222	987	1.1	0.8	2.270	A
B - Eagle Way West	111	28	1054	877	0.126	111	45	0.2	0.1	4.697	A
C - A12 South	923	231	175	2310	0.400	924	1021	0.9	0.7	2.600	A
D - Anson Rd East	224	56	972	1249	0.179	224	427	0.3	0.2	3.515	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.66	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.05	0.51	2.49	3.68			N/A	N/A
B - Eagle Way West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.92	0.06	0.75	1.70	2.25			N/A	N/A
D - Anson Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.03	0.26	1.81	1.81			N/A	N/A
B - Eagle Way West	0.34	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.47	0.03	0.26	1.47	1.47			N/A	N/A
D - Anson Rd East	0.46	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.03	0.26	1.82	1.82			N/A	N/A
B - Eagle Way West	0.34	0.03	0.32	1.15	1.41			N/A	N/A
C - A12 South	1.48	0.03	0.26	1.48	1.48			N/A	N/A
D - Anson Rd East	0.47	0.03	0.32	1.42	1.89			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.50	1.08	1.42	1.73			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	0.94	0.52	1.00	1.43	1.48			N/A	N/A
D - Anson Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.09	0.84	1.08	1.08			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.67	0.09	0.81	1.37	1.44			N/A	N/A
D - Anson Rd East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	7.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2002	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1459	100.000
D - Anson Rd East		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	150	1193	659
	B - Eagle Way West	128	0	29	39
	C - A12 South	1286	20	0	153
	D - Anson Rd East	206	19	107	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	9	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	10	5	0	5
	D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	6.85	4.1	12.1	A	1837	2756
B - Eagle Way West	0.45	13.65	0.8	3.9	B	180	270
C - A12 South	0.75	6.88	3.0	6.3	A	1339	2008
D - Anson Rd East	0.38	6.11	0.6	2.9	A	306	458

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1507	377	166	2776	0.543	1502	1215	0.0	1.2	2.816	A
B - Eagle Way West	148	37	1235	777	0.190	147	142	0.0	0.2	5.699	A
C - A12 South	1098	275	282	2217	0.495	1095	997	0.0	1.0	3.196	A
D - Anson Rd East	251	63	1030	1200	0.209	250	639	0.0	0.3	3.785	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1800	450	199	2756	0.653	1797	1454	1.2	1.9	3.742	A
B - Eagle Way West	176	44	1477	652	0.270	176	170	0.2	0.4	7.548	A
C - A12 South	1312	328	338	2180	0.602	1310	1193	1.0	1.5	4.125	A
D - Anson Rd East	299	75	1231	1097	0.273	299	765	0.3	0.4	4.507	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2204	551	243	2729	0.808	2195	1777	1.9	4.0	6.639	A
B - Eagle Way West	216	54	1806	483	0.447	214	207	0.4	0.8	13.329	B
C - A12 South	1606	402	413	2130	0.754	1600	1457	1.5	3.0	6.723	A
D - Anson Rd East	367	92	1504	959	0.382	366	934	0.4	0.6	6.060	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2204	551	244	2728	0.808	2204	1783	4.0	4.1	6.855	A
B - Eagle Way West	216	54	1812	479	0.450	216	208	0.8	0.8	13.650	B
C - A12 South	1606	402	414	2129	0.754	1606	1463	3.0	3.0	6.877	A
D - Anson Rd East	367	92	1510	956	0.384	367	938	0.6	0.6	6.110	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1800	450	201	2755	0.653	1809	1463	4.1	1.9	3.837	A
B - Eagle Way West	176	44	1486	648	0.272	178	171	0.8	0.4	7.694	A
C - A12 South	1312	328	339	2179	0.602	1318	1201	3.0	1.5	4.209	A
D - Anson Rd East	299	75	1240	1093	0.274	300	770	0.6	0.4	4.545	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1507	377	168	2775	0.543	1510	1222	1.9	1.2	2.850	A
B - Eagle Way West	148	37	1242	774	0.191	148	143	0.4	0.2	5.757	A
C - A12 South	1098	275	284	2216	0.496	1101	1002	1.5	1.0	3.232	A
D - Anson Rd East	251	63	1035	1197	0.209	251	643	0.4	0.3	3.806	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.55	1.04	1.27	1.27			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	0.97	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.04	0.40	4.96	9.00			N/A	N/A
B - Eagle Way West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - A12 South	1.49	0.05	0.45	3.86	6.24			N/A	N/A
D - Anson Rd East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.05	0.03	0.29	4.05	12.09			N/A	N/A
B - Eagle Way West	0.79	0.03	0.26	0.79	0.79			N/A	N/A
C - A12 South	2.98	0.03	0.28	2.98	6.28			N/A	N/A
D - Anson Rd East	0.61	0.03	0.25	0.61	0.61			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.12	0.03	0.27	4.12	4.12			N/A	N/A
B - Eagle Way West	0.81	0.03	0.31	1.41	3.94			N/A	N/A
C - A12 South	3.03	0.03	0.27	3.03	3.03			N/A	N/A
D - Anson Rd East	0.62	0.03	0.30	1.44	2.92			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.07	1.06	4.55	6.50			N/A	N/A
B - Eagle Way West	0.38	0.03	0.27	0.49	0.87			N/A	N/A
C - A12 South	1.53	0.08	1.09	3.18	4.38			N/A	N/A
D - Anson Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.04	0.42	3.00	4.98			N/A	N/A
B - Eagle Way West	0.24	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.99	0.05	0.46	2.27	3.48			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	10.59	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1743	100.000
B - Eagle Way West		ONE HOUR	✓	204	100.000
C - A12 South		ONE HOUR	✓	1497	100.000
D - Anson Rd East		ONE HOUR	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	144	1042	557
	B - Eagle Way West	120	0	24	60
	C - A12 South	1213	38	1	245
	D - Anson Rd East	506	65	266	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	8	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	7	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.66	2.5	5.5	A	1599	2399
B - Eagle Way West	0.64	28.45	1.7	8.9	D	187	281
C - A12 South	0.84	11.09	4.9	22.7	B	1374	2061
D - Anson Rd East	0.82	18.00	4.4	22.7	C	768	1152

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1312	328	247	2761	0.475	1309	1378	0.0	0.9	2.472	A
B - Eagle Way West	154	38	1473	694	0.221	152	185	0.0	0.3	6.632	A
C - A12 South	1127	282	536	2134	0.528	1123	1000	0.0	1.1	3.541	A
D - Anson Rd East	630	158	909	1344	0.469	627	647	0.0	0.9	4.995	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1567	392	296	2732	0.574	1565	1649	0.9	1.3	3.082	A
B - Eagle Way West	183	46	1762	550	0.334	183	222	0.3	0.5	9.786	A
C - A12 South	1346	336	641	2065	0.652	1343	1196	1.1	1.8	4.962	A
D - Anson Rd East	752	188	1087	1249	0.602	750	774	0.9	1.5	7.175	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1919	480	360	2693	0.713	1915	2006	1.3	2.4	4.601	A
B - Eagle Way West	225	56	2146	358	0.628	220	270	0.5	1.6	25.458	D
C - A12 South	1648	412	779	1975	0.835	1637	1461	1.8	4.7	10.310	B
D - Anson Rd East	922	230	1330	1120	0.823	911	945	1.5	4.2	16.389	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1919	480	363	2691	0.713	1919	2023	2.4	2.5	4.662	A
B - Eagle Way West	225	56	2162	350	0.643	224	272	1.6	1.7	28.450	D
C - A12 South	1648	412	787	1970	0.837	1647	1467	4.7	4.9	11.088	B
D - Anson Rd East	922	230	1333	1119	0.824	921	949	4.2	4.4	17.996	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1567	392	301	2729	0.574	1571	1673	2.5	1.4	3.123	A
B - Eagle Way West	183	46	1785	538	0.341	188	224	1.7	0.5	10.419	B
C - A12 South	1346	336	651	2059	0.654	1358	1205	4.9	1.9	5.219	A
D - Anson Rd East	752	188	1092	1247	0.604	764	780	4.4	1.6	7.630	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1312	328	249	2760	0.475	1314	1389	1.4	0.9	2.492	A
B - Eagle Way West	154	38	1484	689	0.223	155	186	0.5	0.3	6.753	A
C - A12 South	1127	282	540	2131	0.529	1130	1006	1.9	1.1	3.605	A
D - Anson Rd East	630	158	913	1342	0.470	633	650	1.6	0.9	5.094	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C - A12 South	1.11	0.55	1.02	1.44	1.49			N/A	N/A
D - Anson Rd East	0.87	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.33	0.04	0.44	3.41	5.49			N/A	N/A
B - Eagle Way West	0.49	0.04	0.44	1.27	1.39			N/A	N/A
C - A12 South	1.84	0.04	0.42	4.94	8.56			N/A	N/A
D - Anson Rd East	1.49	0.05	0.49	3.76	5.81			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.44	0.03	0.27	2.44	2.44			N/A	N/A
B - Eagle Way West	1.57	0.03	0.29	1.57	6.86			N/A	N/A
C - A12 South	4.72	0.03	0.31	5.88	22.70			N/A	N/A
D - Anson Rd East	4.21	0.03	0.34	8.61	22.70			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.46	0.03	0.26	2.46	2.46			N/A	N/A
B - Eagle Way West	1.70	0.03	0.32	3.33	8.90			N/A	N/A
C - A12 South	4.92	0.03	0.28	4.92	11.97			N/A	N/A
D - Anson Rd East	4.43	0.03	0.30	4.43	18.50			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.15	1.20	2.20	2.81			N/A	N/A
B - Eagle Way West	0.53	0.04	0.42	1.34	1.48			N/A	N/A
C - A12 South	1.92	0.05	0.67	4.96	7.66			N/A	N/A
D - Anson Rd East	1.55	0.05	0.46	4.00	6.46			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.06	0.73	1.69	2.23			N/A	N/A
B - Eagle Way West	0.29	0.03	0.31	1.03	1.33			N/A	N/A
C - A12 South	1.13	0.04	0.36	2.79	5.42			N/A	N/A
D - Anson Rd East	0.89	0.03	0.33	1.97	4.36			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	9.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1626	100.000
B - Eagle Way West		ONE HOUR	✓	144	100.000
C - A12 South		ONE HOUR	✓	1523	100.000
D - Anson Rd East		ONE HOUR	✓	923	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	82	1061	483
	B - Eagle Way West	86	0	26	32
	C - A12 South	1244	37	0	242
	D - Anson Rd East	543	69	310	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	3	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	3	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	3.61	1.8	3.5	A	1492	2238
B - Eagle Way West	0.45	18.72	0.8	3.9	C	132	198
C - A12 South	0.81	9.26	4.2	16.6	A	1398	2096
D - Anson Rd East	0.86	21.14	5.7	28.8	C	847	1270

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1224	306	226	2853	0.429	1221	1404	0.0	0.7	2.202	A
B - Eagle Way West	108	27	1522	698	0.155	108	141	0.0	0.2	6.086	A
C - A12 South	1147	287	520	2228	0.515	1142	1048	0.0	1.1	3.305	A
D - Anson Rd East	695	174	878	1393	0.499	691	569	0.0	1.0	5.100	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1462	365	270	2826	0.517	1460	1680	0.7	1.1	2.634	A
B - Eagle Way West	129	32	1821	552	0.234	129	169	0.2	0.3	8.493	A
C - A12 South	1369	342	623	2159	0.634	1367	1254	1.1	1.7	4.527	A
D - Anson Rd East	830	207	1050	1304	0.636	827	681	1.0	1.7	7.497	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1790	448	329	2790	0.642	1787	2045	1.1	1.8	3.582	A
B - Eagle Way West	159	40	2217	358	0.442	157	206	0.3	0.8	17.691	C
C - A12 South	1677	419	755	2070	0.810	1667	1531	1.7	4.1	8.753	A
D - Anson Rd East	1016	254	1285	1183	0.859	1002	832	1.7	5.3	18.587	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1790	448	331	2788	0.642	1790	2061	1.8	1.8	3.606	A
B - Eagle Way West	159	40	2234	350	0.452	158	207	0.8	0.8	18.717	C
C - A12 South	1677	419	764	2064	0.813	1676	1538	4.1	4.2	9.261	A
D - Anson Rd East	1016	254	1287	1182	0.860	1015	834	5.3	5.7	21.138	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1462	365	273	2824	0.518	1465	1702	1.8	1.1	2.652	A
B - Eagle Way West	129	32	1844	541	0.239	131	171	0.8	0.3	8.825	A
C - A12 South	1369	342	635	2151	0.637	1379	1263	4.2	1.8	4.722	A
D - Anson Rd East	830	207	1053	1302	0.637	845	684	5.7	1.8	8.133	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1224	306	227	2852	0.429	1225	1415	1.1	0.8	2.216	A
B - Eagle Way West	108	27	1533	693	0.156	109	142	0.3	0.2	6.170	A
C - A12 South	1147	287	525	2225	0.515	1149	1054	1.8	1.1	3.356	A
D - Anson Rd East	695	174	881	1391	0.499	698	572	1.8	1.0	5.218	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	1.05	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.98	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.05	0.52	2.41	3.55			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.71	0.04	0.42	4.59	7.82			N/A	N/A
D - Anson Rd East	1.71	0.05	0.47	4.50	7.16			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.03	0.26	1.77	1.77			N/A	N/A
B - Eagle Way West	0.77	0.03	0.26	0.77	0.77			N/A	N/A
C - A12 South	4.06	0.03	0.30	4.06	16.56			N/A	N/A
D - Anson Rd East	5.32	0.04	0.38	13.29	28.83			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.03	0.26	1.78	1.78			N/A	N/A
B - Eagle Way West	0.81	0.03	0.33	1.78	3.87			N/A	N/A
C - A12 South	4.21	0.03	0.27	4.21	6.09			N/A	N/A
D - Anson Rd East	5.68	0.03	0.32	7.42	27.65			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.51	1.06	1.30	1.66			N/A	N/A
B - Eagle Way West	0.32	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	1.78	0.06	0.86	4.37	6.44			N/A	N/A
D - Anson Rd East	1.80	0.04	0.43	4.83	8.14			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.09	0.84	1.41	1.49			N/A	N/A
B - Eagle Way West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.07	0.04	0.38	2.70	4.77			N/A	N/A
D - Anson Rd East	1.01	0.03	0.32	1.99	5.05			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	920	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	585	100.000
D - Anson Rd East		ONE HOUR	✓	147	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	721	194
	B - Eagle Way West	30	0	18	9
	C - A12 South	496	1	0	89
	D - Anson Rd East	67	0	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	13
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	1.98	0.6	2.6	A	844	1266
B - Eagle Way West	0.06	3.73	0.1	0.5	A	52	78
C - A12 South	0.27	2.11	0.4	1.5	A	537	806
D - Anson Rd East	0.12	3.10	0.1	0.5	A	135	203

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	693	173	87	2853	0.243	691	445	0.0	0.3	1.665	A
B - Eagle Way West	43	11	490	1142	0.037	42	4	0.0	0.0	3.272	A
C - A12 South	441	110	54	2371	0.186	440	615	0.0	0.2	1.864	A
D - Anson Rd East	111	28	559	1453	0.076	110	219	0.0	0.1	2.680	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	827	207	104	2842	0.291	827	533	0.3	0.4	1.786	A
B - Eagle Way West	51	13	586	1094	0.047	51	5	0.0	0.0	3.451	A
C - A12 South	526	132	65	2363	0.223	526	736	0.2	0.3	1.959	A
D - Anson Rd East	132	33	668	1398	0.095	132	262	0.1	0.1	2.842	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1013	253	127	2826	0.358	1012	652	0.4	0.6	1.985	A
B - Eagle Way West	62	16	717	1027	0.061	62	6	0.0	0.1	3.731	A
C - A12 South	645	161	79	2353	0.274	644	901	0.3	0.4	2.106	A
D - Anson Rd East	162	40	818	1323	0.122	162	321	0.1	0.1	3.099	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1013	253	127	2826	0.358	1013	653	0.6	0.6	1.985	A
B - Eagle Way West	62	16	717	1027	0.061	62	6	0.1	0.1	3.732	A
C - A12 South	645	161	79	2353	0.274	645	902	0.4	0.4	2.106	A
D - Anson Rd East	162	40	819	1323	0.122	162	321	0.1	0.1	3.100	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	827	207	104	2841	0.291	828	533	0.6	0.4	1.787	A
B - Eagle Way West	51	13	586	1093	0.047	51	5	0.1	0.0	3.455	A
C - A12 South	526	132	65	2363	0.223	527	737	0.4	0.3	1.960	A
D - Anson Rd East	132	33	669	1398	0.095	132	262	0.1	0.1	2.844	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	693	173	87	2853	0.243	693	447	0.4	0.3	1.669	A
B - Eagle Way West	43	11	491	1142	0.037	43	4	0.0	0.0	3.277	A
C - A12 South	441	110	54	2370	0.186	441	617	0.3	0.2	1.865	A
D - Anson Rd East	111	28	560	1453	0.076	111	220	0.1	0.1	2.684	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Anson Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.25	0.56	0.56			N/A	N/A
B - Eagle Way West	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.38	0.03	0.25	0.45	0.48			N/A	N/A
D - Anson Rd East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.30	1.40	2.62			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.38	0.03	0.33	1.22	1.47			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Anson Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	4.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1683	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1346	100.000
D - Anson Rd East		ONE HOUR	✓	301	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	58	1257	367
	B - Eagle Way West	90	0	54	19
	C - A12 South	1140	7	0	199
	D - Anson Rd East	176	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	9	0	0	4
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.17	2.1	4.6	A	1545	2317
B - Eagle Way West	0.32	9.36	0.5	1.8	A	150	225
C - A12 South	0.66	4.64	1.9	3.6	A	1235	1853
D - Anson Rd East	0.34	5.57	0.5	2.2	A	276	414

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1267	317	205	2775	0.457	1264	1056	0.0	0.8	2.377	A
B - Eagle Way West	123	31	1139	835	0.147	122	50	0.0	0.2	5.045	A
C - A12 South	1014	253	178	2314	0.438	1011	1076	0.0	0.8	2.755	A
D - Anson Rd East	226	57	1029	1218	0.186	226	440	0.0	0.2	3.624	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1513	378	245	2750	0.550	1512	1264	0.8	1.2	2.902	A
B - Eagle Way West	147	37	1362	721	0.203	146	60	0.2	0.3	6.260	A
C - A12 South	1210	303	213	2291	0.528	1209	1287	0.8	1.1	3.324	A
D - Anson Rd East	270	68	1230	1117	0.242	270	526	0.2	0.3	4.250	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1853	463	299	2717	0.682	1850	1546	1.2	2.1	4.134	A
B - Eagle Way West	180	45	1667	566	0.317	179	73	0.3	0.5	9.274	A
C - A12 South	1482	371	261	2259	0.656	1479	1575	1.1	1.9	4.599	A
D - Anson Rd East	331	83	1505	979	0.338	330	644	0.3	0.5	5.546	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1853	463	300	2716	0.682	1853	1550	2.1	2.1	4.170	A
B - Eagle Way West	180	45	1670	564	0.318	180	73	0.5	0.5	9.355	A
C - A12 South	1482	371	261	2259	0.656	1482	1578	1.9	1.9	4.638	A
D - Anson Rd East	331	83	1508	977	0.339	331	645	0.5	0.5	5.573	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1513	378	246	2750	0.550	1517	1269	2.1	1.2	2.927	A
B - Eagle Way West	147	37	1367	719	0.204	148	60	0.5	0.3	6.313	A
C - A12 South	1210	303	214	2290	0.529	1213	1292	1.9	1.1	3.355	A
D - Anson Rd East	270	68	1235	1114	0.243	271	528	0.5	0.3	4.272	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1267	317	206	2774	0.457	1269	1061	1.2	0.8	2.394	A
B - Eagle Way West	123	31	1144	833	0.148	123	50	0.3	0.2	5.079	A
C - A12 South	1014	253	179	2313	0.438	1015	1081	1.1	0.8	2.775	A
D - Anson Rd East	226	57	1033	1216	0.186	227	442	0.3	0.2	3.643	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.78	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.05	0.47	2.95	4.63			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.11	0.05	0.61	2.48	3.60			N/A	N/A
D - Anson Rd East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.03	0.26	2.12	2.12			N/A	N/A
B - Eagle Way West	0.46	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.88	0.03	0.26	1.88	1.88			N/A	N/A
D - Anson Rd East	0.51	0.03	0.25	0.51	0.51			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.03	0.26	2.13	2.13			N/A	N/A
B - Eagle Way West	0.46	0.03	0.33	1.42	1.80			N/A	N/A
C - A12 South	1.90	0.03	0.26	1.90	1.90			N/A	N/A
D - Anson Rd East	0.51	0.03	0.31	1.46	2.25			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.24	1.15	1.79	2.00			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.13	0.23	1.09	1.63	1.88			N/A	N/A
D - Anson Rd East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.07	0.80	1.31	1.75			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.78	0.07	0.77	1.50	1.55			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	9.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2028	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1628	100.000
D - Anson Rd East		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	167	1202	659
	B - Eagle Way West	142	0	32	43
	C - A12 South	1426	22	0	180
	D - Anson Rd East	210	21	108	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	10	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	9	5	0	4
	D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	7.88	4.8	18.1	A	1861	2791
B - Eagle Way West	0.61	23.76	1.5	7.8	C	200	300
C - A12 South	0.84	10.59	5.1	23.8	B	1494	2240
D - Anson Rd East	0.40	6.43	0.7	3.1	A	312	468

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1527	382	192	2742	0.557	1522	1333	0.0	1.2	2.937	A
B - Eagle Way West	164	41	1362	717	0.229	163	157	0.0	0.3	6.485	A
C - A12 South	1225	306	299	2223	0.551	1221	1007	0.0	1.2	3.572	A
D - Anson Rd East	256	64	1051	1186	0.216	255	663	0.0	0.3	3.863	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1823	456	230	2720	0.670	1820	1595	1.2	2.0	3.988	A
B - Eagle Way West	196	49	1629	580	0.338	195	188	0.3	0.5	9.336	A
C - A12 South	1463	366	358	2184	0.670	1460	1205	1.2	2.0	4.952	A
D - Anson Rd East	306	76	1257	1080	0.283	305	793	0.3	0.4	4.641	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2233	558	279	2689	0.830	2222	1944	2.0	4.7	7.537	A
B - Eagle Way West	240	60	1987	396	0.605	236	230	0.5	1.4	21.987	C
C - A12 South	1792	448	437	2131	0.841	1780	1471	2.0	5.0	9.956	A
D - Anson Rd East	374	94	1534	938	0.399	373	967	0.4	0.7	6.365	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2233	558	282	2688	0.831	2232	1957	4.7	4.8	7.879	A
B - Eagle Way West	240	60	1999	390	0.614	239	231	1.4	1.5	23.765	C
C - A12 South	1792	448	439	2130	0.842	1791	1478	5.0	5.1	10.590	B
D - Anson Rd East	374	94	1542	934	0.401	374	972	0.7	0.7	6.430	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1823	456	233	2717	0.671	1834	1612	4.8	2.1	4.122	A
B - Eagle Way West	196	49	1645	571	0.342	200	190	1.5	0.5	9.787	A
C - A12 South	1463	366	360	2182	0.670	1476	1214	5.1	2.1	5.177	A
D - Anson Rd East	306	76	1267	1075	0.284	307	800	0.7	0.4	4.690	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1527	382	193	2741	0.557	1530	1342	2.1	1.3	2.978	A
B - Eagle Way West	164	41	1371	712	0.230	165	158	0.5	0.3	6.590	A
C - A12 South	1225	306	301	2222	0.551	1229	1013	2.1	1.2	3.637	A
D - Anson Rd East	256	64	1057	1183	0.216	257	667	0.4	0.3	3.888	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.56	1.11	1.44	1.72			N/A	N/A
B - Eagle Way West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - A12 South	1.22	0.56	1.08	1.31	1.65			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.04	0.40	5.38	9.89			N/A	N/A
B - Eagle Way West	0.50	0.05	0.46	1.28	1.39			N/A	N/A
C - A12 South	2.00	0.04	0.42	5.41	9.42			N/A	N/A
D - Anson Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.66	0.03	0.29	4.66	18.08			N/A	N/A
B - Eagle Way West	1.44	0.03	0.28	1.44	5.35			N/A	N/A
C - A12 South	4.95	0.03	0.31	6.12	23.77			N/A	N/A
D - Anson Rd East	0.66	0.03	0.25	0.66	0.66			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.78	0.03	0.27	4.78	4.82			N/A	N/A
B - Eagle Way West	1.53	0.03	0.31	2.53	7.77			N/A	N/A
C - A12 South	5.12	0.03	0.28	5.12	11.59			N/A	N/A
D - Anson Rd East	0.66	0.03	0.30	1.40	3.11			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.07	0.06	0.94	5.21	7.72			N/A	N/A
B - Eagle Way West	0.53	0.04	0.44	1.32	1.45			N/A	N/A
C - A12 South	2.07	0.05	0.67	5.46	8.43			N/A	N/A
D - Anson Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.04	0.39	3.26	5.75			N/A	N/A
B - Eagle Way West	0.30	0.03	0.31	1.04	1.31			N/A	N/A
C - A12 South	1.24	0.04	0.36	3.08	5.97			N/A	N/A
D - Anson Rd East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	16.21	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1797	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1612	100.000
D - Anson Rd East		ONE HOUR	✓	844	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	160	1079	557
	B - Eagle Way West	134	0	27	67
	C - A12 South	1306	42	1	263
	D - Anson Rd East	490	72	281	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	9	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	7	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	5.27	2.9	6.4	A	1649	2473
B - Eagle Way West	0.84	65.37	4.2	20.9	F	208	312
C - A12 South	0.90	18.27	8.5	43.3	C	1479	2219
D - Anson Rd East	0.86	22.96	5.6	28.4	C	774	1162

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1353	338	268	2736	0.494	1349	1446	0.0	1.0	2.588	A
B - Eagle Way West	171	43	1544	657	0.260	170	206	0.0	0.3	7.360	A
C - A12 South	1214	303	541	2129	0.570	1209	1041	0.0	1.3	3.891	A
D - Anson Rd East	635	159	951	1318	0.482	632	665	0.0	0.9	5.219	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1615	404	320	2704	0.597	1613	1729	1.0	1.5	3.295	A
B - Eagle Way West	204	51	1847	506	0.404	203	247	0.3	0.7	11.839	B
C - A12 South	1449	362	648	2059	0.704	1445	1246	1.3	2.3	5.828	A
D - Anson Rd East	759	190	1138	1218	0.623	756	796	0.9	1.6	7.743	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1978	495	386	2665	0.742	1973	2093	1.5	2.8	5.165	A
B - Eagle Way West	250	62	2239	309	0.808	239	300	0.7	3.3	46.308	E
C - A12 South	1775	444	786	1969	0.902	1753	1519	2.3	7.8	15.372	C
D - Anson Rd East	929	232	1390	1083	0.858	915	968	1.6	5.2	19.914	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1978	495	391	2661	0.743	1978	2119	2.8	2.9	5.268	A
B - Eagle Way West	250	62	2264	296	0.844	246	302	3.3	4.2	65.370	F
C - A12 South	1775	444	795	1963	0.904	1772	1527	7.8	8.5	18.270	C
D - Anson Rd East	929	232	1395	1081	0.860	928	975	5.2	5.6	22.958	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1615	404	331	2698	0.599	1621	1772	2.9	1.5	3.358	A
B - Eagle Way West	204	51	1885	486	0.420	218	250	4.2	0.7	14.064	B
C - A12 South	1449	362	661	2050	0.707	1474	1258	8.5	2.5	6.492	A
D - Anson Rd East	759	190	1145	1214	0.625	774	807	5.6	1.7	8.461	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1353	338	270	2734	0.495	1355	1459	1.5	1.0	2.615	A
B - Eagle Way West	171	43	1557	651	0.263	172	207	0.7	0.4	7.554	A
C - A12 South	1214	303	546	2125	0.571	1218	1048	2.5	1.3	3.989	A
D - Anson Rd East	635	159	956	1315	0.483	638	670	1.7	0.9	5.340	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A12 South	1.31	0.55	1.22	1.72	1.89			N/A	N/A
D - Anson Rd East	0.92	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.47	0.04	0.42	3.84	6.44			N/A	N/A
B - Eagle Way West	0.66	0.05	0.49	1.49	1.60			N/A	N/A
C - A12 South	2.33	0.04	0.42	6.37	11.38			N/A	N/A
D - Anson Rd East	1.62	0.05	0.48	4.19	6.65			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.82	0.03	0.27	2.82	2.82			N/A	N/A
B - Eagle Way West	3.29	0.04	0.45	9.21	16.18			N/A	N/A
C - A12 South	7.79	0.04	0.41	20.45	42.48			N/A	N/A
D - Anson Rd East	5.22	0.04	0.39	13.43	28.26			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.86	0.03	0.26	2.86	2.86			N/A	N/A
B - Eagle Way West	4.20	0.05	0.46	11.90	20.94			N/A	N/A
C - A12 South	8.53	0.03	0.33	12.93	43.31			N/A	N/A
D - Anson Rd East	5.63	0.03	0.32	8.39	28.39			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.51	0.11	1.21	2.81	3.70			N/A	N/A
B - Eagle Way West	0.74	0.04	0.37	1.74	2.94			N/A	N/A
C - A12 South	2.47	0.04	0.45	6.81	11.63			N/A	N/A
D - Anson Rd East	1.70	0.04	0.43	4.57	7.72			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.05	0.59	2.00	2.93			N/A	N/A
B - Eagle Way West	0.36	0.03	0.29	0.89	1.54			N/A	N/A
C - A12 South	1.34	0.03	0.32	2.62	6.93			N/A	N/A
D - Anson Rd East	0.94	0.03	0.31	1.82	4.73			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	10.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1688	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1601	100.000
D - Anson Rd East		ONE HOUR	✓	868	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	91	1113	484
	B - Eagle Way West	96	0	29	36
	C - A12 South	1302	41	0	258
	D - Anson Rd East	502	77	288	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	4	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	3	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.02	2.1	4.4	A	1549	2323
B - Eagle Way West	0.54	23.92	1.1	5.7	C	147	221
C - A12 South	0.85	11.72	5.5	26.8	B	1469	2204
D - Anson Rd East	0.84	19.38	4.9	25.3	C	796	1194

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1271	318	242	2824	0.450	1267	1423	0.0	0.8	2.308	A
B - Eagle Way West	121	30	1546	682	0.177	120	157	0.0	0.2	6.396	A
C - A12 South	1205	301	502	2224	0.542	1201	1073	0.0	1.2	3.502	A
D - Anson Rd East	653	163	926	1362	0.480	650	584	0.0	0.9	5.028	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1517	379	290	2795	0.543	1516	1703	0.8	1.2	2.813	A
B - Eagle Way West	144	36	1850	533	0.270	143	188	0.2	0.4	9.236	A
C - A12 South	1439	360	601	2158	0.667	1436	1284	1.2	2.0	4.966	A
D - Anson Rd East	780	195	1107	1268	0.615	777	699	0.9	1.6	7.305	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1858	465	353	2756	0.674	1855	2072	1.2	2.0	3.979	A
B - Eagle Way West	176	44	2251	335	0.526	174	229	0.4	1.1	21.937	C
C - A12 South	1763	441	730	2072	0.851	1750	1568	2.0	5.3	10.760	B
D - Anson Rd East	955	239	1355	1139	0.839	943	853	1.6	4.6	17.397	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1858	465	356	2754	0.675	1858	2089	2.0	2.1	4.017	A
B - Eagle Way West	176	44	2269	326	0.541	176	230	1.1	1.1	23.915	C
C - A12 South	1763	441	738	2067	0.853	1762	1574	5.3	5.5	11.720	B
D - Anson Rd East	955	239	1358	1137	0.840	954	857	4.6	4.9	19.380	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1517	379	294	2792	0.543	1521	1728	2.1	1.2	2.841	A
B - Eagle Way West	144	36	1875	520	0.277	147	190	1.1	0.4	9.731	A
C - A12 South	1439	360	612	2151	0.669	1453	1293	5.5	2.1	5.261	A
D - Anson Rd East	780	195	1112	1265	0.616	793	704	4.9	1.6	7.825	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1271	318	244	2822	0.450	1272	1435	1.2	0.8	2.325	A
B - Eagle Way West	121	30	1558	676	0.178	121	158	0.4	0.2	6.495	A
C - A12 South	1205	301	507	2221	0.543	1209	1079	2.1	1.2	3.570	A
D - Anson Rd East	653	163	930	1360	0.480	656	587	1.6	0.9	5.134	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.17	0.56	1.07	1.18	1.59			N/A	N/A
D - Anson Rd East	0.91	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.05	0.47	2.84	4.39			N/A	N/A
B - Eagle Way West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - A12 South	1.97	0.04	0.41	5.33	9.39			N/A	N/A
D - Anson Rd East	1.57	0.05	0.48	4.01	6.35			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.03	0.26	2.04	2.04			N/A	N/A
B - Eagle Way West	1.06	0.03	0.27	1.06	1.92			N/A	N/A
C - A12 South	5.29	0.03	0.32	8.02	26.81			N/A	N/A
D - Anson Rd East	4.65	0.04	0.36	10.57	25.33			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.06	0.03	0.26	2.06	2.06			N/A	N/A
B - Eagle Way West	1.14	0.03	0.32	2.40	5.74			N/A	N/A
C - A12 South	5.55	0.03	0.29	5.55	16.12			N/A	N/A
D - Anson Rd East	4.92	0.03	0.31	4.92	22.25			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.29	1.14	1.71	1.93			N/A	N/A
B - Eagle Way West	0.39	0.03	0.33	1.08	1.29			N/A	N/A
C - A12 South	2.06	0.05	0.58	5.48	8.58			N/A	N/A
D - Anson Rd East	1.64	0.04	0.45	4.35	7.10			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.08	0.81	1.14	1.63			N/A	N/A
B - Eagle Way West	0.22	0.03	0.27	0.48	0.79			N/A	N/A
C - A12 South	1.20	0.03	0.35	2.89	5.91			N/A	N/A
D - Anson Rd East	0.93	0.03	0.32	1.97	4.63			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	932	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	660	100.000
D - Anson Rd East		ONE HOUR	✓	149	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	734	194
	B - Eagle Way West	30	0	18	9
	C - A12 South	571	1	0	88
	D - Anson Rd East	69	0	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	12	0	0	13
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.00	0.6	2.7	A	855	1283
B - Eagle Way West	0.06	3.94	0.1	0.5	A	52	78
C - A12 South	0.32	2.29	0.5	1.9	A	606	909
D - Anson Rd East	0.12	3.12	0.1	0.5	A	136	205

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	702	175	86	2855	0.246	701	503	0.0	0.3	1.671	A
B - Eagle Way West	43	11	547	1108	0.038	42	4	0.0	0.0	3.378	A
C - A12 South	497	124	55	2319	0.214	496	625	0.0	0.3	1.973	A
D - Anson Rd East	112	28	568	1450	0.077	112	219	0.0	0.1	2.689	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	838	210	103	2844	0.295	838	601	0.3	0.4	1.794	A
B - Eagle Way West	51	13	654	1052	0.048	51	5	0.0	0.1	3.593	A
C - A12 South	594	148	66	2312	0.257	593	747	0.3	0.3	2.094	A
D - Anson Rd East	134	33	679	1394	0.096	134	262	0.1	0.1	2.855	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1026	257	127	2828	0.363	1026	737	0.4	0.6	1.997	A
B - Eagle Way West	62	16	801	977	0.064	62	6	0.1	0.1	3.937	A
C - A12 South	727	182	80	2302	0.316	726	915	0.3	0.5	2.285	A
D - Anson Rd East	164	41	832	1318	0.124	164	321	0.1	0.1	3.118	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1026	257	127	2828	0.363	1026	737	0.6	0.6	1.997	A
B - Eagle Way West	62	16	801	976	0.064	62	6	0.1	0.1	3.938	A
C - A12 South	727	182	80	2301	0.316	727	915	0.5	0.5	2.285	A
D - Anson Rd East	164	41	832	1317	0.124	164	321	0.1	0.1	3.119	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	838	210	103	2844	0.295	839	602	0.6	0.4	1.795	A
B - Eagle Way West	51	13	655	1052	0.048	51	5	0.1	0.1	3.595	A
C - A12 South	594	148	66	2312	0.257	594	748	0.5	0.3	2.097	A
D - Anson Rd East	134	33	680	1394	0.096	134	262	0.1	0.1	2.856	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	702	175	87	2855	0.246	702	504	0.4	0.3	1.672	A
B - Eagle Way West	43	11	548	1107	0.039	43	4	0.1	0.0	3.383	A
C - A12 South	497	124	55	2319	0.214	497	626	0.3	0.3	1.977	A
D - Anson Rd East	112	28	569	1449	0.077	112	219	0.1	0.1	2.693	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.25	0.57	0.57			N/A	N/A
B - Eagle Way West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.46	0.03	0.25	0.46	0.48			N/A	N/A
D - Anson Rd East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.38	2.68			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.46	0.03	0.32	1.41	1.86			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	5.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1712	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1481	100.000
D - Anson Rd East		ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	58	1297	356
	B - Eagle Way West	90	0	54	19
	C - A12 South	1259	7	0	215
	D - Anson Rd East	180	2	125	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	8	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	13	0	0	4
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.50	2.3	5.2	A	1571	2356
B - Eagle Way West	0.39	12.81	0.6	2.9	B	150	225
C - A12 South	0.75	6.47	2.9	6.1	A	1359	2038
D - Anson Rd East	0.36	5.89	0.6	2.6	A	282	422

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1289	322	216	2745	0.469	1285	1147	0.0	0.9	2.460	A
B - Eagle Way West	123	31	1241	765	0.161	122	50	0.0	0.2	5.594	A
C - A12 South	1115	279	181	2240	0.498	1111	1108	0.0	1.0	3.178	A
D - Anson Rd East	231	58	1059	1199	0.193	230	443	0.0	0.2	3.711	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1539	385	259	2719	0.566	1537	1373	0.9	1.3	3.042	A
B - Eagle Way West	147	37	1485	637	0.230	146	60	0.2	0.3	7.333	A
C - A12 South	1331	333	216	2217	0.600	1329	1326	1.0	1.5	4.044	A
D - Anson Rd East	276	69	1266	1094	0.252	276	530	0.2	0.3	4.397	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1885	471	316	2684	0.702	1880	1678	1.3	2.3	4.456	A
B - Eagle Way West	180	45	1816	464	0.388	178	73	0.3	0.6	12.562	B
C - A12 South	1630	408	264	2186	0.746	1625	1622	1.5	2.9	6.350	A
D - Anson Rd East	338	84	1549	950	0.356	337	648	0.3	0.5	5.860	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1885	471	318	2683	0.702	1885	1684	2.3	2.3	4.504	A
B - Eagle Way West	180	45	1822	461	0.390	180	73	0.6	0.6	12.809	B
C - A12 South	1630	408	265	2186	0.746	1630	1625	2.9	2.9	6.473	A
D - Anson Rd East	338	84	1553	949	0.356	338	649	0.5	0.6	5.894	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	385	261	2718	0.566	1543	1381	2.3	1.3	3.076	A
B - Eagle Way West	147	37	1494	633	0.232	148	60	0.6	0.3	7.452	A
C - A12 South	1331	333	217	2217	0.600	1337	1331	2.9	1.5	4.115	A
D - Anson Rd East	276	69	1271	1091	0.253	277	532	0.6	0.3	4.423	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1289	322	218	2744	0.470	1290	1154	1.3	0.9	2.478	A
B - Eagle Way West	123	31	1248	761	0.161	123	50	0.3	0.2	5.647	A
C - A12 South	1115	279	182	2240	0.498	1117	1113	1.5	1.0	3.214	A
D - Anson Rd East	231	58	1063	1197	0.193	231	445	0.3	0.2	3.729	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	0.98	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.05	0.45	3.26	5.18			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.49	0.05	0.46	3.83	6.13			N/A	N/A
D - Anson Rd East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.32	0.03	0.26	2.32	2.32			N/A	N/A
B - Eagle Way West	0.62	0.03	0.26	0.62	0.62			N/A	N/A
C - A12 South	2.85	0.03	0.27	2.85	4.95			N/A	N/A
D - Anson Rd East	0.55	0.03	0.25	0.55	0.55			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.34	0.03	0.26	2.34	2.34			N/A	N/A
B - Eagle Way West	0.63	0.03	0.32	1.32	2.90			N/A	N/A
C - A12 South	2.89	0.03	0.26	2.89	2.89			N/A	N/A
D - Anson Rd East	0.55	0.03	0.31	1.48	2.55			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.17	1.19	1.97	2.61			N/A	N/A
B - Eagle Way West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A12 South	1.52	0.09	1.12	3.04	4.14			N/A	N/A
D - Anson Rd East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.07	0.76	1.58	1.97			N/A	N/A
B - Eagle Way West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.00	0.05	0.48	2.22	3.34			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	12.71	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2052	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1672	100.000
D - Anson Rd East		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	167	1226	660
	B - Eagle Way West	142	0	32	43
	C - A12 South	1470	22	0	180
	D - Anson Rd East	210	21	109	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	11	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	13	5	0	4
	D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	8.65	5.3	22.4	A	1883	2825
B - Eagle Way West	0.72	36.60	2.3	12.3	E	200	300
C - A12 South	0.89	15.78	7.7	39.6	C	1534	2302
D - Anson Rd East	0.41	6.67	0.7	3.2	A	313	469

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1545	386	192	2727	0.566	1540	1365	0.0	1.3	3.017	A
B - Eagle Way West	164	41	1395	679	0.241	163	157	0.0	0.3	6.952	A
C - A12 South	1259	315	299	2154	0.585	1253	1026	0.0	1.4	3.975	A
D - Anson Rd East	257	64	1069	1173	0.219	256	662	0.0	0.3	3.919	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1845	461	229	2705	0.682	1842	1634	1.3	2.1	4.155	A
B - Eagle Way West	196	49	1668	535	0.366	195	188	0.3	0.6	10.554	B
C - A12 South	1503	376	357	2115	0.711	1499	1227	1.4	2.4	5.805	A
D - Anson Rd East	306	77	1278	1065	0.288	306	792	0.3	0.4	4.742	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2259	565	278	2675	0.845	2247	1985	2.1	5.1	8.187	A
B - Eagle Way West	240	60	2029	345	0.695	234	230	0.6	2.0	30.997	D
C - A12 South	1841	460	437	2064	0.892	1822	1497	2.4	7.2	13.889	B
D - Anson Rd East	375	94	1560	919	0.408	374	965	0.4	0.7	6.594	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2259	565	281	2673	0.845	2259	2004	5.1	5.3	8.652	A
B - Eagle Way West	240	60	2047	335	0.715	239	231	2.0	2.3	36.596	E
C - A12 South	1841	460	438	2063	0.893	1839	1505	7.2	7.7	15.779	C
D - Anson Rd East	375	94	1568	915	0.410	375	972	0.7	0.7	6.673	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1845	461	235	2701	0.683	1857	1661	5.3	2.2	4.327	A
B - Eagle Way West	196	49	1694	521	0.375	202	190	2.3	0.6	11.518	B
C - A12 South	1503	376	360	2114	0.711	1524	1238	7.7	2.5	6.311	A
D - Anson Rd East	306	77	1290	1058	0.290	308	802	0.7	0.4	4.802	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1545	386	194	2726	0.567	1548	1377	2.2	1.3	3.067	A
B - Eagle Way West	164	41	1405	673	0.243	165	158	0.6	0.3	7.095	A
C - A12 South	1259	315	300	2152	0.585	1263	1032	2.5	1.4	4.068	A
D - Anson Rd East	257	64	1075	1170	0.219	257	667	0.4	0.3	3.946	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.57	1.17	1.61	1.81			N/A	N/A
B - Eagle Way West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A12 South	1.39	0.57	1.29	1.78	1.92			N/A	N/A
D - Anson Rd East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.04	0.39	5.67	10.52			N/A	N/A
B - Eagle Way West	0.57	0.05	0.53	1.32	1.42			N/A	N/A
C - A12 South	2.40	0.04	0.42	6.60	11.67			N/A	N/A
D - Anson Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.13	0.03	0.30	5.13	22.45			N/A	N/A
B - Eagle Way West	2.05	0.03	0.32	3.92	10.78			N/A	N/A
C - A12 South	7.23	0.04	0.38	17.43	39.63			N/A	N/A
D - Anson Rd East	0.68	0.03	0.25	0.68	0.68			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.29	0.03	0.28	5.29	7.99			N/A	N/A
B - Eagle Way West	2.31	0.03	0.34	5.13	12.26			N/A	N/A
C - A12 South	7.70	0.03	0.31	8.07	35.37			N/A	N/A
D - Anson Rd East	0.69	0.03	0.29	1.38	3.22			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.19	0.06	0.85	5.69	8.62			N/A	N/A
B - Eagle Way West	0.61	0.04	0.41	1.10	1.76			N/A	N/A
C - A12 South	2.52	0.05	0.46	6.96	11.73			N/A	N/A
D - Anson Rd East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.04	0.37	3.39	6.27			N/A	N/A
B - Eagle Way West	0.32	0.03	0.30	1.10	1.10			N/A	N/A
C - A12 South	1.42	0.03	0.33	3.02	7.36			N/A	N/A
D - Anson Rd East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	19.04	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1786	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1617	100.000
D - Anson Rd East		ONE HOUR	✓	844	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	160	1068	558
	B - Eagle Way West	134	0	27	67
	C - A12 South	1312	42	1	262
	D - Anson Rd East	485	72	287	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	12	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	10	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.53	3.0	6.7	A	1639	2458
B - Eagle Way West	0.90	84.79	5.5	24.8	F	208	312
C - A12 South	0.92	22.30	10.4	57.1	C	1484	2225
D - Anson Rd East	0.87	24.73	6.0	31.7	C	775	1162

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1344	336	267	2689	0.500	1340	1446	0.0	1.0	2.662	A
B - Eagle Way West	171	43	1543	645	0.265	169	206	0.0	0.4	7.545	A
C - A12 South	1217	304	538	2089	0.583	1212	1037	0.0	1.4	4.079	A
D - Anson Rd East	636	159	943	1310	0.485	632	665	0.0	0.9	5.283	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1605	401	319	2658	0.604	1603	1729	1.0	1.5	3.406	A
B - Eagle Way West	204	51	1846	491	0.415	203	247	0.4	0.7	12.422	B
C - A12 South	1453	363	643	2021	0.719	1449	1240	1.4	2.5	6.243	A
D - Anson Rd East	759	190	1127	1208	0.628	756	795	0.9	1.7	7.909	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1966	492	383	2620	0.750	1960	2087	1.5	2.9	5.413	A
B - Eagle Way West	250	62	2233	294	0.850	237	300	0.7	3.9	54.364	F
C - A12 South	1780	445	779	1934	0.921	1753	1512	2.5	9.2	17.807	C
D - Anson Rd East	930	232	1377	1071	0.868	914	966	1.7	5.6	21.080	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1966	492	389	2616	0.752	1966	2117	2.9	3.0	5.533	A
B - Eagle Way West	250	62	2262	279	0.895	244	302	3.9	5.5	84.791	F
C - A12 South	1780	445	789	1928	0.923	1775	1521	9.2	10.4	22.302	C
D - Anson Rd East	930	232	1382	1069	0.870	928	973	5.6	6.0	24.725	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1605	401	333	2649	0.606	1611	1781	3.0	1.6	3.487	A
B - Eagle Way West	204	51	1891	468	0.436	223	250	5.5	0.8	15.759	C
C - A12 South	1453	363	657	2012	0.722	1484	1254	10.4	2.7	7.199	A
D - Anson Rd East	759	190	1135	1204	0.630	776	809	6.0	1.7	8.731	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1344	336	270	2687	0.500	1346	1460	1.6	1.0	2.689	A
B - Eagle Way West	171	43	1557	638	0.268	173	208	0.8	0.4	7.765	A
C - A12 South	1217	304	543	2086	0.584	1222	1043	2.7	1.4	4.192	A
D - Anson Rd East	636	159	947	1307	0.486	639	669	1.7	1.0	5.412	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.38	0.54	1.28	1.83	1.98			N/A	N/A
D - Anson Rd East	0.93	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.51	0.04	0.42	3.95	6.69			N/A	N/A
B - Eagle Way West	0.69	0.05	0.47	1.27	1.83			N/A	N/A
C - A12 South	2.50	0.04	0.42	6.86	12.26			N/A	N/A
D - Anson Rd East	1.65	0.05	0.47	4.32	6.85			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.94	0.03	0.27	2.94	3.56			N/A	N/A
B - Eagle Way West	3.93	0.06	0.87	11.09	17.82			N/A	N/A
C - A12 South	9.20	0.05	0.48	26.15	48.18			N/A	N/A
D - Anson Rd East	5.55	0.04	0.41	14.91	29.85			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.98	0.03	0.26	2.98	2.98			N/A	N/A
B - Eagle Way West	5.47	0.06	1.22	15.61	24.81			N/A	N/A
C - A12 South	10.37	0.04	0.37	22.65	57.13			N/A	N/A
D - Anson Rd East	6.04	0.03	0.33	10.47	31.71			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.55	0.10	1.20	2.97	3.95			N/A	N/A
B - Eagle Way West	0.80	0.04	0.35	1.87	3.47			N/A	N/A
C - A12 South	2.67	0.04	0.43	7.39	12.98			N/A	N/A
D - Anson Rd East	1.75	0.04	0.42	4.69	8.05			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.05	0.53	2.17	3.19			N/A	N/A
B - Eagle Way West	0.37	0.03	0.28	0.59	1.43			N/A	N/A
C - A12 South	1.42	0.03	0.31	2.43	7.22			N/A	N/A
D - Anson Rd East	0.96	0.03	0.31	1.75	4.80			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	11.82	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1675	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1632	100.000
D - Anson Rd East		ONE HOUR	✓	866	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	91	1100	484
	B - Eagle Way West	96	0	29	36
	C - A12 South	1331	41	0	260
	D - Anson Rd East	504	77	285	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	7	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.22	2.1	4.6	A	1537	2305
B - Eagle Way West	0.58	27.94	1.3	6.7	D	147	221
C - A12 South	0.87	13.68	6.6	33.4	B	1498	2247
D - Anson Rd East	0.85	20.52	5.2	26.5	C	795	1192

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1261	315	244	2764	0.456	1257	1446	0.0	0.8	2.384	A
B - Eagle Way West	121	30	1571	667	0.181	120	157	0.0	0.2	6.570	A
C - A12 South	1229	307	504	2213	0.555	1224	1060	0.0	1.2	3.624	A
D - Anson Rd East	652	163	916	1353	0.482	648	586	0.0	0.9	5.079	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1505	376	292	2736	0.550	1504	1730	0.8	1.2	2.918	A
B - Eagle Way West	144	36	1879	515	0.280	143	188	0.2	0.4	9.682	A
C - A12 South	1468	367	603	2147	0.684	1464	1269	1.2	2.1	5.247	A
D - Anson Rd East	779	195	1095	1257	0.619	776	701	0.9	1.6	7.436	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1844	461	355	2698	0.683	1840	2102	1.2	2.1	4.178	A
B - Eagle Way West	176	44	2284	314	0.561	173	229	0.4	1.2	24.931	C
C - A12 South	1797	449	732	2061	0.872	1781	1549	2.1	6.2	12.227	B
D - Anson Rd East	954	238	1340	1126	0.847	940	855	1.6	4.9	18.216	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1844	461	358	2696	0.684	1844	2123	2.1	2.1	4.223	A
B - Eagle Way West	176	44	2305	304	0.580	176	230	1.2	1.3	27.936	D
C - A12 South	1797	449	740	2055	0.874	1796	1556	6.2	6.6	13.682	B
D - Anson Rd East	954	238	1343	1125	0.848	952	859	4.9	5.2	20.516	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1505	376	297	2733	0.551	1509	1760	2.1	1.2	2.952	A
B - Eagle Way West	144	36	1909	500	0.288	148	190	1.3	0.4	10.327	B
C - A12 South	1468	367	614	2139	0.686	1485	1278	6.6	2.2	5.646	A
D - Anson Rd East	779	195	1100	1255	0.620	793	706	5.2	1.7	8.013	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1261	315	246	2763	0.456	1262	1458	1.2	0.8	2.400	A
B - Eagle Way West	121	30	1583	661	0.183	121	158	0.4	0.2	6.684	A
C - A12 South	1229	307	508	2209	0.556	1233	1066	2.2	1.3	3.702	A
D - Anson Rd East	652	163	920	1351	0.482	655	589	1.7	0.9	5.191	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.24	0.56	1.14	1.55	1.78			N/A	N/A
D - Anson Rd East	0.92	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.05	0.47	2.95	4.63			N/A	N/A
B - Eagle Way West	0.38	0.03	0.26	0.47	0.55			N/A	N/A
C - A12 South	2.12	0.04	0.41	5.76	10.28			N/A	N/A
D - Anson Rd East	1.59	0.05	0.48	4.11	6.52			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.03	0.26	2.13	2.13			N/A	N/A
B - Eagle Way West	1.20	0.03	0.28	1.20	3.63			N/A	N/A
C - A12 South	6.17	0.03	0.35	12.47	33.42			N/A	N/A
D - Anson Rd East	4.87	0.04	0.37	11.64	26.49			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.03	0.26	2.15	2.15			N/A	N/A
B - Eagle Way West	1.32	0.03	0.33	2.88	6.73			N/A	N/A
C - A12 South	6.55	0.03	0.30	6.55	25.37			N/A	N/A
D - Anson Rd East	5.19	0.03	0.31	6.00	24.49			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.23	1.15	1.80	2.04			N/A	N/A
B - Eagle Way West	0.41	0.04	0.36	1.17	1.34			N/A	N/A
C - A12 South	2.23	0.05	0.48	6.04	9.82			N/A	N/A
D - Anson Rd East	1.67	0.04	0.44	4.44	7.36			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.07	0.79	1.32	1.76			N/A	N/A
B - Eagle Way West	0.23	0.03	0.28	0.60	1.05			N/A	N/A
C - A12 South	1.26	0.03	0.33	2.86	6.44			N/A	N/A
D - Anson Rd East	0.94	0.03	0.32	1.92	4.68			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	942	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	613	100.000
D - Anson Rd East		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	743	195
	B - Eagle Way West	32	0	19	9
	C - A12 South	517	1	0	95
	D - Anson Rd East	69	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	13
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.02	0.6	2.7	A	864	1296
B - Eagle Way West	0.06	3.81	0.1	0.5	A	55	82
C - A12 South	0.29	2.14	0.4	1.3	A	563	844
D - Anson Rd East	0.13	3.14	0.1	0.5	A	138	207

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	709	177	92	2850	0.249	708	464	0.0	0.3	1.680	A
B - Eagle Way West	45	11	512	1132	0.040	45	4	0.0	0.0	3.311	A
C - A12 South	462	115	55	2376	0.194	461	633	0.0	0.2	1.879	A
D - Anson Rd East	113	28	575	1447	0.078	113	224	0.0	0.1	2.699	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	847	212	110	2838	0.298	846	555	0.3	0.4	1.806	A
B - Eagle Way West	53	13	612	1081	0.049	53	5	0.0	0.1	3.502	A
C - A12 South	551	138	66	2368	0.233	551	757	0.2	0.3	1.981	A
D - Anson Rd East	135	34	688	1390	0.097	135	268	0.1	0.1	2.868	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1037	259	135	2822	0.367	1036	680	0.4	0.6	2.016	A
B - Eagle Way West	66	16	750	1011	0.065	65	6	0.1	0.1	3.804	A
C - A12 South	675	169	81	2358	0.286	675	927	0.3	0.4	2.139	A
D - Anson Rd East	166	41	843	1313	0.126	166	329	0.1	0.1	3.138	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1037	259	135	2822	0.367	1037	680	0.6	0.6	2.016	A
B - Eagle Way West	66	16	750	1011	0.065	66	6	0.1	0.1	3.805	A
C - A12 South	675	169	81	2358	0.286	675	928	0.4	0.4	2.139	A
D - Anson Rd East	166	41	843	1312	0.126	166	329	0.1	0.1	3.139	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	847	212	110	2838	0.298	847	556	0.6	0.4	1.808	A
B - Eagle Way West	53	13	613	1081	0.050	54	5	0.1	0.1	3.507	A
C - A12 South	551	138	66	2368	0.233	552	758	0.4	0.3	1.982	A
D - Anson Rd East	135	34	689	1390	0.097	136	269	0.1	0.1	2.870	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	709	177	92	2850	0.249	709	466	0.4	0.3	1.684	A
B - Eagle Way West	45	11	513	1131	0.040	45	4	0.1	0.0	3.316	A
C - A12 South	462	115	56	2376	0.194	462	635	0.3	0.2	1.880	A
D - Anson Rd East	113	28	577	1446	0.078	114	225	0.1	0.1	2.701	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - Eagle Way West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.40	0.03	0.25	0.45	0.48			N/A	N/A
D - Anson Rd East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.30	1.35	2.72			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.40	0.03	0.33	1.26	1.26			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Anson Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	5.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1713	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1508	100.000
D - Anson Rd East		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	61	1294	357
	B - Eagle Way West	95	0	57	20
	C - A12 South	1265	7	0	236
	D - Anson Rd East	184	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	8	0	0	4
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.48	2.3	5.1	A	1572	2358
B - Eagle Way West	0.40	12.53	0.6	3.0	B	157	236
C - A12 South	0.73	5.93	2.7	5.8	A	1384	2076
D - Anson Rd East	0.36	5.85	0.5	2.5	A	283	425

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1290	322	235	2757	0.468	1286	1159	0.0	0.9	2.441	A
B - Eagle Way West	129	32	1265	775	0.167	128	53	0.0	0.2	5.560	A
C - A12 South	1135	284	186	2325	0.488	1131	1106	0.0	0.9	3.005	A
D - Anson Rd East	232	58	1061	1204	0.193	231	460	0.0	0.2	3.699	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1540	385	281	2729	0.564	1539	1387	0.9	1.3	3.020	A
B - Eagle Way West	154	39	1514	649	0.238	154	63	0.2	0.3	7.259	A
C - A12 South	1356	339	223	2301	0.589	1354	1323	0.9	1.4	3.793	A
D - Anson Rd East	277	69	1269	1099	0.252	277	550	0.2	0.3	4.377	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1886	472	343	2691	0.701	1882	1695	1.3	2.3	4.431	A
B - Eagle Way West	189	47	1851	479	0.395	188	77	0.3	0.6	12.309	B
C - A12 South	1660	415	273	2268	0.732	1655	1619	1.4	2.7	5.832	A
D - Anson Rd East	340	85	1552	957	0.355	339	673	0.3	0.5	5.820	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1886	472	345	2690	0.701	1886	1700	2.3	2.3	4.479	A
B - Eagle Way West	189	47	1856	476	0.397	189	77	0.6	0.6	12.534	B
C - A12 South	1660	415	273	2267	0.732	1660	1622	2.7	2.7	5.927	A
D - Anson Rd East	340	85	1556	955	0.356	340	675	0.5	0.5	5.850	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1540	385	283	2728	0.565	1544	1394	2.3	1.3	3.054	A
B - Eagle Way West	154	39	1521	645	0.239	156	63	0.6	0.3	7.367	A
C - A12 South	1356	339	224	2300	0.589	1361	1329	2.7	1.4	3.851	A
D - Anson Rd East	277	69	1274	1097	0.253	278	553	0.5	0.3	4.405	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1290	322	236	2756	0.468	1292	1165	1.3	0.9	2.462	A
B - Eagle Way West	129	32	1272	772	0.167	130	53	0.3	0.2	5.612	A
C - A12 South	1135	284	187	2325	0.488	1137	1111	1.4	1.0	3.036	A
D - Anson Rd East	232	58	1066	1201	0.193	233	462	0.3	0.2	3.717	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.95	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.05	0.45	3.24	5.13			N/A	N/A
B - Eagle Way West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A12 South	1.42	0.05	0.46	3.65	5.78			N/A	N/A
D - Anson Rd East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.31	0.03	0.26	2.31	2.31			N/A	N/A
B - Eagle Way West	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C - A12 South	2.67	0.03	0.27	2.67	3.25			N/A	N/A
D - Anson Rd East	0.55	0.03	0.25	0.55	0.55			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.33	0.03	0.26	2.33	2.33			N/A	N/A
B - Eagle Way West	0.65	0.03	0.32	1.32	3.02			N/A	N/A
C - A12 South	2.70	0.03	0.26	2.70	2.70			N/A	N/A
D - Anson Rd East	0.55	0.03	0.31	1.48	2.54			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.18	1.18	1.96	2.58			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.45	0.10	1.15	2.76	3.66			N/A	N/A
D - Anson Rd East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.07	0.76	1.56	1.95			N/A	N/A
B - Eagle Way West	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.96	0.05	0.55	1.97	2.90			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	18.87	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2155	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1818	100.000
D - Anson Rd East		ONE HOUR	✓	351	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1319	661
	B - Eagle Way West	149	0	34	46
	C - A12 South	1580	23	0	215
	D - Anson Rd East	207	22	121	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	9	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	9	5	0	4
	D - Anson Rd East	10	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	11.83	7.5	38.3	B	1978	2966
B - Eagle Way West	0.86	68.80	4.5	21.8	F	210	315
C - A12 South	0.94	23.27	12.2	67.2	C	1668	2503
D - Anson Rd East	0.44	7.45	0.8	3.5	A	322	483

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1622	406	221	2733	0.594	1617	1451	0.0	1.4	3.206	A
B - Eagle Way West	172	43	1501	650	0.265	171	165	0.0	0.4	7.486	A
C - A12 South	1369	342	304	2236	0.612	1363	1105	0.0	1.6	4.093	A
D - Anson Rd East	264	66	1146	1143	0.231	263	692	0.0	0.3	4.087	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1937	484	265	2707	0.716	1933	1735	1.4	2.5	4.626	A
B - Eagle Way West	206	51	1795	501	0.411	204	198	0.4	0.7	12.100	B
C - A12 South	1635	409	364	2196	0.744	1629	1322	1.6	2.8	6.299	A
D - Anson Rd East	316	79	1371	1028	0.307	315	827	0.3	0.4	5.044	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2373	593	318	2675	0.887	2354	2096	2.5	7.1	10.658	B
B - Eagle Way West	252	63	2173	308	0.817	241	241	0.7	3.4	47.700	E
C - A12 South	2002	500	444	2142	0.935	1970	1609	2.8	10.8	18.333	C
D - Anson Rd East	386	97	1668	876	0.441	385	1004	0.4	0.8	7.313	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2373	593	323	2672	0.888	2371	2124	7.1	7.5	11.833	B
B - Eagle Way West	252	63	2200	294	0.855	248	243	3.4	4.5	68.798	F
C - A12 South	2002	500	446	2140	0.935	1996	1621	10.8	12.2	23.266	C
D - Anson Rd East	386	97	1681	869	0.444	386	1014	0.8	0.8	7.452	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1937	484	275	2701	0.717	1957	1783	7.5	2.6	4.965	A
B - Eagle Way West	206	51	1838	479	0.429	220	200	4.5	0.8	14.667	B
C - A12 South	1635	409	367	2194	0.745	1671	1339	12.2	3.0	7.348	A
D - Anson Rd East	316	79	1389	1018	0.310	317	843	0.8	0.5	5.140	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1622	406	224	2732	0.594	1627	1464	2.6	1.5	3.272	A
B - Eagle Way West	172	43	1514	644	0.267	174	167	0.8	0.4	7.683	A
C - A12 South	1369	342	306	2235	0.612	1374	1113	3.0	1.6	4.210	A
D - Anson Rd East	264	66	1154	1139	0.232	265	697	0.5	0.3	4.122	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.56	1.35	1.85	1.99			N/A	N/A
B - Eagle Way West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.56	0.53	1.43	2.16	2.69			N/A	N/A
D - Anson Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.47	0.04	0.39	6.61	12.52			N/A	N/A
B - Eagle Way West	0.68	0.05	0.49	1.09	1.69			N/A	N/A
C - A12 South	2.84	0.04	0.43	7.84	14.09			N/A	N/A
D - Anson Rd East	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.11	0.03	0.35	13.82	38.30			N/A	N/A
B - Eagle Way West	3.42	0.05	0.47	9.62	16.53			N/A	N/A
C - A12 South	10.78	0.05	0.93	31.42	55.06			N/A	N/A
D - Anson Rd East	0.78	0.03	0.26	0.78	0.78			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.50	0.03	0.30	7.50	27.12			N/A	N/A
B - Eagle Way West	4.45	0.05	0.49	12.67	21.81			N/A	N/A
C - A12 South	12.16	0.04	0.40	29.44	67.23			N/A	N/A
D - Anson Rd East	0.79	0.03	0.29	1.27	3.49			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.58	0.05	0.52	7.10	11.50			N/A	N/A
B - Eagle Way West	0.77	0.04	0.37	1.82	3.12			N/A	N/A
C - A12 South	3.01	0.04	0.43	8.35	14.93			N/A	N/A
D - Anson Rd East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.48	0.03	0.34	3.46	7.59			N/A	N/A
B - Eagle Way West	0.37	0.03	0.28	0.86	1.57			N/A	N/A
C - A12 South	1.60	0.03	0.31	2.70	8.16			N/A	N/A
D - Anson Rd East	0.30	0.03	0.25	0.45	0.48			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	33.91	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1894	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1782	100.000
D - Anson Rd East		ONE HOUR	✓	842	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	169	1167	558
	B - Eagle Way West	141	0	28	70
	C - A12 South	1462	45	1	275
	D - Anson Rd East	444	76	322	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	8	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	6	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.23	3.6	7.9	A	1738	2607
B - Eagle Way West	1.09	189.06	14.8	39.3	F	219	329
C - A12 South	0.98	43.75	23.2	101.7	E	1636	2453
D - Anson Rd East	0.90	32.39	7.8	42.8	D	772	1158

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1426	357	280	2733	0.522	1422	1532	0.0	1.1	2.736	A
B - Eagle Way West	180	45	1634	614	0.293	178	217	0.0	0.4	8.237	A
C - A12 South	1342	335	515	2155	0.623	1335	1139	0.0	1.6	4.358	A
D - Anson Rd East	634	158	1024	1280	0.495	630	678	0.0	1.0	5.503	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1703	426	335	2700	0.631	1700	1831	1.1	1.7	3.591	A
B - Eagle Way West	215	54	1953	454	0.473	213	259	0.4	0.9	14.817	B
C - A12 South	1602	401	617	2089	0.767	1596	1362	1.6	3.2	7.217	A
D - Anson Rd East	757	189	1225	1173	0.645	753	810	1.0	1.8	8.508	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2086	521	392	2666	0.782	2078	2179	1.7	3.5	6.059	A
B - Eagle Way West	263	66	2336	263	1.001	236	315	0.9	7.7	93.090	F
C - A12 South	1963	491	745	2004	0.979	1906	1656	3.2	17.3	27.500	D
D - Anson Rd East	927	232	1495	1030	0.900	906	976	1.8	6.9	25.737	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2086	521	397	2663	0.783	2085	2215	3.5	3.6	6.229	A
B - Eagle Way West	263	66	2377	242	1.086	235	318	7.7	14.8	189.064	F
C - A12 South	1963	491	756	1997	0.983	1939	1667	17.3	23.2	43.747	E
D - Anson Rd East	927	232	1499	1027	0.902	923	983	6.9	7.8	32.386	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1703	426	371	2678	0.636	1710	1948	3.6	1.8	3.746	A
B - Eagle Way West	215	54	2050	405	0.530	269	265	14.8	1.2	36.894	E
C - A12 South	1602	401	634	2077	0.771	1681	1385	23.2	3.5	10.865	B
D - Anson Rd East	757	189	1239	1166	0.649	780	843	7.8	1.9	9.867	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1426	357	284	2731	0.522	1429	1550	1.8	1.1	2.772	A
B - Eagle Way West	180	45	1651	605	0.297	183	219	1.2	0.4	8.588	A
C - A12 South	1342	335	521	2152	0.624	1349	1146	3.5	1.7	4.525	A
D - Anson Rd East	634	158	1030	1277	0.496	637	683	1.9	1.0	5.654	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.41	0.03	0.28	0.61	1.05			N/A	N/A
C - A12 South	1.63	0.27	1.42	2.65	3.20			N/A	N/A
D - Anson Rd East	0.97	0.54	1.01	1.42	1.47			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.69	0.04	0.41	4.51	7.87			N/A	N/A
B - Eagle Way West	0.87	0.04	0.41	1.98	3.22			N/A	N/A
C - A12 South	3.19	0.04	0.44	8.88	15.87			N/A	N/A
D - Anson Rd East	1.77	0.05	0.47	4.70	7.60			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.49	0.03	0.28	3.49	7.52			N/A	N/A
B - Eagle Way West	7.74	0.33	4.69	17.74	23.48			N/A	N/A
C - A12 South	17.34	0.16	6.78	47.17	68.02			N/A	N/A
D - Anson Rd East	6.92	0.05	0.65	19.97	34.68			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.55	0.03	0.27	3.55	3.55			N/A	N/A
B - Eagle Way West	14.80	1.49	10.91	31.04	39.28			N/A	N/A
C - A12 South	23.19	0.11	6.06	66.76	101.68			N/A	N/A
D - Anson Rd East	7.81	0.04	0.39	19.17	42.79			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.08	1.18	3.83	5.27			N/A	N/A
B - Eagle Way West	1.19	0.03	0.34	2.80	5.96			N/A	N/A
C - A12 South	3.51	0.04	0.41	9.60	18.03			N/A	N/A
D - Anson Rd East	1.90	0.04	0.40	5.07	9.23			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.05	0.45	2.67	4.12			N/A	N/A
B - Eagle Way West	0.43	0.03	0.27	0.48	0.95			N/A	N/A
C - A12 South	1.68	0.03	0.30	1.68	7.60			N/A	N/A
D - Anson Rd East	1.00	0.03	0.30	1.39	4.82			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	18.63	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1827	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1778	100.000
D - Anson Rd East		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	96	1247	484
	B - Eagle Way West	101	0	30	37
	C - A12 South	1459	43	0	275
	D - Anson Rd East	476	81	301	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	4	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	3	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	4.90	2.7	6.1	A	1677	2515
B - Eagle Way West	0.74	51.72	2.5	12.6	F	155	232
C - A12 South	0.94	24.55	12.5	68.9	C	1631	2447
D - Anson Rd East	0.89	29.40	7.3	39.9	D	788	1182

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1376	344	258	2819	0.488	1372	1525	0.0	0.9	2.482	A
B - Eagle Way West	127	32	1657	628	0.202	126	165	0.0	0.3	7.149	A
C - A12 South	1338	335	489	2238	0.598	1333	1185	0.0	1.5	3.950	A
D - Anson Rd East	646	162	1031	1308	0.494	643	599	0.0	1.0	5.376	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1643	411	308	2788	0.589	1641	1824	0.9	1.4	3.132	A
B - Eagle Way West	152	38	1981	469	0.323	151	197	0.3	0.5	11.273	B
C - A12 South	1598	400	585	2174	0.735	1593	1417	1.5	2.7	6.150	A
D - Anson Rd East	772	193	1233	1204	0.641	769	716	1.0	1.7	8.222	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2012	503	371	2750	0.732	2007	2200	1.4	2.7	4.815	A
B - Eagle Way West	186	46	2392	267	0.695	180	240	0.5	2.0	38.821	E
C - A12 South	1957	489	707	2092	0.936	1925	1727	2.7	10.8	18.736	C
D - Anson Rd East	945	236	1508	1061	0.891	926	871	1.7	6.5	23.967	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2012	503	377	2746	0.733	2012	2233	2.7	2.7	4.901	A
B - Eagle Way West	186	46	2426	250	0.741	184	242	2.0	2.5	51.719	F
C - A12 South	1957	489	717	2085	0.939	1951	1737	10.8	12.5	24.554	C
D - Anson Rd East	945	236	1512	1059	0.893	943	877	6.5	7.3	29.398	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1643	411	319	2782	0.591	1648	1878	2.7	1.5	3.189	A
B - Eagle Way West	152	38	2037	442	0.343	159	201	2.5	0.5	13.099	B
C - A12 South	1598	400	602	2163	0.739	1637	1432	12.5	2.9	7.325	A
D - Anson Rd East	772	193	1240	1200	0.643	794	726	7.3	1.9	9.306	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1376	344	260	2817	0.488	1378	1540	1.5	1.0	2.505	A
B - Eagle Way West	127	32	1672	621	0.204	128	166	0.5	0.3	7.321	A
C - A12 South	1338	335	494	2235	0.599	1344	1191	2.9	1.5	4.066	A
D - Anson Rd East	646	162	1036	1306	0.495	650	602	1.9	1.0	5.516	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.47	0.51	1.35	1.97	2.52			N/A	N/A
D - Anson Rd East	0.97	0.55	1.00	1.41	1.46			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.04	0.43	3.71	6.15			N/A	N/A
B - Eagle Way West	0.47	0.04	0.41	1.24	1.37			N/A	N/A
C - A12 South	2.71	0.04	0.42	7.45	13.53			N/A	N/A
D - Anson Rd East	1.75	0.05	0.47	4.63	7.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.68	0.03	0.27	2.68	2.68			N/A	N/A
B - Eagle Way West	1.99	0.03	0.33	4.26	10.54			N/A	N/A
C - A12 South	10.82	0.06	1.03	31.60	54.79			N/A	N/A
D - Anson Rd East	6.52	0.05	0.48	18.60	33.60			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.71	0.03	0.26	2.71	2.71			N/A	N/A
B - Eagle Way West	2.49	0.04	0.39	6.66	12.61			N/A	N/A
C - A12 South	12.53	0.04	0.41	31.60	68.90			N/A	N/A
D - Anson Rd East	7.25	0.04	0.37	16.36	39.87			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.13	1.22	2.59	3.29			N/A	N/A
B - Eagle Way West	0.53	0.04	0.39	1.43	1.51			N/A	N/A
C - A12 South	2.91	0.04	0.43	8.07	14.40			N/A	N/A
D - Anson Rd East	1.85	0.04	0.40	4.95	8.89			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.06	0.67	1.88	2.69			N/A	N/A
B - Eagle Way West	0.26	0.03	0.29	0.92	1.40			N/A	N/A
C - A12 South	1.51	0.03	0.31	2.37	7.60			N/A	N/A
D - Anson Rd East	0.99	0.03	0.30	1.53	4.88			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	943	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	761	100.000
D - Anson Rd East		ONE HOUR	✓	153	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	744	195
	B - Eagle Way West	32	0	19	9
	C - A12 South	666	1	0	95
	D - Anson Rd East	71	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	10	0	0	13
	D - Anson Rd East	11	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.02	0.6	2.7	A	865	1298
B - Eagle Way West	0.07	4.19	0.1	0.5	A	55	82
C - A12 South	0.36	2.41	0.6	2.6	A	699	1048
D - Anson Rd East	0.13	3.14	0.1	0.5	A	140	210

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	710	177	92	2850	0.249	709	577	0.0	0.3	1.681	A
B - Eagle Way West	45	11	624	1072	0.042	45	4	0.0	0.0	3.502	A
C - A12 South	573	143	57	2353	0.244	572	634	0.0	0.3	2.021	A
D - Anson Rd East	115	29	576	1448	0.079	114	224	0.0	0.1	2.700	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	848	212	110	2838	0.299	847	690	0.3	0.4	1.807	A
B - Eagle Way West	53	13	747	1010	0.053	53	5	0.0	0.1	3.763	A
C - A12 South	684	171	68	2345	0.292	684	759	0.3	0.4	2.167	A
D - Anson Rd East	137	34	689	1391	0.099	137	268	0.1	0.1	2.870	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1038	260	135	2822	0.368	1038	845	0.4	0.6	2.017	A
B - Eagle Way West	66	16	914	924	0.071	65	6	0.1	0.1	4.191	A
C - A12 South	838	210	83	2334	0.359	838	929	0.4	0.6	2.403	A
D - Anson Rd East	168	42	844	1313	0.128	168	329	0.1	0.1	3.143	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1038	260	135	2822	0.368	1038	845	0.6	0.6	2.018	A
B - Eagle Way West	66	16	915	924	0.071	66	6	0.1	0.1	4.193	A
C - A12 South	838	210	83	2334	0.359	838	929	0.6	0.6	2.405	A
D - Anson Rd East	168	42	845	1313	0.128	168	329	0.1	0.1	3.143	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	848	212	110	2838	0.299	848	691	0.6	0.4	1.808	A
B - Eagle Way West	53	13	748	1009	0.053	54	5	0.1	0.1	3.769	A
C - A12 South	684	171	68	2345	0.292	685	759	0.6	0.4	2.170	A
D - Anson Rd East	137	34	690	1390	0.099	137	269	0.1	0.1	2.872	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	710	177	92	2850	0.249	710	578	0.4	0.3	1.684	A
B - Eagle Way West	45	11	626	1071	0.042	45	4	0.1	0.0	3.509	A
C - A12 South	573	143	57	2353	0.244	574	636	0.4	0.3	2.025	A
D - Anson Rd East	115	29	578	1447	0.079	115	225	0.1	0.1	2.704	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Anson Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.41	0.00	0.00	0.41	0.41			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.56	0.03	0.25	0.56	0.56			N/A	N/A
D - Anson Rd East	0.15	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.30	1.35	2.73			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.56	0.03	0.30	1.36	2.63			N/A	N/A
D - Anson Rd East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.41	0.00	0.00	0.41	0.41			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Anson Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	6.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1719	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1619	100.000
D - Anson Rd East		ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	61	1300	357
	B - Eagle Way West	95	0	57	20
	C - A12 South	1375	7	0	237
	D - Anson Rd East	182	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	12	0	0	4
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.54	2.4	5.2	A	1577	2366
B - Eagle Way West	0.48	17.71	0.9	4.5	C	157	236
C - A12 South	0.81	8.37	4.1	14.8	A	1485	2228
D - Anson Rd East	0.36	5.88	0.5	2.5	A	282	422

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1294	324	235	2753	0.470	1291	1239	0.0	0.9	2.456	A
B - Eagle Way West	129	32	1346	718	0.180	128	53	0.0	0.2	6.098	A
C - A12 South	1219	305	185	2267	0.538	1214	1110	0.0	1.2	3.403	A
D - Anson Rd East	231	58	1065	1200	0.193	230	461	0.0	0.2	3.708	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1545	386	282	2724	0.567	1544	1483	0.9	1.3	3.045	A
B - Eagle Way West	154	39	1611	581	0.266	154	63	0.2	0.4	8.417	A
C - A12 South	1455	364	221	2244	0.649	1453	1328	1.2	1.8	4.536	A
D - Anson Rd East	276	69	1274	1095	0.252	276	551	0.2	0.3	4.390	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1892	473	343	2687	0.704	1888	1811	1.3	2.3	4.486	A
B - Eagle Way West	189	47	1968	396	0.477	187	77	0.4	0.9	17.015	C
C - A12 South	1782	446	271	2211	0.806	1774	1624	1.8	4.0	8.071	A
D - Anson Rd East	338	84	1558	952	0.355	337	674	0.3	0.5	5.844	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1892	473	346	2685	0.705	1892	1820	2.3	2.4	4.538	A
B - Eagle Way West	189	47	1976	392	0.482	189	77	0.9	0.9	17.714	C
C - A12 South	1782	446	271	2211	0.806	1782	1629	4.0	4.1	8.374	A
D - Anson Rd East	338	84	1562	950	0.356	338	676	0.5	0.5	5.879	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1545	386	284	2723	0.568	1549	1495	2.4	1.3	3.080	A
B - Eagle Way West	154	39	1623	575	0.268	156	63	0.9	0.4	8.651	A
C - A12 South	1455	364	222	2243	0.649	1464	1334	4.1	1.9	4.674	A
D - Anson Rd East	276	69	1280	1092	0.253	277	554	0.5	0.3	4.418	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1294	324	237	2752	0.470	1296	1247	1.3	0.9	2.475	A
B - Eagle Way West	129	32	1355	714	0.181	130	53	0.4	0.2	6.171	A
C - A12 South	1219	305	186	2267	0.538	1222	1115	1.9	1.2	3.456	A
D - Anson Rd East	231	58	1070	1198	0.193	231	463	0.3	0.2	3.728	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.15	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.04	0.45	3.29	5.24			N/A	N/A
B - Eagle Way West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.82	0.04	0.43	4.89	8.36			N/A	N/A
D - Anson Rd East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.34	0.03	0.26	2.34	2.34			N/A	N/A
B - Eagle Way West	0.88	0.03	0.26	0.88	0.88			N/A	N/A
C - A12 South	3.97	0.03	0.29	3.97	14.76			N/A	N/A
D - Anson Rd East	0.54	0.03	0.25	0.54	0.54			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.37	0.03	0.26	2.37	2.37			N/A	N/A
B - Eagle Way West	0.91	0.03	0.31	1.75	4.54			N/A	N/A
C - A12 South	4.06	0.03	0.27	4.06	4.06			N/A	N/A
D - Anson Rd East	0.55	0.03	0.31	1.48	2.54			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.17	1.19	1.99	2.65			N/A	N/A
B - Eagle Way West	0.37	0.03	0.29	0.75	1.12			N/A	N/A
C - A12 South	1.87	0.06	0.93	4.62	6.75			N/A	N/A
D - Anson Rd East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.06	0.75	1.60	1.99			N/A	N/A
B - Eagle Way West	0.22	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	1.17	0.04	0.40	2.96	5.08			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	20.14	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2161	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1778	100.000
D - Anson Rd East		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1325	661
	B - Eagle Way West	149	0	34	46
	C - A12 South	1564	23	0	190
	D - Anson Rd East	203	22	120	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	10	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	12	5	0	4
	D - Anson Rd East	10	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	12.06	7.7	39.3	B	1983	2975
B - Eagle Way West	0.87	74.04	4.8	23.0	F	210	315
C - A12 South	0.94	25.52	13.0	71.6	D	1631	2447
D - Anson Rd East	0.44	7.54	0.8	3.5	A	318	477

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1627	407	203	2729	0.596	1621	1436	0.0	1.5	3.234	A
B - Eagle Way West	172	43	1468	647	0.266	171	165	0.0	0.4	7.541	A
C - A12 South	1338	335	301	2172	0.616	1332	1109	0.0	1.6	4.256	A
D - Anson Rd East	261	65	1150	1135	0.230	260	673	0.0	0.3	4.109	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1943	486	242	2705	0.718	1939	1717	1.5	2.5	4.675	A
B - Eagle Way West	206	51	1755	496	0.414	204	198	0.4	0.7	12.279	B
C - A12 South	1598	400	360	2133	0.749	1593	1326	1.6	2.9	6.599	A
D - Anson Rd East	311	78	1376	1019	0.306	311	805	0.3	0.4	5.081	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2379	595	290	2675	0.889	2360	2072	2.5	7.2	10.829	B
B - Eagle Way West	252	63	2122	304	0.828	240	241	0.7	3.6	49.779	E
C - A12 South	1957	489	440	2081	0.941	1923	1614	2.9	11.4	19.641	C
D - Anson Rd East	381	95	1674	865	0.441	380	977	0.4	0.8	7.400	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2379	595	296	2672	0.890	2378	2101	7.2	7.7	12.059	B
B - Eagle Way West	252	63	2150	290	0.870	247	243	3.6	4.8	74.039	F
C - A12 South	1957	489	442	2080	0.941	1951	1626	11.4	13.0	25.518	D
D - Anson Rd East	381	95	1687	859	0.444	381	986	0.8	0.8	7.545	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1943	486	253	2698	0.720	1963	1769	7.7	2.6	5.028	A
B - Eagle Way West	206	51	1801	472	0.435	222	201	4.8	0.8	15.234	C
C - A12 South	1598	400	363	2131	0.750	1638	1345	13.0	3.1	7.862	A
D - Anson Rd East	311	78	1395	1009	0.309	313	821	0.8	0.5	5.181	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1627	407	205	2727	0.597	1631	1450	2.6	1.5	3.298	A
B - Eagle Way West	172	43	1481	640	0.269	174	167	0.8	0.4	7.752	A
C - A12 South	1338	335	303	2171	0.617	1344	1117	3.1	1.6	4.386	A
D - Anson Rd East	261	65	1158	1131	0.231	261	678	0.5	0.3	4.144	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.46	0.56	1.36	1.87	2.03			N/A	N/A
B - Eagle Way West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.59	0.52	1.45	2.26	2.75			N/A	N/A
D - Anson Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.51	0.04	0.39	6.70	12.68			N/A	N/A
B - Eagle Way West	0.69	0.05	0.48	1.18	1.75			N/A	N/A
C - A12 South	2.90	0.04	0.43	8.05	14.35			N/A	N/A
D - Anson Rd East	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.25	0.03	0.35	14.51	39.28			N/A	N/A
B - Eagle Way West	3.59	0.05	0.49	10.14	17.02			N/A	N/A
C - A12 South	11.39	0.06	1.32	33.35	56.38			N/A	N/A
D - Anson Rd East	0.78	0.03	0.26	0.78	0.78			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.65	0.03	0.30	7.65	28.61			N/A	N/A
B - Eagle Way West	4.80	0.05	0.70	13.75	22.98			N/A	N/A
C - A12 South	13.02	0.04	0.43	33.91	71.64			N/A	N/A
D - Anson Rd East	0.79	0.03	0.29	1.28	3.52			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.62	0.05	0.50	7.22	11.72			N/A	N/A
B - Eagle Way West	0.79	0.04	0.36	1.87	3.31			N/A	N/A
C - A12 South	3.09	0.04	0.43	8.58	15.50			N/A	N/A
D - Anson Rd East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.49	0.03	0.34	3.47	7.69			N/A	N/A
B - Eagle Way West	0.37	0.03	0.28	0.78	1.55			N/A	N/A
C - A12 South	1.63	0.03	0.31	2.62	8.24			N/A	N/A
D - Anson Rd East	0.30	0.03	0.25	0.45	0.48			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	45.01	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1940	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1796	100.000
D - Anson Rd East		ONE HOUR	✓	836	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	169	1213	559
	B - Eagle Way West	141	0	28	70
	C - A12 South	1472	45	1	278
	D - Anson Rd East	436	76	324	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	10	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	9	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	7.31	4.3	13.8	A	1780	2670
B - Eagle Way West	1.15	237.45	18.9	43.7	F	219	329
C - A12 South	1.01	61.59	34.8	116.5	F	1648	2472
D - Anson Rd East	0.93	43.67	10.4	54.2	E	767	1150

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1460	365	282	2692	0.542	1456	1534	0.0	1.2	2.901	A
B - Eagle Way West	180	45	1638	597	0.301	178	217	0.0	0.4	8.569	A
C - A12 South	1352	338	509	2112	0.640	1345	1174	0.0	1.8	4.652	A
D - Anson Rd East	629	157	1058	1251	0.503	625	680	0.0	1.0	5.717	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1744	436	337	2659	0.656	1741	1833	1.2	1.9	3.908	A
B - Eagle Way West	215	54	1957	434	0.495	213	259	0.4	0.9	16.122	C
C - A12 South	1614	404	609	2048	0.788	1607	1404	1.8	3.6	8.038	A
D - Anson Rd East	751	188	1266	1138	0.660	748	813	1.0	1.9	9.134	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2136	534	389	2628	0.813	2126	2157	1.9	4.2	7.049	A
B - Eagle Way West	263	66	2317	251	1.049	229	313	0.9	9.4	110.315	F
C - A12 South	1977	494	732	1969	1.004	1899	1703	3.6	23.2	34.287	D
D - Anson Rd East	920	230	1542	988	0.931	893	974	1.9	8.7	31.580	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2136	534	392	2626	0.813	2135	2192	4.2	4.3	7.315	A
B - Eagle Way West	263	66	2359	230	1.146	225	317	9.4	18.9	237.450	F
C - A12 South	1977	494	745	1960	1.009	1931	1716	23.2	34.8	61.591	F
D - Anson Rd East	920	230	1548	985	0.934	913	980	8.7	10.4	43.667	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1744	436	387	2630	0.663	1753	2001	4.3	2.0	4.144	A
B - Eagle Way West	215	54	2104	359	0.598	284	267	18.9	1.7	76.896	F
C - A12 South	1614	404	633	2032	0.794	1737	1434	34.8	4.1	17.228	C
D - Anson Rd East	751	188	1282	1130	0.665	785	857	10.4	2.1	11.419	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1460	365	287	2689	0.543	1463	1555	2.0	1.2	2.944	A
B - Eagle Way West	180	45	1658	586	0.307	185	219	1.7	0.4	9.065	A
C - A12 South	1352	338	515	2108	0.641	1361	1183	4.1	1.8	4.876	A
D - Anson Rd East	629	157	1065	1248	0.504	633	686	2.1	1.0	5.898	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.55	1.04	1.33	1.33			N/A	N/A
B - Eagle Way West	0.43	0.03	0.33	1.10	1.30			N/A	N/A
C - A12 South	1.75	0.20	1.46	2.98	3.83			N/A	N/A
D - Anson Rd East	1.00	0.52	1.02	1.24	1.24			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.88	0.04	0.40	5.03	9.07			N/A	N/A
B - Eagle Way West	0.95	0.04	0.40	2.29	3.75			N/A	N/A
C - A12 South	3.58	0.05	0.46	10.06	17.62			N/A	N/A
D - Anson Rd East	1.89	0.05	0.46	5.05	8.30			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.16	0.03	0.29	4.16	13.81			N/A	N/A
B - Eagle Way West	9.38	0.83	6.62	19.75	25.15			N/A	N/A
C - A12 South	23.18	0.63	13.95	56.04	75.04			N/A	N/A
D - Anson Rd East	8.72	0.07	1.59	25.01	39.05			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.26	0.03	0.27	4.26	4.26			N/A	N/A
B - Eagle Way West	18.86	3.04	15.46	35.82	43.66			N/A	N/A
C - A12 South	34.85	0.73	20.31	86.17	116.47			N/A	N/A
D - Anson Rd East	10.45	0.05	0.68	30.19	54.16			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.07	1.09	4.78	6.84			N/A	N/A
B - Eagle Way West	1.66	0.04	0.38	4.35	8.11			N/A	N/A
C - A12 South	4.09	0.04	0.42	11.23	21.21			N/A	N/A
D - Anson Rd East	2.05	0.04	0.38	5.40	10.30			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.04	0.40	3.01	5.12			N/A	N/A
B - Eagle Way West	0.45	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	1.81	0.03	0.29	1.81	7.65			N/A	N/A
D - Anson Rd East	1.03	0.03	0.29	1.44	4.58			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	19.64	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1832	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1771	100.000
D - Anson Rd East		ONE HOUR	✓	857	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	96	1252	484
	B - Eagle Way West	101	0	30	37
	C - A12 South	1450	43	0	278
	D - Anson Rd East	470	81	306	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	6	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.30	2.9	6.7	A	1681	2522
B - Eagle Way West	0.74	51.34	2.5	12.5	F	155	232
C - A12 South	0.94	24.85	12.6	69.5	C	1625	2438
D - Anson Rd East	0.91	34.11	8.4	45.8	D	787	1180

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1380	345	260	2768	0.498	1376	1513	0.0	1.0	2.577	A
B - Eagle Way West	127	32	1647	629	0.202	126	165	0.0	0.3	7.147	A
C - A12 South	1334	333	485	2226	0.599	1328	1191	0.0	1.5	3.981	A
D - Anson Rd East	645	161	1035	1294	0.499	641	601	0.0	1.0	5.485	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1647	412	311	2738	0.602	1645	1809	1.0	1.5	3.290	A
B - Eagle Way West	152	38	1970	469	0.323	151	197	0.3	0.5	11.268	B
C - A12 South	1592	398	580	2163	0.736	1587	1425	1.5	2.7	6.205	A
D - Anson Rd East	771	193	1238	1186	0.650	767	719	1.0	1.8	8.530	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2018	504	375	2699	0.747	2012	2182	1.5	2.9	5.194	A
B - Eagle Way West	186	46	2377	268	0.693	180	239	0.5	2.0	38.463	E
C - A12 South	1950	488	698	2084	0.936	1918	1736	2.7	10.9	18.873	C
D - Anson Rd East	944	236	1512	1040	0.908	922	874	1.8	7.3	26.632	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2018	504	380	2696	0.748	2017	2215	2.9	2.9	5.301	A
B - Eagle Way West	186	46	2412	251	0.740	184	242	2.0	2.5	51.339	F
C - A12 South	1950	488	710	2076	0.940	1943	1747	10.9	12.6	24.849	C
D - Anson Rd East	944	236	1517	1037	0.910	940	881	7.3	8.4	34.112	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1647	412	321	2731	0.603	1653	1866	2.9	1.5	3.357	A
B - Eagle Way West	152	38	2029	440	0.344	159	202	2.5	0.5	13.152	B
C - A12 South	1592	398	599	2150	0.741	1631	1442	12.6	2.9	7.443	A
D - Anson Rd East	771	193	1245	1182	0.652	796	730	8.4	1.9	9.923	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1380	345	263	2767	0.499	1382	1528	1.5	1.0	2.605	A
B - Eagle Way West	127	32	1663	621	0.204	128	166	0.5	0.3	7.319	A
C - A12 South	1334	333	490	2222	0.600	1339	1199	2.9	1.5	4.103	A
D - Anson Rd East	645	161	1040	1291	0.500	649	605	1.9	1.0	5.636	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.48	0.51	1.36	1.98	2.54			N/A	N/A
D - Anson Rd East	0.98	0.54	1.01	1.43	1.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.04	0.42	3.92	6.66			N/A	N/A
B - Eagle Way West	0.47	0.04	0.41	1.24	1.37			N/A	N/A
C - A12 South	2.72	0.04	0.42	7.50	13.59			N/A	N/A
D - Anson Rd East	1.81	0.05	0.46	4.82	7.85			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.89	0.03	0.27	2.89	2.95			N/A	N/A
B - Eagle Way West	1.97	0.03	0.33	4.15	10.43			N/A	N/A
C - A12 South	10.87	0.06	1.06	31.74	54.86			N/A	N/A
D - Anson Rd East	7.34	0.06	0.92	21.29	36.04			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.94	0.03	0.26	2.94	2.94			N/A	N/A
B - Eagle Way West	2.47	0.04	0.39	6.60	12.52			N/A	N/A
C - A12 South	12.64	0.04	0.42	32.18	69.51			N/A	N/A
D - Anson Rd East	8.37	0.04	0.41	21.59	45.76			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.11	1.21	2.89	3.82			N/A	N/A
B - Eagle Way West	0.54	0.04	0.39	1.43	1.50			N/A	N/A
C - A12 South	2.94	0.04	0.43	8.16	14.53			N/A	N/A
D - Anson Rd East	1.93	0.04	0.39	5.12	9.49			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.05	0.57	2.09	3.03			N/A	N/A
B - Eagle Way West	0.26	0.03	0.29	0.93	1.40			N/A	N/A
C - A12 South	1.52	0.03	0.31	2.38	7.63			N/A	N/A
D - Anson Rd East	1.01	0.03	0.30	1.31	4.82			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1053	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	706	100.000
D - Anson Rd East		ONE HOUR	✓	194	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	774	274
	B - Eagle Way West	33	0	19	10
	C - A12 South	550	1	0	155
	D - Anson Rd East	109	0	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	8	0	0	8
	D - Anson Rd East	7	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.20	0.7	2.5	A	966	1449
B - Eagle Way West	0.07	4.11	0.1	0.5	A	57	85
C - A12 South	0.33	2.29	0.5	2.1	A	647	971
D - Anson Rd East	0.16	3.27	0.2	0.5	A	178	267

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	793	198	138	2833	0.280	791	519	0.0	0.4	1.763	A
B - Eagle Way West	46	12	611	1085	0.043	46	5	0.0	0.0	3.464	A
C - A12 South	531	133	86	2378	0.223	530	660	0.0	0.3	1.947	A
D - Anson Rd East	146	36	600	1456	0.100	146	329	0.0	0.1	2.747	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	946	237	165	2816	0.336	946	621	0.4	0.5	1.925	A
B - Eagle Way West	56	14	731	1025	0.054	55	5	0.0	0.1	3.710	A
C - A12 South	634	159	102	2367	0.268	634	789	0.3	0.4	2.077	A
D - Anson Rd East	174	44	717	1396	0.125	174	394	0.1	0.1	2.946	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1159	290	202	2793	0.415	1158	761	0.5	0.7	2.201	A
B - Eagle Way West	68	17	895	943	0.072	68	7	0.1	0.1	4.112	A
C - A12 South	777	194	125	2351	0.330	776	966	0.4	0.5	2.286	A
D - Anson Rd East	214	53	878	1314	0.163	213	482	0.1	0.2	3.270	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1159	290	202	2793	0.415	1159	761	0.7	0.7	2.203	A
B - Eagle Way West	68	17	896	943	0.072	68	7	0.1	0.1	4.113	A
C - A12 South	777	194	125	2351	0.330	777	967	0.5	0.5	2.286	A
D - Anson Rd East	214	53	879	1314	0.163	214	482	0.2	0.2	3.271	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	946	237	165	2816	0.336	947	622	0.7	0.5	1.928	A
B - Eagle Way West	56	14	732	1025	0.054	56	5	0.1	0.1	3.716	A
C - A12 South	634	159	103	2367	0.268	635	790	0.5	0.4	2.078	A
D - Anson Rd East	174	44	718	1395	0.125	175	394	0.2	0.1	2.948	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	793	198	138	2833	0.280	793	521	0.5	0.4	1.766	A
B - Eagle Way West	46	12	613	1084	0.043	47	5	0.1	0.0	3.467	A
C - A12 South	531	133	86	2378	0.223	531	662	0.4	0.3	1.951	A
D - Anson Rd East	146	36	601	1455	0.100	146	330	0.1	0.1	2.750	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.50	0.05	0.50	1.30	1.40			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.36	0.00	0.00	0.36	0.36			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.71	0.03	0.25	0.71	0.71			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Anson Rd East	0.19	0.03	0.25	0.46	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.71	0.03	0.28	0.71	2.53			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.49	0.03	0.31	1.43	2.12			N/A	N/A
D - Anson Rd East	0.19	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.51	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	9.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2036	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1693	100.000
D - Anson Rd East		ONE HOUR	✓	398	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	63	1382	589
	B - Eagle Way West	98	0	59	21
	C - A12 South	1382	7	0	304
	D - Anson Rd East	266	2	129	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	5	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	7	0	0	3
	D - Anson Rd East	4	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	8.17	5.0	19.7	A	1868	2802
B - Eagle Way West	0.57	24.33	1.3	6.6	C	163	245
C - A12 South	0.83	9.58	4.8	21.1	A	1554	2331
D - Anson Rd East	0.47	7.37	0.9	3.5	A	365	548

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1533	383	288	2763	0.555	1528	1310	0.0	1.2	2.901	A
B - Eagle Way West	134	33	1465	685	0.196	133	55	0.0	0.2	6.516	A
C - A12 South	1275	319	250	2316	0.550	1270	1178	0.0	1.2	3.425	A
D - Anson Rd East	300	75	1130	1193	0.251	298	686	0.0	0.3	4.019	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1830	458	345	2728	0.671	1827	1567	1.2	2.0	3.980	A
B - Eagle Way West	160	40	1753	541	0.296	159	65	0.2	0.4	9.409	A
C - A12 South	1522	381	299	2284	0.667	1519	1409	1.2	2.0	4.691	A
D - Anson Rd East	358	89	1351	1081	0.331	357	821	0.3	0.5	4.969	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2241	560	420	2682	0.836	2230	1912	2.0	4.8	7.776	A
B - Eagle Way West	196	49	2139	349	0.562	193	80	0.4	1.2	22.640	C
C - A12 South	1864	466	365	2239	0.833	1854	1720	2.0	4.7	9.087	A
D - Anson Rd East	438	110	1649	931	0.471	436	1001	0.5	0.9	7.261	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2241	560	423	2680	0.836	2241	1923	4.8	5.0	8.169	A
B - Eagle Way West	196	49	2150	343	0.571	196	80	1.2	1.3	24.327	C
C - A12 South	1864	466	366	2238	0.833	1864	1729	4.7	4.8	9.577	A
D - Anson Rd East	438	110	1657	927	0.473	438	1007	0.9	0.9	7.368	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1830	458	349	2726	0.671	1842	1583	5.0	2.1	4.126	A
B - Eagle Way West	160	40	1768	533	0.300	163	66	1.3	0.4	9.815	A
C - A12 South	1522	381	301	2282	0.667	1534	1421	4.8	2.0	4.879	A
D - Anson Rd East	358	89	1363	1075	0.333	359	828	0.9	0.5	5.041	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1533	383	290	2762	0.555	1536	1319	2.1	1.3	2.945	A
B - Eagle Way West	134	33	1474	680	0.197	135	55	0.4	0.2	6.613	A
C - A12 South	1275	319	251	2315	0.551	1278	1185	2.0	1.2	3.482	A
D - Anson Rd East	300	75	1136	1189	0.252	300	690	0.5	0.3	4.051	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.56	1.11	1.44	1.72			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.21	0.56	1.07	1.22	1.61			N/A	N/A
D - Anson Rd East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.04	0.39	5.37	9.95			N/A	N/A
B - Eagle Way West	0.41	0.03	0.29	0.81	1.15			N/A	N/A
C - A12 South	1.97	0.04	0.42	5.32	9.30			N/A	N/A
D - Anson Rd East	0.49	0.00	0.00	0.49	0.49			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.83	0.03	0.30	4.83	19.73			N/A	N/A
B - Eagle Way West	1.21	0.03	0.28	1.21	3.41			N/A	N/A
C - A12 South	4.70	0.03	0.30	4.70	21.07			N/A	N/A
D - Anson Rd East	0.88	0.03	0.26	0.88	0.88			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.97	0.03	0.27	4.97	5.98			N/A	N/A
B - Eagle Way West	1.28	0.03	0.32	2.50	6.60			N/A	N/A
C - A12 South	4.84	0.03	0.28	4.84	8.37			N/A	N/A
D - Anson Rd East	0.89	0.03	0.28	0.99	3.49			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.07	0.06	0.90	5.28	7.86			N/A	N/A
B - Eagle Way West	0.43	0.04	0.37	1.20	1.36			N/A	N/A
C - A12 South	2.03	0.06	0.77	5.27	7.99			N/A	N/A
D - Anson Rd East	0.50	0.50	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.04	0.38	3.21	5.80			N/A	N/A
B - Eagle Way West	0.25	0.03	0.29	0.74	1.13			N/A	N/A
C - A12 South	1.24	0.04	0.37	3.13	5.83			N/A	N/A
D - Anson Rd East	0.34	0.03	0.26	0.46	0.49			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	57.44	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2316	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1944	100.000
D - Anson Rd East		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	182	1422	712
	B - Eagle Way West	155	0	35	47
	C - A12 South	1608	24	0	312
	D - Anson Rd East	303	23	136	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	8	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	8	5	0	3
	D - Anson Rd East	7	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	28.04	18.7	98.4	D	2125	3187
B - Eagle Way West	1.20	295.57	23.2	48.1	F	218	327
C - A12 South	1.02	74.82	47.6	132.3	F	1784	2675
D - Anson Rd East	0.61	10.94	1.5	4.5	B	425	638

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1743	436	295	2714	0.642	1736	1547	0.0	1.8	3.657	A
B - Eagle Way West	179	45	1665	577	0.310	177	172	0.0	0.4	8.966	A
C - A12 South	1463	366	381	2208	0.663	1456	1194	0.0	1.9	4.736	A
D - Anson Rd East	349	87	1229	1127	0.310	347	803	0.0	0.4	4.607	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	2082	520	353	2679	0.777	2075	1848	1.8	3.4	5.900	A
B - Eagle Way West	213	53	1990	413	0.516	211	205	0.4	1.0	17.600	C
C - A12 South	1747	437	456	2158	0.810	1739	1428	1.9	4.1	8.427	A
D - Anson Rd East	416	104	1468	1003	0.415	415	960	0.4	0.7	6.113	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2550	637	404	2648	0.963	2501	2159	3.4	15.6	19.915	C
B - Eagle Way West	261	65	2344	235	1.111	219	247	1.0	11.5	134.321	F
C - A12 South	2140	535	554	2092	1.023	2036	1717	4.1	30.0	39.011	E
D - Anson Rd East	510	128	1764	851	0.599	507	1140	0.7	1.5	10.374	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2550	637	407	2646	0.964	2537	2186	15.6	18.7	28.041	D
B - Eagle Way West	261	65	2379	218	1.201	215	250	11.5	23.2	295.566	F
C - A12 South	2140	535	559	2088	1.025	2070	1740	30.0	47.6	74.822	F
D - Anson Rd East	510	128	1789	838	0.608	510	1156	1.5	1.5	10.938	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2082	520	411	2643	0.788	2141	2055	18.7	3.8	7.989	A
B - Eagle Way West	213	53	2171	322	0.662	296	213	23.2	2.6	150.840	F
C - A12 South	1747	437	464	2152	0.812	1919	1482	47.6	4.7	25.771	D
D - Anson Rd East	416	104	1527	974	0.428	420	1026	1.5	0.8	6.531	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1743	436	302	2710	0.643	1751	1570	3.8	1.8	3.786	A
B - Eagle Way West	179	45	1685	567	0.315	187	173	2.6	0.5	9.688	A
C - A12 South	1463	366	384	2206	0.663	1474	1206	4.7	2.0	4.987	A
D - Anson Rd East	349	87	1241	1121	0.311	350	813	0.8	0.5	4.680	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.29	1.04	2.89	3.65			N/A	N/A
B - Eagle Way West	0.44	0.04	0.38	1.20	1.35			N/A	N/A
C - A12 South	1.93	0.17	1.03	3.61	4.62			N/A	N/A
D - Anson Rd East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.39	0.04	0.42	9.28	17.33			N/A	N/A
B - Eagle Way West	1.03	0.04	0.39	2.57	4.34			N/A	N/A
C - A12 South	4.06	0.05	0.48	11.52	19.89			N/A	N/A
D - Anson Rd East	0.70	0.08	0.77	1.40	1.47			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	15.61	0.08	2.84	45.56	71.84			N/A	N/A
B - Eagle Way West	11.54	1.37	9.09	22.27	27.40			N/A	N/A
C - A12 South	30.01	1.76	21.63	65.86	84.42			N/A	N/A
D - Anson Rd East	1.45	0.03	0.27	1.45	1.68			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	18.74	0.06	1.11	54.45	98.38			N/A	N/A
B - Eagle Way West	23.16	5.80	20.15	40.59	48.11			N/A	N/A
C - A12 South	47.56	3.39	35.00	103.66	132.27			N/A	N/A
D - Anson Rd East	1.52	0.03	0.28	1.52	4.52			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.84	0.05	0.46	10.84	18.92			N/A	N/A
B - Eagle Way West	2.56	0.05	0.50	7.02	11.39			N/A	N/A
C - A12 South	4.66	0.04	0.42	12.81	24.37			N/A	N/A
D - Anson Rd East	0.76	0.09	0.82	1.03	1.03			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.03	0.31	2.63	9.02			N/A	N/A
B - Eagle Way West	0.47	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	2.00	0.03	0.29	2.00	8.15			N/A	N/A
D - Anson Rd East	0.46	0.04	0.38	1.25	1.41			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	105.75	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2310	100.000
B - Eagle Way West		ONE HOUR	✓	248	100.000
C - A12 South		ONE HOUR	✓	2039	100.000
D - Anson Rd East		ONE HOUR	✓	816	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1444	691
	B - Eagle Way West	146	0	29	73
	C - A12 South	1678	46	1	314
	D - Anson Rd East	436	79	301	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	6	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	5	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	21.19	14.1	77.9	C	2120	3180
B - Eagle Way West	1.25	451.13	31.1	55.0	F	228	342
C - A12 South	1.11	163.52	116.0	197.7	F	1871	2807
D - Anson Rd East	1.02	96.40	25.0	76.5	F	749	1123

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1739	435	311	2750	0.632	1733	1690	0.0	1.7	3.515	A
B - Eagle Way West	187	47	1817	530	0.353	185	225	0.0	0.5	10.372	B
C - A12 South	1535	384	516	2178	0.705	1526	1330	0.0	2.3	5.444	A
D - Anson Rd East	614	154	1237	1177	0.522	610	807	0.0	1.1	6.305	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	2077	519	371	2714	0.765	2071	2015	1.7	3.2	5.547	A
B - Eagle Way West	223	56	2167	356	0.626	219	269	0.5	1.6	25.496	D
C - A12 South	1833	458	617	2111	0.868	1818	1590	2.3	6.0	11.755	B
D - Anson Rd East	734	183	1478	1050	0.698	729	964	1.1	2.2	11.046	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2544	636	401	2695	0.944	2507	2242	3.2	12.5	16.562	C
B - Eagle Way West	273	68	2426	228	1.198	218	318	1.6	15.5	172.436	F
C - A12 South	2245	561	723	2040	1.100	2021	1905	6.0	62.1	69.013	F
D - Anson Rd East	898	225	1783	890	1.009	844	1125	2.2	15.8	52.086	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2544	636	403	2694	0.944	2537	2258	12.5	14.1	21.189	C
B - Eagle Way West	273	68	2444	219	1.246	218	322	15.5	29.3	399.658	F
C - A12 South	2245	561	736	2032	1.105	2029	1930	62.1	116.0	163.523	F
D - Anson Rd East	898	225	1805	879	1.022	862	1135	15.8	25.0	96.398	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2077	519	405	2693	0.771	2119	2255	14.1	3.5	6.724	A
B - Eagle Way West	223	56	2444	219	1.020	216	287	29.3	31.1	451.131	F
C - A12 South	1833	458	680	2069	0.886	2051	1655	116.0	61.5	156.995	F
D - Anson Rd East	734	183	1512	1033	0.710	823	1013	25.0	2.6	24.430	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1739	435	400	2696	0.645	1746	1970	3.5	1.8	3.811	A
B - Eagle Way West	187	47	2062	408	0.458	308	233	31.1	0.9	86.169	F
C - A12 South	1535	384	524	2173	0.706	1771	1357	61.5	2.5	16.543	C
D - Anson Rd East	614	154	1261	1164	0.528	620	885	2.6	1.1	6.685	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.70	0.38	1.01	2.68	3.21			N/A	N/A
B - Eagle Way West	0.54	0.04	0.42	1.14	1.14			N/A	N/A
C - A12 South	2.34	0.10	1.46	5.25	7.16			N/A	N/A
D - Anson Rd East	1.08	0.19	1.05	1.56	1.84			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.18	0.04	0.41	8.64	16.24			N/A	N/A
B - Eagle Way West	1.56	0.04	0.44	4.07	6.69			N/A	N/A
C - A12 South	6.01	0.06	1.30	17.21	27.40			N/A	N/A
D - Anson Rd East	2.23	0.05	0.46	6.09	10.17			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.46	0.06	1.07	36.43	63.74			N/A	N/A
B - Eagle Way West	15.46	3.67	13.28	26.95	31.99			N/A	N/A
C - A12 South	62.09	22.15	56.98	101.25	116.91			N/A	N/A
D - Anson Rd East	15.76	0.67	10.09	36.53	48.11			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.07	0.04	0.40	34.39	77.93			N/A	N/A
B - Eagle Way West	29.34	10.20	26.67	47.58	54.98			N/A	N/A
C - A12 South	116.03	>199	>199	>199	>199			N/A	N/A
D - Anson Rd East	24.97	1.06	16.28	58.15	76.49			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.47	0.05	0.46	9.75	16.97			N/A	N/A
B - Eagle Way West	31.13	18.94	29.97	41.01	44.58			N/A	N/A
C - A12 South	61.52	33.96	59.16	85.73	94.47			N/A	N/A
D - Anson Rd East	2.60	0.04	0.37	6.59	13.73			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.03	0.32	3.44	9.60			N/A	N/A
B - Eagle Way West	0.90	0.03	0.27	0.90	1.14			N/A	N/A
C - A12 South	2.48	0.03	0.28	2.48	7.54			N/A	N/A
D - Anson Rd East	1.13	0.03	0.28	1.13	3.53			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	273.84	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2094	100.000
B - Eagle Way West		ONE HOUR	✓	175	100.000
C - A12 South		ONE HOUR	✓	1970	100.000
D - Anson Rd East		ONE HOUR	✓	1301	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	100	1491	503
	B - Eagle Way West	105	0	32	39
	C - A12 South	1585	45	0	340
	D - Anson Rd East	868	84	348	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	2	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	2	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	8.14	5.1	20.3	A	1922	2882
B - Eagle Way West	1.17	401.13	19.0	38.3	F	161	241
C - A12 South	1.06	111.13	74.3	157.6	F	1808	2711
D - Anson Rd East	1.53	939.31	294.9	294.9	F	1194	1791

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1576	394	308	2815	0.560	1571	1906	0.0	1.3	2.884	A
B - Eagle Way West	132	33	2083	428	0.308	130	171	0.0	0.4	12.006	B
C - A12 South	1483	371	781	2062	0.719	1473	1401	0.0	2.5	6.020	A
D - Anson Rd East	979	245	1217	1223	0.801	965	662	0.0	3.7	13.235	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1882	471	365	2779	0.677	1879	2218	1.3	2.1	3.987	A
B - Eagle Way West	157	39	2430	260	0.607	154	199	0.4	1.4	32.858	D
C - A12 South	1771	443	875	1998	0.886	1753	1653	2.5	6.9	13.810	B
D - Anson Rd East	1170	292	1455	1101	1.062	1073	789	3.7	28.0	66.706	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2306	576	415	2748	0.839	2294	2348	2.1	4.9	7.732	A
B - Eagle Way West	193	48	2601	175	1.102	161	216	1.4	9.3	156.454	F
C - A12 South	2169	542	796	2052	1.057	2022	1913	6.9	43.7	54.064	F
D - Anson Rd East	1432	358	1772	938	1.527	937	937	28.0	151.7	353.804	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2306	576	419	2746	0.840	2305	2365	4.9	5.1	8.136	A
B - Eagle Way West	193	48	2623	164	1.173	161	217	9.3	17.2	337.697	F
C - A12 South	2169	542	793	2053	1.056	2046	1920	43.7	74.3	111.129	F
D - Anson Rd East	1432	358	1780	934	1.534	934	944	151.7	276.4	769.825	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1882	471	400	2758	0.683	1894	2397	5.1	2.2	4.224	A
B - Eagle Way West	157	39	2647	153	1.026	150	206	17.2	19.0	401.125	F
C - A12 South	1771	443	892	1987	0.891	1960	1669	74.3	27.0	96.171	F
D - Anson Rd East	1170	292	1466	1095	1.068	1095	828	276.4	294.9	939.313	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1576	394	356	2785	0.566	1580	2198	2.2	1.3	2.997	A
B - Eagle Way West	132	33	2349	300	0.440	205	189	19.0	0.8	68.023	F
C - A12 South	1483	371	961	1940	0.764	1577	1486	27.0	3.4	12.530	B
D - Anson Rd East	979	245	1237	1213	0.807	1209	699	294.9	237.5	792.983	F

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.56	1.14	1.54	1.77			N/A	N/A
B - Eagle Way West	0.44	0.04	0.37	1.21	1.36			N/A	N/A
C - A12 South	2.50	0.14	1.28	5.30	6.99			N/A	N/A
D - Anson Rd East	3.73	0.03	0.28	3.73	10.35			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.07	0.04	0.39	5.53	10.32			N/A	N/A
B - Eagle Way West	1.41	0.06	0.70	3.36	4.92			N/A	N/A
C - A12 South	6.86	0.09	1.89	18.93	28.20			N/A	N/A
D - Anson Rd East	27.97	0.76	16.90	67.79	90.79			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.94	0.03	0.30	4.94	20.33			N/A	N/A
B - Eagle Way West	9.26	1.33	7.06	18.14	22.51			N/A	N/A
C - A12 South	43.69	8.70	37.09	81.72	98.69			N/A	N/A
D - Anson Rd East	151.70	>199	>199	>199	>199			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.09	0.03	0.27	5.09	6.20			N/A	N/A
B - Eagle Way West	17.17	3.16	14.31	31.72	38.32			N/A	N/A
C - A12 South	74.33	18.98	65.42	132.72	157.64			N/A	N/A
D - Anson Rd East	276.37	>199	>199	>199	>199			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.06	0.96	5.58	8.28			N/A	N/A
B - Eagle Way West	19.01	9.78	17.88	26.54	29.40			N/A	N/A
C - A12 South	27.00	3.75	21.78	53.17	65.47			N/A	N/A
D - Anson Rd East	294.94	>199	>199	>199	>199			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.04	0.38	3.40	6.06			N/A	N/A
B - Eagle Way West	0.84	0.03	0.28	0.84	2.44			N/A	N/A
C - A12 South	3.38	0.03	0.32	5.10	17.08			N/A	N/A
D - Anson Rd East	237.49	>199	>199	>199	>199			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	974	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	706	100.000
D - Anson Rd East		ONE HOUR	✓	194	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	775	194
	B - Eagle Way West	33	0	19	10
	C - A12 South	550	1	0	155
	D - Anson Rd East	109	0	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	8	0	0	8
	D - Anson Rd East	7	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.11	0.6	2.8	A	894	1341
B - Eagle Way West	0.07	4.11	0.1	0.5	A	57	85
C - A12 South	0.33	2.29	0.5	2.1	A	648	972
D - Anson Rd East	0.16	3.27	0.2	0.5	A	178	267

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	733	183	138	2823	0.260	732	520	0.0	0.4	1.722	A
B - Eagle Way West	46	12	611	1085	0.043	46	5	0.0	0.0	3.465	A
C - A12 South	532	133	86	2378	0.224	530	660	0.0	0.3	1.947	A
D - Anson Rd East	146	36	600	1456	0.100	146	269	0.0	0.1	2.748	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	876	219	165	2806	0.312	875	622	0.4	0.5	1.864	A
B - Eagle Way West	56	14	731	1025	0.054	55	5	0.0	0.1	3.711	A
C - A12 South	635	159	102	2367	0.268	634	790	0.3	0.4	2.078	A
D - Anson Rd East	174	44	718	1396	0.125	174	322	0.1	0.1	2.946	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1072	268	202	2782	0.385	1072	761	0.5	0.6	2.103	A
B - Eagle Way West	68	17	896	943	0.072	68	7	0.1	0.1	4.113	A
C - A12 South	777	194	125	2351	0.331	777	967	0.4	0.5	2.287	A
D - Anson Rd East	214	53	879	1314	0.163	213	395	0.1	0.2	3.271	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1072	268	202	2782	0.385	1072	762	0.6	0.6	2.105	A
B - Eagle Way West	68	17	896	943	0.072	68	7	0.1	0.1	4.115	A
C - A12 South	777	194	125	2351	0.331	777	968	0.5	0.5	2.287	A
D - Anson Rd East	214	53	880	1313	0.163	214	395	0.2	0.2	3.272	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	876	219	165	2805	0.312	876	623	0.6	0.5	1.868	A
B - Eagle Way West	56	14	732	1025	0.054	56	5	0.1	0.1	3.714	A
C - A12 South	635	159	103	2367	0.268	635	791	0.5	0.4	2.081	A
D - Anson Rd East	174	44	719	1395	0.125	175	323	0.2	0.1	2.951	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	733	183	138	2822	0.260	734	521	0.5	0.4	1.725	A
B - Eagle Way West	46	12	613	1084	0.043	47	5	0.1	0.0	3.471	A
C - A12 South	532	133	86	2378	0.224	532	662	0.4	0.3	1.949	A
D - Anson Rd East	146	36	602	1455	0.100	146	270	0.1	0.1	2.750	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.62	0.03	0.25	0.62	0.62			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Anson Rd East	0.19	0.03	0.25	0.46	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.03	0.29	1.17	2.78			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.49	0.03	0.31	1.43	2.13			N/A	N/A
D - Anson Rd East	0.19	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	7.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1806	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1690	100.000
D - Anson Rd East		ONE HOUR	✓	306	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	63	1382	359
	B - Eagle Way West	98	0	59	21
	C - A12 South	1389	7	0	294
	D - Anson Rd East	175	2	129	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	5	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	7	0	0	3
	D - Anson Rd East	7	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	5.25	2.9	6.4	A	1657	2485
B - Eagle Way West	0.50	18.42	1.0	4.9	C	163	245
C - A12 South	0.81	8.17	4.1	14.9	A	1551	2327
D - Anson Rd East	0.37	6.26	0.6	2.7	A	281	421

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1359	340	280	2754	0.494	1355	1247	0.0	1.0	2.567	A
B - Eagle Way West	134	33	1394	717	0.187	133	55	0.0	0.2	6.154	A
C - A12 South	1273	318	181	2358	0.540	1268	1179	0.0	1.2	3.290	A
D - Anson Rd East	230	58	1130	1173	0.196	230	506	0.0	0.2	3.810	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1623	406	335	2720	0.597	1621	1492	1.0	1.5	3.271	A
B - Eagle Way West	160	40	1668	580	0.276	159	65	0.2	0.4	8.543	A
C - A12 South	1520	380	217	2334	0.651	1517	1410	1.2	1.8	4.392	A
D - Anson Rd East	275	69	1352	1063	0.259	275	605	0.2	0.3	4.563	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1988	497	409	2675	0.743	1983	1822	1.5	2.8	5.160	A
B - Eagle Way West	196	49	2037	395	0.496	194	80	0.4	0.9	17.647	C
C - A12 South	1861	465	265	2301	0.809	1852	1724	1.8	4.0	7.871	A
D - Anson Rd East	337	84	1653	914	0.369	336	739	0.3	0.6	6.218	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1988	497	411	2673	0.744	1988	1831	2.8	2.9	5.252	A
B - Eagle Way West	196	49	2046	391	0.501	196	80	0.9	1.0	18.418	C
C - A12 South	1861	465	266	2300	0.809	1861	1729	4.0	4.1	8.169	A
D - Anson Rd East	337	84	1658	912	0.370	337	742	0.6	0.6	6.264	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1623	406	339	2718	0.597	1629	1504	2.9	1.5	3.323	A
B - Eagle Way West	160	40	1681	574	0.279	162	66	1.0	0.4	8.795	A
C - A12 South	1520	380	218	2333	0.651	1529	1417	4.1	1.9	4.523	A
D - Anson Rd East	275	69	1359	1060	0.260	276	609	0.6	0.4	4.599	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1359	340	282	2752	0.494	1361	1255	1.5	1.0	2.593	A
B - Eagle Way West	134	33	1403	713	0.188	135	55	0.4	0.2	6.231	A
C - A12 South	1273	318	182	2357	0.540	1275	1184	1.9	1.2	3.336	A
D - Anson Rd East	230	58	1135	1171	0.197	231	508	0.4	0.2	3.830	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.16	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.47	0.04	0.42	3.84	6.45			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.84	0.04	0.42	4.94	8.56			N/A	N/A
D - Anson Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.83	0.03	0.27	2.83	2.83			N/A	N/A
B - Eagle Way West	0.95	0.03	0.27	0.95	1.15			N/A	N/A
C - A12 South	4.05	0.03	0.29	4.05	14.86			N/A	N/A
D - Anson Rd East	0.58	0.03	0.25	0.58	0.58			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.87	0.03	0.26	2.87	2.87			N/A	N/A
B - Eagle Way West	0.98	0.03	0.31	1.81	4.92			N/A	N/A
C - A12 South	4.14	0.03	0.27	4.14	4.14			N/A	N/A
D - Anson Rd East	0.58	0.03	0.30	1.48	2.73			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.11	1.20	2.80	3.68			N/A	N/A
B - Eagle Way West	0.39	0.03	0.31	1.01	1.25			N/A	N/A
C - A12 South	1.89	0.06	0.94	4.67	6.81			N/A	N/A
D - Anson Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.05	0.59	1.99	2.92			N/A	N/A
B - Eagle Way West	0.23	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	1.18	0.04	0.40	2.98	5.15			N/A	N/A
D - Anson Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	54.61	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2275	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1939	100.000
D - Anson Rd East		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	182	1444	650
	B - Eagle Way West	155	0	35	47
	C - A12 South	1613	24	0	302
	D - Anson Rd East	304	23	135	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	8	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	8	5	0	3
	D - Anson Rd East	7	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	21.97	14.4	79.2	C	2088	3132
B - Eagle Way West	1.20	293.83	23.0	48.0	F	218	327
C - A12 South	1.02	74.29	47.0	131.5	F	1779	2668
D - Anson Rd East	0.62	11.39	1.6	4.8	B	424	637

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1713	428	288	2714	0.631	1706	1551	0.0	1.7	3.549	A
B - Eagle Way West	179	45	1662	577	0.310	177	172	0.0	0.4	8.955	A
C - A12 South	1459	365	382	2204	0.662	1452	1210	0.0	1.9	4.736	A
D - Anson Rd East	348	87	1245	1118	0.311	346	749	0.0	0.4	4.654	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	2045	511	344	2680	0.763	2039	1853	1.7	3.1	5.569	A
B - Eagle Way West	213	53	1986	414	0.515	211	205	0.4	1.0	17.552	C
C - A12 South	1743	436	457	2154	0.809	1734	1446	1.9	4.0	8.414	A
D - Anson Rd East	416	104	1488	993	0.419	415	895	0.4	0.7	6.211	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2505	626	393	2651	0.945	2467	2166	3.1	12.6	16.954	C
B - Eagle Way West	261	65	2340	236	1.109	219	247	1.0	11.5	133.530	F
C - A12 South	2134	534	556	2087	1.023	2032	1745	4.0	29.8	38.852	E
D - Anson Rd East	509	127	1795	835	0.610	506	1065	0.7	1.5	10.824	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2505	626	397	2648	0.946	2498	2193	12.6	14.4	21.975	C
B - Eagle Way West	261	65	2375	218	1.200	215	251	11.5	23.0	293.828	F
C - A12 South	2134	534	560	2084	1.024	2065	1765	29.8	47.0	74.292	F
D - Anson Rd East	509	127	1817	824	0.618	509	1078	1.5	1.6	11.394	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2045	511	401	2646	0.773	2089	2059	14.4	3.5	6.947	A
B - Eagle Way West	213	53	2165	324	0.659	296	211	23.0	2.5	147.674	F
C - A12 South	1743	436	464	2149	0.811	1912	1491	47.0	4.6	25.233	D
D - Anson Rd East	416	104	1536	969	0.429	419	953	1.6	0.8	6.583	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1713	428	294	2710	0.632	1720	1575	3.5	1.7	3.662	A
B - Eagle Way West	179	45	1682	567	0.315	187	173	2.5	0.5	9.659	A
C - A12 South	1459	365	385	2202	0.663	1470	1221	4.6	2.0	4.985	A
D - Anson Rd East	348	87	1257	1112	0.313	349	758	0.8	0.5	4.726	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.69	0.38	1.00	2.66	3.15			N/A	N/A
B - Eagle Way West	0.44	0.04	0.37	1.20	1.35			N/A	N/A
C - A12 South	1.93	0.17	1.03	3.60	4.60			N/A	N/A
D - Anson Rd East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.14	0.04	0.41	8.53	16.04			N/A	N/A
B - Eagle Way West	1.02	0.04	0.39	2.56	4.32			N/A	N/A
C - A12 South	4.05	0.05	0.48	11.47	19.81			N/A	N/A
D - Anson Rd East	0.71	0.07	0.76	1.41	1.49			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.61	0.06	1.19	36.92	63.84			N/A	N/A
B - Eagle Way West	11.47	1.34	9.01	22.19	27.34			N/A	N/A
C - A12 South	29.76	1.69	21.35	65.54	84.11			N/A	N/A
D - Anson Rd East	1.51	0.03	0.27	1.51	2.22			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.37	0.04	0.41	36.06	79.24			N/A	N/A
B - Eagle Way West	23.04	5.72	20.02	40.47	48.00			N/A	N/A
C - A12 South	47.02	3.20	34.38	102.92	131.53			N/A	N/A
D - Anson Rd East	1.58	0.03	0.28	1.58	4.78			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.51	0.05	0.47	9.88	16.94			N/A	N/A
B - Eagle Way West	2.49	0.05	0.49	6.85	11.19			N/A	N/A
C - A12 South	4.62	0.04	0.42	12.70	24.22			N/A	N/A
D - Anson Rd East	0.76	0.08	0.80	1.25	1.25			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.03	0.31	2.89	8.87			N/A	N/A
B - Eagle Way West	0.47	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	2.00	0.03	0.29	2.00	8.14			N/A	N/A
D - Anson Rd East	0.46	0.04	0.38	1.27	1.43			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	101.54	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2201	100.000
B - Eagle Way West		ONE HOUR	✓	248	100.000
C - A12 South		ONE HOUR	✓	2035	100.000
D - Anson Rd East		ONE HOUR	✓	777	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1474	552
	B - Eagle Way West	146	0	29	73
	C - A12 South	1679	46	1	308
	D - Anson Rd East	436	79	262	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	6	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	5	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	13.11	8.4	43.9	B	2020	3030
B - Eagle Way West	1.25	449.10	31.1	55.1	F	228	342
C - A12 South	1.11	163.75	116.1	197.6	F	1867	2801
D - Anson Rd East	1.00	79.12	18.7	68.6	F	713	1070

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1657	414	307	2746	0.603	1651	1691	0.0	1.5	3.271	A
B - Eagle Way West	187	47	1814	531	0.352	185	225	0.0	0.5	10.329	B
C - A12 South	1532	383	516	2178	0.703	1523	1324	0.0	2.3	5.421	A
D - Anson Rd East	585	146	1259	1164	0.503	581	699	0.0	1.0	6.136	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1979	495	366	2710	0.730	1974	2016	1.5	2.7	4.860	A
B - Eagle Way West	223	56	2163	358	0.623	219	269	0.5	1.5	25.222	D
C - A12 South	1829	457	617	2110	0.867	1815	1583	2.3	5.9	11.639	B
D - Anson Rd East	699	175	1506	1035	0.675	695	834	1.0	2.0	10.448	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2423	606	396	2692	0.900	2402	2247	2.7	8.0	11.648	B
B - Eagle Way West	273	68	2426	228	1.198	218	320	1.5	15.4	172.288	F
C - A12 South	2240	560	729	2036	1.100	2016	1909	5.9	61.9	68.955	F
D - Anson Rd East	856	214	1826	867	0.986	812	972	2.0	13.0	46.513	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2423	606	397	2691	0.900	2421	2265	8.0	8.4	13.110	B
B - Eagle Way West	273	68	2445	219	1.249	217	323	15.4	29.5	400.844	F
C - A12 South	2240	560	744	2026	1.106	2024	1929	61.9	116.1	163.755	F
D - Anson Rd East	856	214	1841	860	0.995	833	978	13.0	18.7	79.121	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1979	495	402	2688	0.736	2001	2257	8.4	2.8	5.403	A
B - Eagle Way West	223	56	2442	219	1.017	217	284	29.5	31.1	449.103	F
C - A12 South	1829	457	666	2078	0.880	2060	1624	116.1	58.3	153.752	F
D - Anson Rd East	699	175	1526	1025	0.682	765	878	18.7	2.2	17.335	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1657	414	393	2694	0.615	1662	1961	2.8	1.6	3.507	A
B - Eagle Way West	187	47	2046	415	0.450	308	232	31.1	0.9	79.458	F
C - A12 South	1532	383	523	2173	0.705	1755	1349	58.3	2.5	15.036	C
D - Anson Rd East	585	146	1282	1152	0.508	590	773	2.2	1.0	6.452	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.51	0.55	1.40	1.94	2.41			N/A	N/A
B - Eagle Way West	0.53	0.04	0.42	1.10	1.10			N/A	N/A
C - A12 South	2.32	0.10	1.46	5.20	7.10			N/A	N/A
D - Anson Rd East	1.00	0.24	1.01	1.22	1.63			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.65	0.04	0.40	7.11	13.47			N/A	N/A
B - Eagle Way West	1.54	0.04	0.44	4.01	6.63			N/A	N/A
C - A12 South	5.93	0.06	1.25	17.00	27.17			N/A	N/A
D - Anson Rd East	2.01	0.05	0.45	5.44	9.04			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.98	0.04	0.37	18.02	43.92			N/A	N/A
B - Eagle Way West	15.45	3.66	13.27	26.94	31.98			N/A	N/A
C - A12 South	61.94	22.07	56.83	101.01	116.63			N/A	N/A
D - Anson Rd East	12.95	0.27	6.89	32.30	44.18			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.45	0.03	0.31	8.45	35.86			N/A	N/A
B - Eagle Way West	29.46	10.30	26.79	47.68	55.05			N/A	N/A
C - A12 South	116.11	>199	>199	>199	>199			N/A	N/A
D - Anson Rd East	18.72	0.23	8.85	48.95	68.59			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.85	0.05	0.50	7.89	12.92			N/A	N/A
B - Eagle Way West	31.09	19.04	29.96	40.87	44.39			N/A	N/A
C - A12 South	58.32	31.12	55.89	82.41	91.19			N/A	N/A
D - Anson Rd East	2.24	0.04	0.36	5.58	11.76			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.03	0.34	3.73	8.36			N/A	N/A
B - Eagle Way West	0.87	0.03	0.27	0.87	1.39			N/A	N/A
C - A12 South	2.46	0.03	0.28	2.46	7.40			N/A	N/A
D - Anson Rd East	1.05	0.03	0.28	1.05	3.61			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	251.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2067	100.000
B - Eagle Way West		ONE HOUR	✓	175	100.000
C - A12 South		ONE HOUR	✓	1965	100.000
D - Anson Rd East		ONE HOUR	✓	1283	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	100	1494	473
	B - Eagle Way West	105	0	32	39
	C - A12 South	1576	45	0	344
	D - Anson Rd East	850	84	348	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	2	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	2	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	7.69	4.8	17.5	A	1896	2845
B - Eagle Way West	1.16	379.06	17.9	37.6	F	161	241
C - A12 South	1.05	105.82	70.3	153.8	F	1803	2704
D - Anson Rd East	1.52	857.11	279.8	279.8	F	1177	1766

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1556	389	310	2812	0.553	1551	1887	0.0	1.2	2.844	A
B - Eagle Way West	132	33	2067	436	0.302	130	171	0.0	0.4	11.699	B
C - A12 South	1479	370	768	2070	0.714	1469	1403	0.0	2.4	5.900	A
D - Anson Rd East	966	242	1220	1222	0.790	952	641	0.0	3.5	12.738	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1858	464	369	2776	0.669	1855	2202	1.2	2.0	3.894	A
B - Eagle Way West	157	39	2417	266	0.593	154	199	0.4	1.3	31.240	D
C - A12 South	1766	442	867	2004	0.881	1749	1658	2.4	6.6	13.361	B
D - Anson Rd East	1154	288	1458	1099	1.049	1067	765	3.5	25.2	61.847	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2275	569	420	2745	0.829	2265	2339	2.0	4.6	7.348	A
B - Eagle Way West	193	48	2596	177	1.087	163	217	1.3	8.9	149.691	F
C - A12 South	2163	541	790	2055	1.052	2023	1921	6.6	41.7	52.069	F
D - Anson Rd East	1413	353	1776	936	1.510	935	909	25.2	144.6	335.886	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2275	569	424	2742	0.830	2275	2357	4.6	4.8	7.689	A
B - Eagle Way West	193	48	2619	166	1.161	162	218	8.9	16.4	321.967	F
C - A12 South	2163	541	788	2057	1.052	2049	1927	41.7	70.3	105.818	F
D - Anson Rd East	1413	353	1784	932	1.516	932	915	144.6	264.9	739.686	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1858	464	405	2754	0.675	1868	2389	4.8	2.1	4.115	A
B - Eagle Way West	157	39	2642	156	1.013	152	207	16.4	17.9	379.058	F
C - A12 South	1766	442	887	1990	0.888	1962	1675	70.3	21.3	87.720	F
D - Anson Rd East	1154	288	1468	1094	1.054	1094	805	264.9	279.8	857.107	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1556	389	353	2786	0.558	1559	2164	2.1	1.3	2.944	A
B - Eagle Way West	132	33	2317	315	0.418	201	190	17.9	0.8	52.475	F
C - A12 South	1479	370	955	1944	0.761	1551	1491	21.3	3.3	10.822	B
D - Anson Rd East	966	242	1239	1212	0.797	1208	673	279.8	219.3	744.261	F

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.56	1.10	1.38	1.69			N/A	N/A
B - Eagle Way West	0.43	0.04	0.36	1.18	1.34			N/A	N/A
C - A12 South	2.45	0.14	1.25	5.12	6.81			N/A	N/A
D - Anson Rd East	3.52	0.03	0.29	3.52	11.40			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.00	0.04	0.39	5.34	9.88			N/A	N/A
B - Eagle Way West	1.34	0.05	0.66	3.14	4.67			N/A	N/A
C - A12 South	6.61	0.08	1.70	18.35	27.55			N/A	N/A
D - Anson Rd East	25.19	0.58	14.82	61.63	82.97			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.63	0.03	0.29	4.63	17.46			N/A	N/A
B - Eagle Way West	8.86	1.12	6.62	17.67	22.05			N/A	N/A
C - A12 South	41.71	7.47	34.89	79.58	96.78			N/A	N/A
D - Anson Rd East	144.63	>199	>199	>199	>199			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.76	0.03	0.27	4.76	4.76			N/A	N/A
B - Eagle Way West	16.44	2.70	13.51	30.92	37.61			N/A	N/A
C - A12 South	70.32	16.16	61.00	128.52	153.82			N/A	N/A
D - Anson Rd East	264.91	>199	>199	>199	>199			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.10	0.06	1.02	5.24	7.68			N/A	N/A
B - Eagle Way West	17.93	9.26	16.85	24.91	27.59			N/A	N/A
C - A12 South	21.34	1.19	15.36	46.39	59.35			N/A	N/A
D - Anson Rd East	279.84	>199	>199	>199	>199			N/A	N/A

18:00 - 18:15

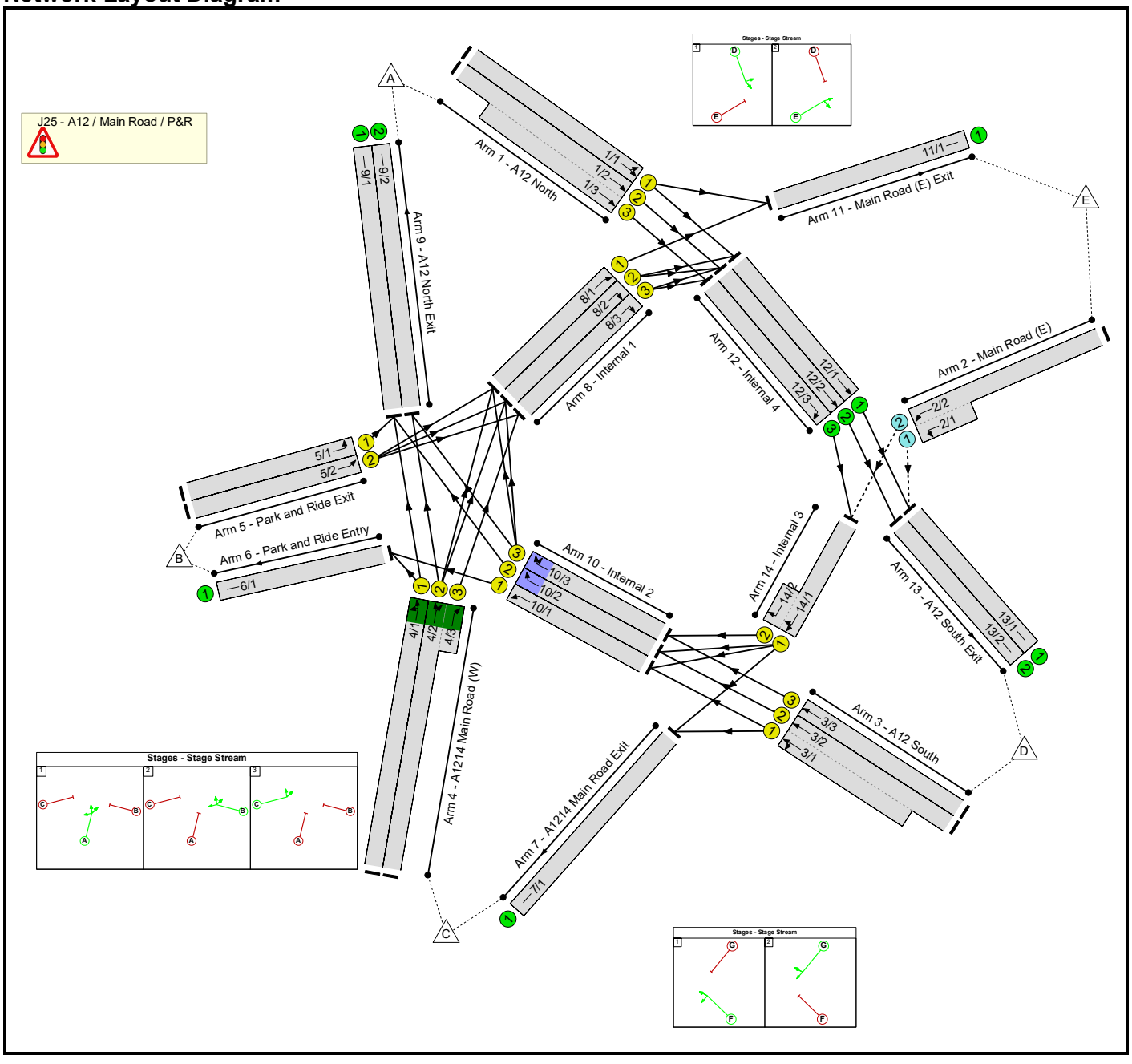
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.04	0.39	3.29	5.73			N/A	N/A
B - Eagle Way West	0.76	0.03	0.27	0.76	1.88			N/A	N/A
C - A12 South	3.31	0.03	0.32	4.99	16.72			N/A	N/A
D - Anson Rd East	219.33	>199	>199	>199	>199			N/A	N/A

Full Input Data And Results

User and Project Details

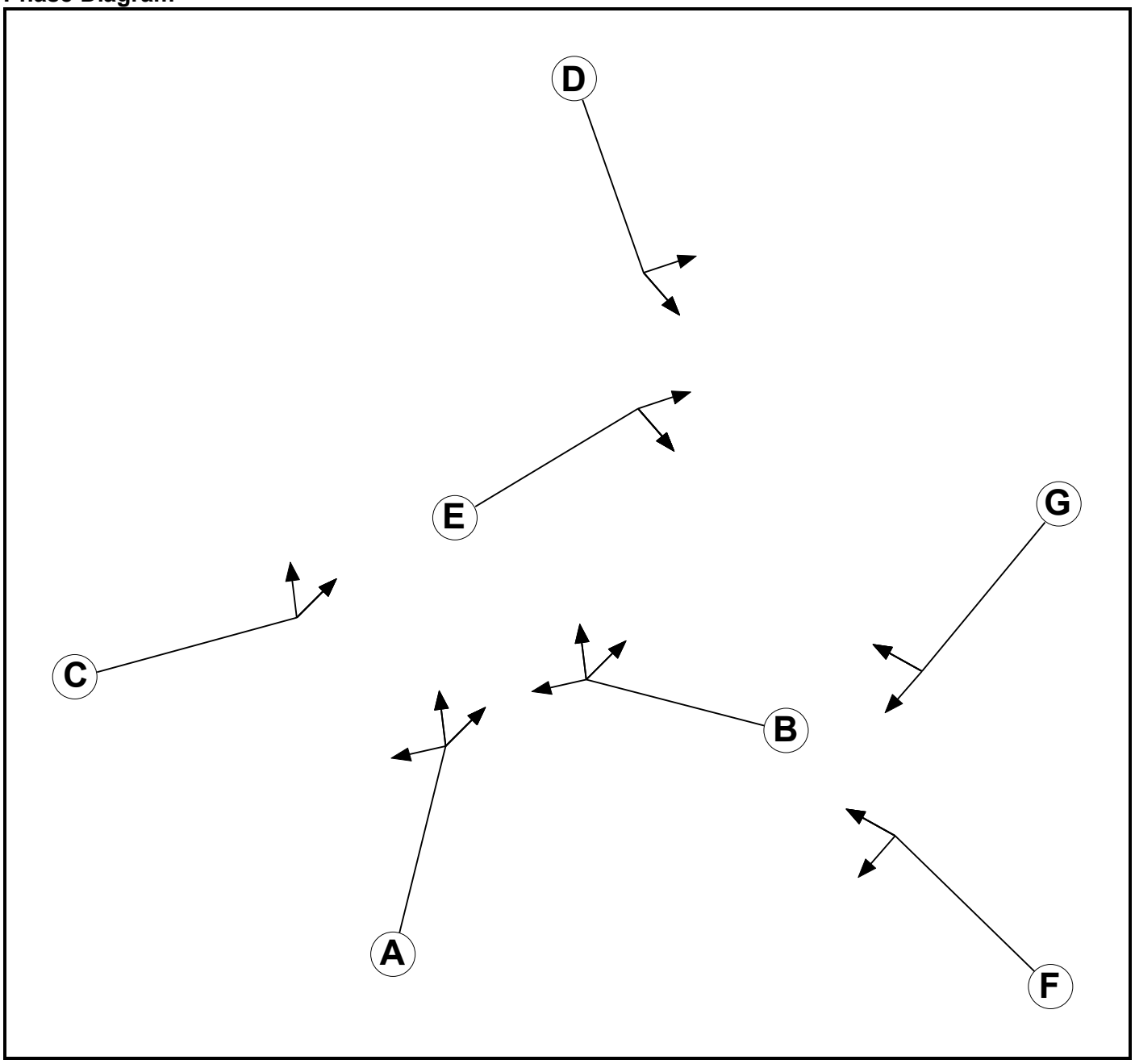
Project:	
Title:	
Location:	
Additional detail:	
File name:	2019.08.14 J25_Model v16.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	2		7	7
E	Traffic	2		7	7
F	Traffic	3		7	7
G	Traffic	3		7	7

Full Input Data And Results

Phase Intergreens Matrix

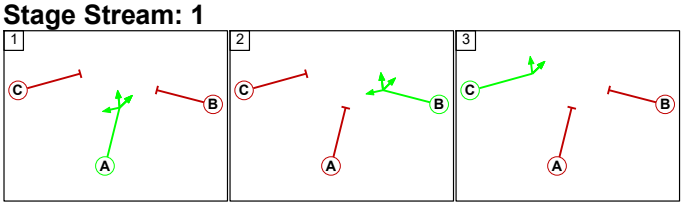
		Starting Phase						
		A	B	C	D	E	F	G
Terminating Phase	A		5	9	-	-	-	-
	B	5		9	-	-	-	-
	C	5	5		-	-	-	-
	D	-	-	-		5	-	-
	E	-	-	-	5		-	-
	F	-	-	-	-	-		5
	G	-	-	-	-	-	5	

Phases in Stage

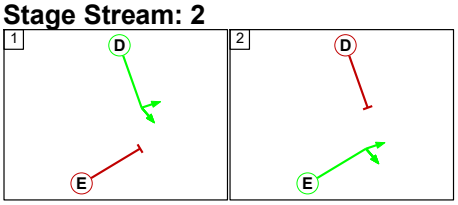
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
1	3	C
2	1	D
2	2	E
3	1	F
3	2	G

Stage Diagram

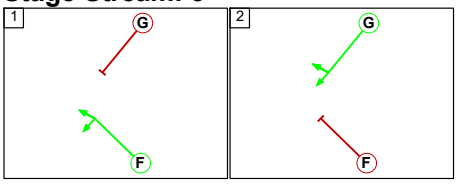
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

From Stage \ To Stage	1	2	3
1		5	9
2	5		9
3	5	5	

Stage Stream: 2

From Stage \ To Stage	1	2
1		5
2	5	

Stage Stream: 3

From Stage \ To Stage	1	2
1		5
2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J25 - A12 / Main Road / P&&R

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Main Road (E))	13/1 (Left)	715	0	12/1	0.22	All	-	-	-	-	-
2/2 (Main Road (E))	14/1 (Ahead)	715	0	12/3	0.22	All	-	-	-	-	-
				12/1	0.22	All					
				12/2	0.22	All					

Full Input Data And Results

Lane Input Data

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A12 North)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 11 Left	71.50
											Arm 12 Ahead	Inf
1/2 (A12 North)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 12 Ahead	Inf
1/3 (A12 North)	U	D	2	3	15.2	Geom	-	3.60	0.00	N	Arm 12 Ahead	Inf
2/1 (Main Road (E))	O		2	3	4.9	Geom	-	3.85	0.00	Y	Arm 13 Left	17.80
2/2 (Main Road (E))	O		2	3	60.0	User	950	-	-	-	-	-
3/1 (A12 South)	U	F	2	3	16.2	Geom	-	3.70	0.00	Y	Arm 7 Left	38.50
											Arm 10 Ahead	29.20
3/2 (A12 South)	U	F	2	3	60.0	Geom	-	3.70	0.00	N	Arm 10 Ahead	56.10
3/3 (A12 South)	U	F	2	3	60.0	Geom	-	3.70	0.00	N	Arm 10 Ahead	77.10
4/1 (A1214 Main Road (W))	U	A	2	3	60.0	Geom	-	4.20	0.00	Y	Arm 6 Left	31.40
											Arm 9 Ahead	Inf
4/2 (A1214 Main Road (W))	U	A	2	3	60.0	Geom	-	4.20	0.00	N	Arm 8 Ahead	Inf
											Arm 9 Ahead	Inf
4/3 (A1214 Main Road (W))	U	A	2	3	3.9	Geom	-	4.20	0.00	N	Arm 8 Ahead	Inf
5/1 (Park and Ride Exit)	U	C	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 9 Left	Inf
5/2 (Park and Ride Exit)	U	C	2	3	60.0	Geom	-	3.70	0.00	N	Arm 8 Ahead	Inf
6/1 (Park and Ride Entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A1214 Main Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Internal 1)	U	E	2	3	10.2	Geom	-	4.70	0.00	Y	Arm 11 Ahead	32.60
8/2 (Internal 1)	U	E	2	3	10.2	Geom	-	4.80	0.00	N	Arm 12 Right	32.60

Full Input Data And Results

8/3 (Internal 1)	U	E	2	3	10.2	Geom	-	4.70	0.00	N	Arm 12 Right	32.60
9/1 (A12 North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
9/2 (A12 North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Internal 2)	U	B	2	3	4.6	Geom	-	4.10	0.00	Y	Arm 6 Ahead	31.20
10/2 (Internal 2)	U	B	2	3	7.8	Geom	-	4.10	0.00	N	Arm 9 Right	31.20
10/3 (Internal 2)	U	B	2	3	7.8	Geom	-	4.10	0.00	N	Arm 8 Right Arm 9 Right	31.20 31.20
11/1 (Main Road (E) Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1 (Internal 4)	U		2	3	8.9	Inf	-	-	-	-	-	-
12/2 (Internal 4)	U		2	3	8.9	Inf	-	-	-	-	-	-
12/3 (Internal 4)	U		2	3	8.9	Inf	-	-	-	-	-	-
13/1 (A12 South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
13/2 (A12 South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (Internal 3)	U	G	2	3	5.7	User	1800	-	-	-	-	-
14/2 (Internal 3)	U	G	2	3	3.4	User	1800	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '17BY_6-7AM'	06:00	07:00	01:00	
2: '17BY_7-8AM'	07:00	08:00	01:00	
3: '17BY_8-9AM'	08:00	09:00	01:00	
4: '17BY_3-4PM'	15:00	16:00	01:00	
5: '17BY_5-6PM'	17:00	18:00	01:00	
6: '23EY_6-7AM'	06:00	07:00	01:00	
7: '23EY_7-8AM'	07:00	08:00	01:00	
8: '23EY_8-9AM'	08:00	09:00	01:00	
9: '23EY_3-4PM'	15:00	16:00	01:00	
10: '23EY_5-6PM'	17:00	18:00	01:00	
11: '23RC_6-7AM'	06:00	07:00	01:00	
12: '23RC_7-8AM'	07:00	08:00	01:00	
13: '23RC_8-9AM'	08:00	09:00	01:00	
14: '23RC_3-4PM'	15:00	16:00	01:00	
15: '23RC_5-6PM'	17:00	18:00	01:00	
16: '28PC_6-7AM'	06:00	07:00	01:00	
17: '28PC_7-8AM'	07:00	08:00	01:00	
18: '28PC_8-9AM'	08:00	09:00	01:00	
19: '28PC_3-4PM'	15:00	16:00	01:00	
20: '28PC_5-6PM'	17:00	18:00	01:00	
21: '28RC_6-7AM'	06:00	07:00	01:00	
22: '28RC_7-8AM'	07:00	08:00	01:00	
23: '28RC_8-9AM'	08:00	09:00	01:00	
24: '28RC_3-4PM'	15:00	16:00	01:00	
25: '28RC_5-6PM'	17:00	18:00	01:00	
26: '34OP_6-7AM'	06:00	07:00	01:00	
27: '34OP_7-8AM'	07:00	08:00	01:00	
28: '34OP_8-9AM'	08:00	09:00	01:00	
29: '34OP_3-4PM'	15:00	16:00	01:00	
30: '34OP_5-6PM'	17:00	18:00	01:00	
31: '34RC_6-7AM'	06:00	07:00	01:00	
32: '34RC_7-8AM'	07:00	08:00	01:00	
33: '34RC_8-9AM'	08:00	09:00	01:00	
34: '34RC_3-4PM'	15:00	16:00	01:00	
35: '34RC_5-6PM'	17:00	18:00	01:00	

Scenario 1: '2019 Base Year 6-7AM' (FG1: '17BY_6-7AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	145	667	1	813
	B	0	0	0	2	0	2
	C	179	1	0	224	34	438
	D	476	6	132	1	10	625
	E	4	0	0	36	0	40
	Tot.	659	7	277	930	45	1918

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2019 Base Year 6-7AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	270
1/2 (with short)	543(In) 398(Out)
1/3 (short)	145
2/1 (short)	36
2/2 (with short)	40(In) 4(Out)
3/1 (short)	138
3/2 (with short)	412(In) 274(Out)
3/3	213
4/1	123
4/2 (with short)	315(In) 189(Out)
4/3 (short)	126
5/1	0
5/2	2
6/1	7
7/1	277
8/1	44
8/2	99
8/3	128
9/1	399
9/2	260
10/1	6
10/2	277
10/3	214
11/1	45
12/1	318
12/2	576
12/3	145
13/1	354
13/2	576
14/1 (with short)	149(In) 148(Out)
14/2 (short)	1

Full Input Data And Results

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.4 %	1965	1965
				Arm 12 Ahead	Inf	99.6 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	95.7 %	1910	1910
				Arm 10 Ahead	29.20	4.3 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.8 %	2034	2034
				Arm 9 Ahead	Inf	99.2 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	69.8 %	2175	2175
				Arm 9 Ahead	Inf	30.2 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	0.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	5.1 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	94.9 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 2: '2019 Base Year 7-8AM' (FG2: '17BY_7-8AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	7	0	342	1102	2	1453
	B	3	0	0	2	2	7
	C	433	13	0	560	85	1091
	D	1108	41	290	1	18	1458
	E	5	0	0	78	0	83
	Tot.	1556	54	632	1743	107	4092

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2019 Base Year 7-8AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	488
1/2 (with short)	965(In) 616(Out)
1/3 (short)	349
2/1 (short)	78
2/2 (with short)	83(In) 5(Out)
3/1 (short)	331
3/2 (with short)	929(In) 598(Out)
3/3	529
4/1	421
4/2 (with short)	670(In) 378(Out)
4/3 (short)	292
5/1	3
5/2	4
6/1	54
7/1	632
8/1	105
8/2	271
8/3	292
9/1	1009
9/2	547
10/1	41
10/2	598
10/3	541
11/1	107
12/1	621
12/2	1044
12/3	349
13/1	699
13/2	1044
14/1 (with short)	354(In) 342(Out)
14/2 (short)	12

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.4 %	1965	1965
				Arm 12 Ahead	Inf	99.6 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	87.6 %	1908	1908
				Arm 10 Ahead	29.20	12.4 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	3.1 %	2032	2032
				Arm 9 Ahead	Inf	96.9 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	93.4 %	2175	2175
				Arm 9 Ahead	Inf	6.6 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.5 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.5 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 3: '2019 Base Year 8-9AM' (FG3: '17BY_8-9AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	8	0	391	1310	7	1716
	B	5	0	1	13	0	19
	C	380	6	0	741	97	1224
	D	1345	48	382	0	44	1819
	E	17	2	0	127	0	146
	Tot.	1755	56	774	2191	148	4924

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2019 Base Year 8-9AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	601
1/2 (with short)	1115(In) 716(Out)
1/3 (short)	399
2/1 (short)	127
2/2 (with short)	146(In) 19(Out)
3/1 (short)	430
3/2 (with short)	1136(In) 706(Out)
3/3	683
4/1	386
4/2 (with short)	838(In) 455(Out)
4/3 (short)	383
5/1	5
5/2	14
6/1	56
7/1	774
8/1	141
8/2	371
8/3	384
9/1	1104
9/2	651
10/1	50
10/2	719
10/3	695
11/1	148
12/1	780
12/2	1284
12/3	400
13/1	907
13/2	1284
14/1 (with short)	419(In) 407(Out)
14/2 (short)	12

Full Input Data And Results

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.2 %	1965	1965
				Arm 12 Ahead	Inf	98.8 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	88.8 %	1908	1908
				Arm 10 Ahead	29.20	11.2 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	1.6 %	2033	2033
				Arm 9 Ahead	Inf	98.4 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	6.3 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	93.7 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 4: '2019 Base Year 3-4PM' (FG4: '17BY_3-4PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	0	378	1131	12	1522
	B	4	0	0	8	1	13
	C	373	0	0	594	47	1014
	D	1232	2	610	0	108	1952
	E	11	0	91	127	0	229
	Tot.	1621	2	1079	1860	168	4730

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2019 Base Year 3-4PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	527
1/2 (with short)	995(In) 616(Out)
1/3 (short)	379
2/1 (short)	127
2/2 (with short)	229(In) 102(Out)
3/1 (short)	612
3/2 (with short)	1302(In) 690(Out)
3/3	650
4/1	373
4/2 (with short)	641(In) 333(Out)
4/3 (short)	308
5/1	4
5/2	9
6/1	2
7/1	1079
8/1	156
8/2	288
8/3	314
9/1	1075
9/2	546
10/1	2
10/2	698
10/3	654
11/1	168
12/1	659
12/2	1074
12/3	379
13/1	786
13/2	1074
14/1 (with short)	481(In) 477(Out)
14/2 (short)	4

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	2.3 %	1964	1964
				Arm 12 Ahead	Inf	97.7 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.7 %	1910	1910
				Arm 10 Ahead	29.20	0.3 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.0 %	2035	2035
				Arm 9 Ahead	Inf	100.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	16.5 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	83.5 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 5: '2019 Base Year 5-6PM' (FG5: '17BY_5-6PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	376	1036	7	1419
	B	20	0	0	18	4	42
	C	317	2	0	461	76	856
	D	1199	6	625	2	130	1962
	E	6	2	132	147	1	288
	Tot.	1542	10	1133	1664	218	4567

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2019 Base Year 5-6PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	472
1/2 (with short)	947(In) 571(Out)
1/3 (short)	376
2/1 (short)	147
2/2 (with short)	288(In) 141(Out)
3/1 (short)	631
3/2 (with short)	1314(In) 683(Out)
3/3	648
4/1	302
4/2 (with short)	554(In) 287(Out)
4/3 (short)	267
5/1	20
5/2	22
6/1	10
7/1	1133
8/1	211
8/2	200
8/3	281
9/1	1008
9/2	534
10/1	8
10/2	688
10/3	650
11/1	218
12/1	565
12/2	952
12/3	376
13/1	712
13/2	952
14/1 (with short)	517(In) 515(Out)
14/2 (short)	2

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.5 %	1964	1964
				Arm 12 Ahead	Inf	98.5 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.0 %	1910	1910
				Arm 10 Ahead	29.20	1.0 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.7 %	2034	2034
				Arm 9 Ahead	Inf	99.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	94.1 %	2175	2175
				Arm 9 Ahead	Inf	5.9 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	20.5 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	79.5 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 6: '2023 Reference Case 6-7AM' (FG11: '23RC_6-7AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	142	711	10	864
	B	1	0	0	2	0	3
	C	198	1	0	225	32	456
	D	511	7	137	1	10	666
	E	4	0	1	36	0	41
	Tot.	714	9	280	975	52	2030

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2023 Reference Case 6-7AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	299
1/2 (with short)	565(In) 422(Out)
1/3 (short)	143
2/1 (short)	36
2/2 (with short)	41(In) 5(Out)
3/1 (short)	144
3/2 (with short)	435(In) 291(Out)
3/3	231
4/1	133
4/2 (with short)	323(In) 194(Out)
4/3 (short)	129
5/1	1
5/2	2
6/1	9
7/1	280
8/1	42
8/2	97
8/3	131
9/1	427
9/2	287
10/1	8
10/2	294
10/3	232
11/1	52
12/1	337
12/2	602
12/3	143
13/1	373
13/2	602
14/1 (with short)	148(In) 147(Out)
14/2 (short)	1

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.3 %	1964	1964
				Arm 12 Ahead	Inf	96.7 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	95.1 %	1909	1909
				Arm 10 Ahead	29.20	4.9 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.8 %	2034	2034
				Arm 9 Ahead	Inf	99.2 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	66.0 %	2175	2175
				Arm 9 Ahead	Inf	34.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	4.7 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	95.3 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 7: '2023 Reference Case 7-8AM' (FG12: '23RC_7-8AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	7	1	342	1168	17	1535
	B	3	0	0	2	2	7
	C	464	13	0	562	84	1123
	D	1190	42	304	1	21	1558
	E	5	1	7	82	0	95
	Tot.	1669	57	653	1815	124	4318

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2023 Reference Case 7-8AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	532
1/2 (with short)	1003(In) 653(Out)
1/3 (short)	350
2/1 (short)	82
2/2 (with short)	95(In) 13(Out)
3/1 (short)	346
3/2 (with short)	984(In) 638(Out)
3/3	574
4/1	440
4/2 (with short)	683(In) 391(Out)
4/3 (short)	292
5/1	3
5/2	4
6/1	57
7/1	653
8/1	107
8/2	271
8/3	294
9/1	1068
9/2	601
10/1	44
10/2	638
10/3	586
11/1	124
12/1	650
12/2	1083
12/3	350
13/1	732
13/2	1083
14/1 (with short)	363(In) 351(Out)
14/2 (short)	12

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.2 %	1964	1964
				Arm 12 Ahead	Inf	96.8 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	87.9 %	1908	1908
				Arm 10 Ahead	29.20	12.1 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	3.0 %	2032	2032
				Arm 9 Ahead	Inf	97.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	90.5 %	2175	2175
				Arm 9 Ahead	Inf	9.5 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.8 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.2 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 8: '2023 Reference Case 8-9AM' (FG13: '23RC_8-9AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	8	1	417	1334	20	1780
	B	6	0	1	13	0	20
	C	405	6	0	743	114	1268
	D	1446	50	422	0	52	1970
	E	17	3	11	132	0	163
	Tot.	1882	60	851	2222	186	5201

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2023 Reference Case 8-9AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	619
1/2 (with short)	1161(In) 735(Out)
1/3 (short)	426
2/1 (short)	132
2/2 (with short)	163(In) 31(Out)
3/1 (short)	472
3/2 (with short)	1229(In) 757(Out)
3/3	741
4/1	411
4/2 (with short)	857(In) 472(Out)
4/3 (short)	385
5/1	6
5/2	14
6/1	60
7/1	851
8/1	166
8/2	371
8/3	386
9/1	1182
9/2	700
10/1	54
10/2	771
10/3	752
11/1	186
12/1	785
12/2	1305
12/3	427
13/1	917
13/2	1305
14/1 (with short)	458(In) 447(Out)
14/2 (short)	11

Full Input Data And Results

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.2 %	1964	1964
				Arm 12 Ahead	Inf	96.8 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	89.4 %	1908	1908
				Arm 10 Ahead	29.20	10.6 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	1.5 %	2034	2034
				Arm 9 Ahead	Inf	98.5 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	6.9 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	93.1 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 9: '2023 Reference Case 3-4PM' (FG14: '23RC_3-4PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	0	404	1183	8	1596
	B	5	0	1	9	1	16
	C	398	0	0	592	62	1052
	D	1294	2	632	0	116	2044
	E	11	0	134	130	0	275
	Tot.	1709	2	1171	1914	187	4983

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2023 Reference Case 3-4PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	550
1/2 (with short)	1046(In) 641(Out)
1/3 (short)	405
2/1 (short)	130
2/2 (with short)	275(In) 145(Out)
3/1 (short)	634
3/2 (with short)	1353(In) 719(Out)
3/3	691
4/1	398
4/2 (with short)	654(In) 358(Out)
4/3 (short)	296
5/1	5
5/2	11
6/1	2
7/1	1171
8/1	179
8/2	302
8/3	300
9/1	1128
9/2	581
10/1	2
10/2	725
10/3	697
11/1	187
12/1	693
12/2	1091
12/3	406
13/1	823
13/2	1091
14/1 (with short)	551(In) 545(Out)
14/2 (short)	6

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.5 %	1964	1964
				Arm 12 Ahead	Inf	98.5 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.7 %	1910	1910
				Arm 10 Ahead	29.20	0.3 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.0 %	2035	2035
				Arm 9 Ahead	Inf	100.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	16.6 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	83.4 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 10: '2023 Reference Case 5-6PM' (FG15: '23RC_5-6PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	389	1132	8	1529
	B	21	0	0	18	5	44
	C	334	2	0	429	89	854
	D	1260	6	585	2	143	1996
	E	6	2	239	152	1	400
	Tot.	1621	10	1213	1733	246	4823

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2023 Reference Case 5-6PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	528
1/2 (with short)	1001(In) 612(Out)
1/3 (short)	389
2/1 (short)	152
2/2 (with short)	400(In) 248(Out)
3/1 (short)	591
3/2 (with short)	1305(In) 714(Out)
3/3	691
4/1	303
4/2 (with short)	551(In) 288(Out)
4/3 (short)	263
5/1	21
5/2	23
6/1	10
7/1	1213
8/1	238
8/2	176
8/3	273
9/1	1040
9/2	581
10/1	8
10/2	718
10/3	694
11/1	246
12/1	608
12/2	973
12/3	389
13/1	760
13/2	973
14/1 (with short)	637(In) 634(Out)
14/2 (short)	3

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.5 %	1964	1964
				Arm 12 Ahead	Inf	98.5 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.0 %	1910	1910
				Arm 10 Ahead	29.20	1.0 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.7 %	2034	2034
				Arm 9 Ahead	Inf	99.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	88.5 %	2175	2175
				Arm 9 Ahead	Inf	11.5 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	21.0 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	79.0 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 11: '2023 Early Years 6-7AM' (FG6: '23EY_6-7AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	144	722	10	877
	B	1	0	0	2	0	3
	C	221	1	0	226	33	481
	D	616	7	138	1	10	772
	E	4	0	0	36	0	40
	Tot.	842	9	282	987	53	2173

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2023 Early Years 6-7AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	305
1/2 (with short)	572(In) 427(Out)
1/3 (short)	145
2/1 (short)	36
2/2 (with short)	40(In) 4(Out)
3/1 (short)	145
3/2 (with short)	485(In) 340(Out)
3/3	287
4/1	146
4/2 (with short)	335(In) 203(Out)
4/3 (short)	132
5/1	1
5/2	2
6/1	9
7/1	282
8/1	43
8/2	97
8/3	132
9/1	487
9/2	355
10/1	8
10/2	341
10/3	290
11/1	53
12/1	343
12/2	608
12/3	145
13/1	379
13/2	608
14/1 (with short)	149(In) 146(Out)
14/2 (short)	3

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.3 %	1964	1964
				Arm 12 Ahead	Inf	96.7 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	95.2 %	1909	1909
				Arm 10 Ahead	29.20	4.8 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.7 %	2034	2034
				Arm 9 Ahead	Inf	99.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	62.6 %	2175	2175
				Arm 9 Ahead	Inf	37.4 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.8 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.2 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 12: '2023 Early Years 7-8AM' (FG7: '23EY_7-8AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	7	1	347	1181	28	1564
	B	3	0	0	1	2	6
	C	523	13	0	568	72	1176
	D	1382	42	307	1	21	1753
	E	5	1	4	82	0	92
	Tot.	1920	57	658	1833	123	4591

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2023 Early Years 7-8AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	544
1/2 (with short)	1020(In) 665(Out)
1/3 (short)	355
2/1 (short)	82
2/2 (with short)	92(In) 10(Out)
3/1 (short)	349
3/2 (with short)	1075(In) 726(Out)
3/3	678
4/1	471
4/2 (with short)	705(In) 409(Out)
4/3 (short)	296
5/1	3
5/2	3
6/1	57
7/1	658
8/1	95
8/2	273
8/3	297
9/1	1187
9/2	733
10/1	44
10/2	726
10/3	690
11/1	123
12/1	652
12/2	1099
12/3	355
13/1	734
13/2	1099
14/1 (with short)	365(In) 353(Out)
14/2 (short)	12

Full Input Data And Results

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	5.1 %	1963	1963
				Arm 12 Ahead	Inf	94.9 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	88.0 %	1908	1908
				Arm 10 Ahead	29.20	12.0 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	2.8 %	2032	2032
				Arm 9 Ahead	Inf	97.2 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	84.1 %	2175	2175
				Arm 9 Ahead	Inf	15.9 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.2 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.8 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 13: '2023 Early Years 8-9AM' (FG8: '23EY_8-9AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	8	1	408	1368	21	1806
	B	6	0	1	13	0	20
	C	413	6	0	752	114	1285
	D	1572	50	422	0	52	2096
	E	17	3	11	132	0	163
	Tot.	2016	60	842	2265	187	5370

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2023 Early Years 8-9AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	639
1/2 (with short)	1167(In) 750(Out)
1/3 (short)	417
2/1 (short)	132
2/2 (with short)	163(In) 31(Out)
3/1 (short)	472
3/2 (with short)	1289(In) 817(Out)
3/3	807
4/1	419
4/2 (with short)	866(In) 478(Out)
4/3 (short)	388
5/1	6
5/2	14
6/1	60
7/1	842
8/1	166
8/2	377
8/3	389
9/1	1249
9/2	767
10/1	54
10/2	830
10/3	819
11/1	187
12/1	807
12/2	1326
12/3	418
13/1	939
13/2	1326
14/1 (with short)	449(In) 437(Out)
14/2 (short)	12

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.3 %	1964	1964
				Arm 12 Ahead	Inf	96.7 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	89.4 %	1908	1908
				Arm 10 Ahead	29.20	10.6 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	1.4 %	2034	2034
				Arm 9 Ahead	Inf	98.6 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	6.3 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	93.7 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 14: '2023 Early Years 3-4PM' (FG9: '23EY_3-4PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	0	414	1247	3	1665
	B	5	0	1	9	1	16
	C	398	0	0	560	63	1021
	D	1340	2	627	0	122	2091
	E	11	0	134	130	0	275
	Tot.	1755	2	1176	1946	189	5068

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 2023 Early Years 3-4PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	585
1/2 (with short)	1080(In) 665(Out)
1/3 (short)	415
2/1 (short)	130
2/2 (with short)	275(In) 145(Out)
3/1 (short)	629
3/2 (with short)	1370(In) 741(Out)
3/3	721
4/1	387
4/2 (with short)	634(In) 332(Out)
4/3 (short)	302
5/1	5
5/2	11
6/1	2
7/1	1176
8/1	186
8/2	262
8/3	308
9/1	1141
9/2	614
10/1	2
10/2	749
10/3	725
11/1	189
12/1	713
12/2	1103
12/3	416
13/1	843
13/2	1103
14/1 (with short)	561(In) 557(Out)
14/2 (short)	4

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.5 %	1965	1965
				Arm 12 Ahead	Inf	99.5 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.7 %	1910	1910
				Arm 10 Ahead	29.20	0.3 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.0 %	2035	2035
				Arm 9 Ahead	Inf	100.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	96.7 %	2175	2175
				Arm 9 Ahead	Inf	3.3 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	16.8 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	83.2 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 15: '2023 Early Years 5-6PM' (FG10: '23EY_5-6PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	404	1191	8	1603
	B	21	0	0	18	5	44
	C	331	2	0	403	93	829
	D	1273	6	597	2	161	2039
	E	6	2	241	152	1	402
	Tot.	1631	10	1242	1766	268	4917

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 15: 2023 Early Years 5-6PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	563
1/2 (with short)	1040(In) 636(Out)
1/3 (short)	404
2/1 (short)	152
2/2 (with short)	402(In) 250(Out)
3/1 (short)	603
3/2 (with short)	1330(In) 727(Out)
3/3	709
4/1	291
4/2 (with short)	538(In) 283(Out)
4/3 (short)	255
5/1	21
5/2	23
6/1	10
7/1	1242
8/1	260
8/2	156
8/3	267
9/1	1041
9/2	590
10/1	8
10/2	731
10/3	712
11/1	268
12/1	633
12/2	981
12/3	404
13/1	785
13/2	981
14/1 (with short)	654(In) 651(Out)
14/2 (short)	3

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.4 %	1964	1964
				Arm 12 Ahead	Inf	98.6 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.0 %	1910	1910
				Arm 10 Ahead	29.20	1.0 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.7 %	2034	2034
				Arm 9 Ahead	Inf	99.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	85.2 %	2175	2175
				Arm 9 Ahead	Inf	14.8 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	23.0 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	77.0 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 16: '2028 Reference Case 6-7AM' (FG21: '28RC_6-7AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	153	732	11	897
	B	1	0	0	2	0	3
	C	217	1	0	227	36	481
	D	533	7	140	1	10	691
	E	4	0	3	36	0	43
	Tot.	755	9	296	998	57	2115

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 16: 2028 Reference Case 6-7AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	309
1/2 (with short)	588(In) 434(Out)
1/3 (short)	154
2/1 (short)	36
2/2 (with short)	43(In) 7(Out)
3/1 (short)	147
3/2 (with short)	449(In) 302(Out)
3/3	242
4/1	146
4/2 (with short)	335(In) 202(Out)
4/3 (short)	133
5/1	1
5/2	2
6/1	9
7/1	296
8/1	46
8/2	95
8/3	135
9/1	451
9/2	304
10/1	8
10/2	305
10/3	243
11/1	57
12/1	345
12/2	617
12/3	154
13/1	381
13/2	617
14/1 (with short)	161(In) 160(Out)
14/2 (short)	1

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.6 %	1964	1964
				Arm 12 Ahead	Inf	96.4 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	95.2 %	1909	1909
				Arm 10 Ahead	29.20	4.8 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.7 %	2034	2034
				Arm 9 Ahead	Inf	99.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	64.4 %	2175	2175
				Arm 9 Ahead	Inf	35.6 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	4.5 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	95.5 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 17: '2028 Reference Case 7-8AM' (FG22: '28RC_7-8AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	7	2	343	1192	81	1625
	B	4	0	0	1	2	7
	C	463	14	0	566	88	1131
	D	1300	43	325	1	22	1691
	E	5	1	9	83	0	98
	Tot.	1779	60	677	1843	193	4552

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 17: 2028 Reference Case 7-8AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	578
1/2 (with short)	1047(In) 695(Out)
1/3 (short)	352
2/1 (short)	83
2/2 (with short)	98(In) 15(Out)
3/1 (short)	368
3/2 (with short)	1059(In) 691(Out)
3/3	632
4/1	444
4/2 (with short)	687(In) 393(Out)
4/3 (short)	294
5/1	4
5/2	3
6/1	60
7/1	677
8/1	112
8/2	273
8/3	295
9/1	1126
9/2	653
10/1	46
10/2	692
10/3	643
11/1	193
12/1	633
12/2	1127
12/3	352
13/1	716
13/2	1127
14/1 (with short)	367(In) 356(Out)
14/2 (short)	11

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	14.0 %	1959	1959
				Arm 12 Ahead	Inf	86.0 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	88.3 %	1908	1908
				Arm 10 Ahead	29.20	11.7 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	3.2 %	2032	2032
				Arm 9 Ahead	Inf	96.8 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	91.6 %	2175	2175
				Arm 9 Ahead	Inf	8.4 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.6 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.4 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 18: '2028 Reference Case 8-9AM' (FG23: '28RC_8-9AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	8	1	419	1433	22	1883
	B	6	0	1	13	0	20
	C	462	7	0	766	142	1377
	D	1552	52	467	0	53	2124
	E	17	3	16	131	0	167
	Tot.	2045	63	903	2343	217	5571

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 18: 2028 Reference Case 8-9AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	675
1/2 (with short)	1208(In) 780(Out)
1/3 (short)	428
2/1 (short)	131
2/2 (with short)	167(In) 36(Out)
3/1 (short)	519
3/2 (with short)	1324(In) 805(Out)
3/3	800
4/1	469
4/2 (with short)	908(In) 512(Out)
4/3 (short)	396
5/1	6
5/2	14
6/1	63
7/1	903
8/1	195
8/2	383
8/3	397
9/1	1289
9/2	756
10/1	56
10/2	821
10/3	809
11/1	217
12/1	845
12/2	1367
12/3	429
13/1	976
13/2	1367
14/1 (with short)	465(In) 456(Out)
14/2 (short)	9

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.3 %	1964	1964
				Arm 12 Ahead	Inf	96.7 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	90.0 %	1908	1908
				Arm 10 Ahead	29.20	10.0 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	1.5 %	2034	2034
				Arm 9 Ahead	Inf	98.5 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	6.6 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	93.4 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 19: '2028 Reference Case 3-4PM' (FG24: '28RC_3-4PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1	412	1304	16	1734
	B	5	0	1	10	2	18
	C	388	0	0	560	83	1031
	D	1373	2	642	0	139	2156
	E	11	1	192	132	0	336
	Tot.	1778	4	1247	2006	240	5275

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 19: 2028 Reference Case 3-4PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	625
1/2 (with short)	1109(In) 695(Out)
1/3 (short)	414
2/1 (short)	132
2/2 (with short)	336(In) 204(Out)
3/1 (short)	644
3/2 (with short)	1405(In) 761(Out)
3/3	751
4/1	388
4/2 (with short)	643(In) 339(Out)
4/3 (short)	304
5/1	5
5/2	13
6/1	4
7/1	1247
8/1	224
8/2	262
8/3	309
9/1	1162
9/2	616
10/1	4
10/2	769
10/3	755
11/1	240
12/1	740
12/2	1134
12/3	415
13/1	872
13/2	1134
14/1 (with short)	619(In) 615(Out)
14/2 (short)	4

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	2.6 %	1964	1964
				Arm 12 Ahead	Inf	97.4 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.7 %	1910	1910
				Arm 10 Ahead	29.20	0.3 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.0 %	2035	2035
				Arm 9 Ahead	Inf	100.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	18.4 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	81.6 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 20: '2028 Reference Case 5-6PM' (FG25: '28RC_5-6PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	380	1249	8	1637
	B	22	0	1	19	5	47
	C	320	2	0	447	110	879
	D	1337	6	631	2	154	2130
	E	6	2	304	152	1	465
	Tot.	1685	10	1316	1869	278	5158

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 20: 2028 Reference Case 5-6PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	597
1/2 (with short)	1040(In) 660(Out)
1/3 (short)	380
2/1 (short)	152
2/2 (with short)	465(In) 313(Out)
3/1 (short)	637
3/2 (with short)	1388(In) 751(Out)
3/3	742
4/1	314
4/2 (with short)	565(In) 294(Out)
4/3 (short)	271
5/1	22
5/2	25
6/1	10
7/1	1316
8/1	270
8/2	186
8/3	283
9/1	1090
9/2	595
10/1	8
10/2	756
10/3	744
11/1	278
12/1	682
12/2	1035
12/3	381
13/1	834
13/2	1035
14/1 (with short)	694(In) 692(Out)
14/2 (short)	2

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.3 %	1964	1964
				Arm 12 Ahead	Inf	98.7 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.1 %	1910	1910
				Arm 10 Ahead	29.20	0.9 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.6 %	2034	2034
				Arm 9 Ahead	Inf	99.4 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	97.3 %	2175	2175
				Arm 9 Ahead	Inf	2.7 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	21.1 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	78.9 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 21: '2028 Peak Construction 6-7AM' (FG16: '28PC_6-7AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	159	733	12	905
	B	1	0	0	2	0	3
	C	265	1	0	227	37	530
	D	709	7	141	1	10	868
	E	4	0	1	36	5	46
	Tot.	979	9	301	999	64	2352

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 21: 2028 Peak Construction 6-7AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	309
1/2 (with short)	596(In) 436(Out)
1/3 (short)	160
2/1 (short)	36
2/2 (with short)	46(In) 10(Out)
3/1 (short)	148
3/2 (with short)	531(In) 383(Out)
3/3	337
4/1	172
4/2 (with short)	358(In) 221(Out)
4/3 (short)	137
5/1	1
5/2	2
6/1	9
7/1	301
8/1	52
8/2	91
8/3	139
9/1	558
9/2	421
10/1	8
10/2	386
10/3	343
11/1	64
12/1	342
12/2	621
12/3	160
13/1	378
13/2	621
14/1 (with short)	170(In) 164(Out)
14/2 (short)	6

Full Input Data And Results

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.9 %	1963	1963
				Arm 12 Ahead	Inf	96.1 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	95.3 %	1909	1909
				Arm 10 Ahead	29.20	4.7 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.6 %	2034	2034
				Arm 9 Ahead	Inf	99.4 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	57.5 %	2175	2175
				Arm 9 Ahead	Inf	42.5 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	4.7 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	95.3 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 22: '2028 Peak Construction 7-8AM' (FG17: '28PC_7-8AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	7	2	363	1202	68	1642
	B	4	0	0	1	2	7
	C	483	14	0	566	87	1150
	D	1480	43	323	1	22	1869
	E	5	1	11	83	5	105
	Tot.	1979	60	697	1853	184	4773

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 22: 2028 Peak Construction 7-8AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	576
1/2 (with short)	1066(In) 694(Out)
1/3 (short)	372
2/1 (short)	83
2/2 (with short)	105(In) 22(Out)
3/1 (short)	366
3/2 (with short)	1137(In) 771(Out)
3/3	732
4/1	456
4/2 (with short)	694(In) 400(Out)
4/3 (short)	294
5/1	4
5/2	3
6/1	60
7/1	697
8/1	116
8/2	273
8/3	295
9/1	1222
9/2	757
10/1	46
10/2	776
10/3	744
11/1	184
12/1	644
12/2	1126
12/3	372
13/1	727
13/2	1126
14/1 (with short)	394(In) 382(Out)
14/2 (short)	12

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	11.8 %	1960	1960
				Arm 12 Ahead	Inf	88.2 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	88.3 %	1908	1908
				Arm 10 Ahead	29.20	11.7 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	3.1 %	2032	2032
				Arm 9 Ahead	Inf	96.9 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	89.8 %	2175	2175
				Arm 9 Ahead	Inf	10.3 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.8 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.2 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 23: '2028 Peak Construction 8-9AM' (FG18: '28PC_8-9AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	8	1	439	1439	23	1910
	B	6	0	1	13	0	20
	C	442	7	0	786	167	1402
	D	1623	52	449	0	52	2176
	E	17	3	20	129	5	174
	Tot.	2096	63	909	2367	247	5682

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 23: 2028 Peak Construction 8-9AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	678
1/2 (with short)	1232(In) 784(Out)
1/3 (short)	448
2/1 (short)	129
2/2 (with short)	174(In) 45(Out)
3/1 (short)	501
3/2 (with short)	1343(In) 842(Out)
3/3	833
4/1	449
4/2 (with short)	953(In) 551(Out)
4/3 (short)	402
5/1	6
5/2	14
6/1	63
7/1	909
8/1	224
8/2	397
8/3	403
9/1	1304
9/2	792
10/1	56
10/2	856
10/3	849
11/1	247
12/1	854
12/2	1384
12/3	449
13/1	983
13/2	1384
14/1 (with short)	494(In) 478(Out)
14/2 (short)	16

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	3.4 %	1964	1964
				Arm 12 Ahead	Inf	96.6 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	89.6 %	1908	1908
				Arm 10 Ahead	29.20	10.4 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	1.6 %	2033	2033
				Arm 9 Ahead	Inf	98.4 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	6.7 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	93.3 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 24: '2028 Peak Construction 3-4PM' (FG19: '28PC_3-4PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1	447	1401	8	1858
	B	5	0	1	10	2	18
	C	410	0	0	553	99	1062
	D	1402	2	631	0	179	2214
	E	11	1	200	130	5	347
	Tot.	1829	4	1279	2094	293	5499

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 24: 2028 Peak Construction 3-4PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	676
1/2 (with short)	1182(In) 733(Out)
1/3 (short)	449
2/1 (short)	130
2/2 (with short)	347(In) 217(Out)
3/1 (short)	633
3/2 (with short)	1422(In) 789(Out)
3/3	792
4/1	410
4/2 (with short)	652(In) 347(Out)
4/3 (short)	305
5/1	5
5/2	13
6/1	4
7/1	1279
8/1	285
8/2	256
8/3	308
9/1	1213
9/2	616
10/1	4
10/2	798
10/3	800
11/1	293
12/1	796
12/2	1168
12/3	450
13/1	926
13/2	1168
14/1 (with short)	667(In) 659(Out)
14/2 (short)	8

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.2 %	1965	1965
				Arm 12 Ahead	Inf	98.8 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.7 %	1910	1910
				Arm 10 Ahead	29.20	0.3 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.0 %	2035	2035
				Arm 9 Ahead	Inf	100.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	23.0 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	77.0 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 25: '2028 Peak Construction 5-6PM' (FG20: '28PC_5-6PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	398	1325	9	1732
	B	21	0	1	19	6	47
	C	334	2	0	420	109	865
	D	1298	6	630	2	193	2129
	E	6	2	311	152	6	477
	Tot.	1659	10	1340	1918	323	5250

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 25: 2028 Peak Construction 5-6PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	640
1/2 (with short)	1092(In) 694(Out)
1/3 (short)	398
2/1 (short)	152
2/2 (with short)	477(In) 325(Out)
3/1 (short)	636
3/2 (with short)	1387(In) 751(Out)
3/3	742
4/1	309
4/2 (with short)	556(In) 292(Out)
4/3 (short)	264
5/1	21
5/2	26
6/1	10
7/1	1340
8/1	314
8/2	168
8/3	274
9/1	1084
9/2	575
10/1	8
10/2	756
10/3	749
11/1	323
12/1	715
12/2	1051
12/3	399
13/1	867
13/2	1051
14/1 (with short)	724(In) 717(Out)
14/2 (short)	7

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.4 %	1964	1964
				Arm 12 Ahead	Inf	98.6 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.1 %	1910	1910
				Arm 10 Ahead	29.20	0.9 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.6 %	2034	2034
				Arm 9 Ahead	Inf	99.4 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	90.8 %	2175	2175
				Arm 9 Ahead	Inf	9.2 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	26.8 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	73.2 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 26: '2034 Reference Case 6-7AM' (FG31: '34RC_6-7AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	163	810	0	974
	B	1	0	0	2	0	3
	C	238	1	0	261	0	500
	D	564	7	182	1	10	764
	E	4	0	0	36	0	40
	Tot.	807	9	345	1110	10	2281

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 26: 2034 Reference Case 6-7AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	344
1/2 (with short)	630(In) 466(Out)
1/3 (short)	164
2/1 (short)	36
2/2 (with short)	40(In) 4(Out)
3/1 (short)	189
3/2 (with short)	510(In) 321(Out)
3/3	254
4/1	148
4/2 (with short)	352(In) 207(Out)
4/3 (short)	145
5/1	1
5/2	2
6/1	9
7/1	345
8/1	10
8/2	119
8/3	145
9/1	472
9/2	335
10/1	8
10/2	324
10/3	255
11/1	10
12/1	403
12/2	671
12/3	164
13/1	439
13/2	671
14/1 (with short)	168(In) 167(Out)
14/2 (short)	1

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.0 %	1965	1965
				Arm 12 Ahead	Inf	100.0 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	96.3 %	1910	1910
				Arm 10 Ahead	29.20	3.7 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.7 %	2034	2034
				Arm 9 Ahead	Inf	99.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	56.0 %	2175	2175
				Arm 9 Ahead	Inf	44.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	4.3 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	95.7 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 27: '2034 Reference Case 7-8AM' (FG32: '34RC_7-8AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	7	3	360	1380	0	1750
	B	4	0	0	2	2	8
	C	492	15	0	683	0	1190
	D	1359	48	448	1	22	1878
	E	5	0	0	83	0	88
	Tot.	1867	66	808	2149	24	4914

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 27: 2034 Reference Case 7-8AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	636
1/2 (with short)	1114(In) 744(Out)
1/3 (short)	370
2/1 (short)	83
2/2 (with short)	88(In) 5(Out)
3/1 (short)	496
3/2 (with short)	1220(In) 724(Out)
3/3	658
4/1	457
4/2 (with short)	733(In) 388(Out)
4/3 (short)	345
5/1	4
5/2	4
6/1	66
7/1	808
8/1	24
8/2	341
8/3	345
9/1	1173
9/2	694
10/1	51
10/2	727
10/3	667
11/1	24
12/1	806
12/2	1260
12/3	370
13/1	889
13/2	1260
14/1 (with short)	375(In) 366(Out)
14/2 (short)	9

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.0 %	1965	1965
				Arm 12 Ahead	Inf	100.0 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	90.3 %	1908	1908
				Arm 10 Ahead	29.20	9.7 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	3.3 %	2032	2032
				Arm 9 Ahead	Inf	96.7 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	87.1 %	2175	2175
				Arm 9 Ahead	Inf	12.9 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.4 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.6 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 28: '2034 Reference Case 8-9AM' (FG33: '34RC_8-9AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	8	8	434	1484	0	1934
	B	7	0	2	13	0	22
	C	513	9	0	855	147	1524
	D	1539	57	588	0	51	2235
	E	17	1	0	131	0	149
	Tot.	2084	75	1024	2483	198	5864

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 28: 2034 Reference Case 8-9AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	690
1/2 (with short)	1244(In) 794(Out)
1/3 (short)	450
2/1 (short)	131
2/2 (with short)	149(In) 18(Out)
3/1 (short)	645
3/2 (with short)	1444(In) 799(Out)
3/3	791
4/1	522
4/2 (with short)	1002(In) 569(Out)
4/3 (short)	433
5/1	7
5/2	15
6/1	75
7/1	1024
8/1	198
8/2	435
8/3	435
9/1	1335
9/2	749
10/1	66
10/2	815
10/3	800
11/1	198
12/1	908
12/2	1444
12/3	452
13/1	1039
13/2	1444
14/1 (with short)	470(In) 461(Out)
14/2 (short)	9

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.0 %	1965	1965
				Arm 12 Ahead	Inf	100.0 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	91.2 %	1909	1909
				Arm 10 Ahead	29.20	8.8 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	1.7 %	2033	2033
				Arm 9 Ahead	Inf	98.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	6.4 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	93.6 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 29: '2034 Reference Case 3-4PM' (FG34: '34RC_3-4PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1	411	1479	0	1892
	B	4	0	2	12	3	21
	C	413	0	0	731	23	1167
	D	1464	3	690	0	197	2354
	E	11	1	244	182	0	438
	Tot.	1893	5	1347	2404	223	5872

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 29: 2034 Reference Case 3-4PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	717
1/2 (with short)	1175(In) 762(Out)
1/3 (short)	413
2/1 (short)	182
2/2 (with short)	438(In) 256(Out)
3/1 (short)	693
3/2 (with short)	1515(In) 822(Out)
3/3	839
4/1	413
4/2 (with short)	754(In) 385(Out)
4/3 (short)	369
5/1	4
5/2	17
6/1	5
7/1	1347
8/1	223
8/2	366
8/3	379
9/1	1250
9/2	643
10/1	5
10/2	833
10/3	840
11/1	223
12/1	900
12/2	1322
12/3	415
13/1	1082
13/2	1322
14/1 (with short)	671(In) 670(Out)
14/2 (short)	1

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.0 %	1965	1965
				Arm 12 Ahead	Inf	100.0 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.6 %	1910	1910
				Arm 10 Ahead	29.20	0.4 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.0 %	2035	2035
				Arm 9 Ahead	Inf	100.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	23.5 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	76.5 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 30: '2034 Reference Case 5-6PM' (FG35: '34RC_5-6PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	486	1394	0	1881
	B	24	0	2	21	5	52
	C	382	3	0	546	95	1026
	D	1403	7	1076	2	144	2632
	E	6	2	0	152	1	161
	Tot.	1815	13	1564	2115	245	5752

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 30: 2034 Reference Case 5-6PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	670
1/2 (with short)	1211(In) 724(Out)
1/3 (short)	487
2/1 (short)	152
2/2 (with short)	161(In) 9(Out)
3/1 (short)	1083
3/2 (with short)	1445(In) 362(Out)
3/3	1187
4/1	385
4/2 (with short)	641(In) 335(Out)
4/3 (short)	306
5/1	24
5/2	28
6/1	13
7/1	1564
8/1	245
8/2	250
8/3	321
9/1	774
9/2	1041
10/1	10
10/2	368
10/3	1188
11/1	245
12/1	795
12/2	1168
12/3	489
13/1	947
13/2	1168
14/1 (with short)	498(In) 497(Out)
14/2 (short)	1

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	0.0 %	1965	1965
				Arm 12 Ahead	Inf	100.0 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.4 %	1910	1910
				Arm 10 Ahead	29.20	0.6 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.8 %	2034	2034
				Arm 9 Ahead	Inf	99.2 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	12.4 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	87.6 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 31: '2034 Operational Forecast 6-7AM' (FG26: '34OP_6-7AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	164	764	22	951
	B	1	0	0	2	0	3
	C	238	1	0	229	0	468
	D	565	7	182	1	10	765
	E	4	0	0	36	0	40
	Tot.	808	9	346	1032	32	2227

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 31: 2034 Operational Forecast 6-7AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	329
1/2 (with short)	622(In) 457(Out)
1/3 (short)	165
2/1 (short)	36
2/2 (with short)	40(In) 4(Out)
3/1 (short)	189
3/2 (with short)	511(In) 322(Out)
3/3	254
4/1	138
4/2 (with short)	330(In) 199(Out)
4/3 (short)	131
5/1	1
5/2	2
6/1	9
7/1	346
8/1	10
8/2	99
8/3	133
9/1	463
9/2	345
10/1	8
10/2	325
10/3	255
11/1	32
12/1	356
12/2	640
12/3	165
13/1	392
13/2	640
14/1 (with short)	169(In) 168(Out)
14/2 (short)	1

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	6.7 %	1962	1962
				Arm 12 Ahead	Inf	93.3 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	96.3 %	1910	1910
				Arm 10 Ahead	29.20	3.7 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.7 %	2034	2034
				Arm 9 Ahead	Inf	99.3 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	49.2 %	2175	2175
				Arm 9 Ahead	Inf	50.8 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	4.3 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	95.7 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 32: '2034 Operational Forecast 7-8AM' (FG27: '34OP_7-8AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	7	3	360	1252	27	1649
	B	4	0	0	1	2	7
	C	499	15	0	581	73	1168
	D	1364	45	364	1	22	1796
	E	5	1	23	83	0	112
	Tot.	1879	64	747	1918	124	4732

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 32: 2034 Operational Forecast 7-8AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	581
1/2 (with short)	1068(In) 698(Out)
1/3 (short)	370
2/1 (short)	83
2/2 (with short)	112(In) 29(Out)
3/1 (short)	409
3/2 (with short)	1130(In) 721(Out)
3/3	666
4/1	464
4/2 (with short)	704(In) 403(Out)
4/3 (short)	301
5/1	4
5/2	3
6/1	64
7/1	747
8/1	97
8/2	281
8/3	302
9/1	1177
9/2	702
10/1	49
10/2	724
10/3	675
11/1	124
12/1	694
12/2	1141
12/3	370
13/1	777
13/2	1141
14/1 (with short)	399(In) 390(Out)
14/2 (short)	9

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	4.6 %	1963	1963
				Arm 12 Ahead	Inf	95.4 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	89.0 %	1908	1908
				Arm 10 Ahead	29.20	11.0 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	3.2 %	2032	2032
				Arm 9 Ahead	Inf	96.8 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	87.6 %	2175	2175
				Arm 9 Ahead	Inf	12.4 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	3.4 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	96.6 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 33: '2034 Operational Forecast 8-9AM' (FG28: '34OP_8-9AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	8	8	437	1447	36	1936
	B	7	0	2	14	0	23
	C	488	9	0	852	173	1522
	D	1548	57	588	0	51	2244
	E	17	1	0	131	0	149
	Tot.	2068	75	1027	2444	260	5874

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 33: 2034 Operational Forecast 8-9AM
Junction: J25 - A12 / Main Road / P&&R	
1/1	689
1/2 (with short)	1247(In) 794(Out)
1/3 (short)	453
2/1 (short)	131
2/2 (with short)	149(In) 18(Out)
3/1 (short)	645
3/2 (with short)	1448(In) 803(Out)
3/3	796
4/1	497
4/2 (with short)	1025(In) 595(Out)
4/3 (short)	430
5/1	7
5/2	16
6/1	75
7/1	1027
8/1	224
8/2	436
8/3	432
9/1	1314
9/2	754
10/1	66
10/2	819
10/3	805
11/1	260
12/1	871
12/2	1442
12/3	455
13/1	1002
13/2	1442
14/1 (with short)	473(In) 464(Out)
14/2 (short)	9

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	5.2 %	1963	1963
				Arm 12 Ahead	Inf	94.8 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	91.2 %	1909	1909
				Arm 10 Ahead	29.20	8.8 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	1.8 %	2033	2033
				Arm 9 Ahead	Inf	98.2 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	6.3 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	93.7 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 34: '2034 Operational Forecast 3-4PM' (FG29: '34OP_3-4PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1	411	1452	8	1873
	B	4	0	2	10	5	21
	C	411	0	0	612	139	1162
	D	1470	3	690	0	191	2354
	E	11	1	244	221	0	477
	Tot.	1897	5	1347	2295	343	5887

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 34: 2034 Operational Forecast 3-4PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	706
1/2 (with short)	1167(In) 754(Out)
1/3 (short)	413
2/1 (short)	221
2/2 (with short)	477(In) 256(Out)
3/1 (short)	693
3/2 (with short)	1515(In) 822(Out)
3/3	839
4/1	411
4/2 (with short)	751(In) 413(Out)
4/3 (short)	338
5/1	4
5/2	17
6/1	5
7/1	1347
8/1	335
8/2	281
8/3	343
9/1	1248
9/2	649
10/1	5
10/2	833
10/3	840
11/1	343
12/1	838
12/2	1236
12/3	415
13/1	1059
13/2	1236
14/1 (with short)	671(In) 670(Out)
14/2 (short)	1

Full Input Data And Results

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	1.1 %	1965	1965
				Arm 12 Ahead	Inf	98.9 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.6 %	1910	1910
				Arm 10 Ahead	29.20	0.4 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.0 %	2035	2035
				Arm 9 Ahead	Inf	100.0 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	22.7 %	2066	2066

(Internal 2)				Arm 9 Right	31.20	77.3 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 35: '2034 Operational Forecast 5-6PM' (FG30: '34OP_5-6PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1	484	1386	17	1888
	B	24	0	2	21	5	52
	C	382	3	0	540	103	1028
	D	1407	7	1058	2	144	2618
	E	6	2	2	152	1	163
	Tot.	1819	13	1546	2101	270	5749

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 35: 2034 Operational Forecast 5-6PM
Junction: J25 - A12 / Main Road / P&&R	
1/1	675
1/2 (with short)	1213(In) 728(Out)
1/3 (short)	485
2/1 (short)	152
2/2 (with short)	163(In) 11(Out)
3/1 (short)	1065
3/2 (with short)	1533(In) 468(Out)
3/3	1085
4/1	385
4/2 (with short)	643(In) 331(Out)
4/3 (short)	312
5/1	24
5/2	28
6/1	13
7/1	1546
8/1	253
8/2	236
8/3	329
9/1	880
9/2	939
10/1	10
10/2	474
10/3	1086
11/1	270
12/1	776
12/2	1173
12/3	487
13/1	928
13/2	1173
14/1 (with short)	498(In) 497(Out)
14/2 (short)	1

Lane Saturation Flows

Junction: J25 - A12 / Main Road / P&&R

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.50	0.00	Y	Arm 11 Left	71.50	2.5 %	1964	1964
				Arm 12 Ahead	Inf	97.5 %		
1/2 (A12 North)	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
1/3 (A12 North)	3.60	0.00	N	Arm 12 Ahead	Inf	100.0 %	2115	2115
2/1 (Main Road (E))	3.85	0.00	Y	Arm 13 Left	17.80	100.0 %	1845	1845
2/2 (Main Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						950	950
3/1 (A12 South)	3.70	0.00	Y	Arm 7 Left	38.50	99.3 %	1910	1910
				Arm 10 Ahead	29.20	0.7 %		
3/2 (A12 South)	3.70	0.00	N	Arm 10 Ahead	56.10	100.0 %	2070	2070
3/3 (A12 South)	3.70	0.00	N	Arm 10 Ahead	77.10	100.0 %	2084	2084
4/1 (A1214 Main Road (W))	4.20	0.00	Y	Arm 6 Left	31.40	0.8 %	2034	2034
				Arm 9 Ahead	Inf	99.2 %		
4/2 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
				Arm 9 Ahead	Inf	0.0 %		
4/3 (A1214 Main Road (W))	4.20	0.00	N	Arm 8 Ahead	Inf	100.0 %	2175	2175
5/1 (Park and Ride Exit)	3.80	0.00	Y	Arm 9 Left	Inf	100.0 %	1995	1995
5/2 (Park and Ride Exit)	3.70	0.00	N	Arm 8 Ahead	Inf	100.0 %	2125	2125
6/1 (Park and Ride Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A1214 Main Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Internal 1)	4.70	0.00	Y	Arm 11 Ahead	32.60	100.0 %	1993	1993
8/2 (Internal 1)	4.80	0.00	N	Arm 12 Right	32.60	100.0 %	2137	2137
8/3 (Internal 1)	4.70	0.00	N	Arm 12 Right	32.60	100.0 %	2127	2127
9/1 (A12 North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (A12 North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
10/1 (Internal 2)	4.10	0.00	Y	Arm 6 Ahead	31.20	100.0 %	1932	1932
10/2 (Internal 2)	4.10	0.00	N	Arm 9 Right	31.20	100.0 %	2066	2066
10/3	4.10	0.00	N	Arm 8 Right	31.20	13.5 %	2066	2066

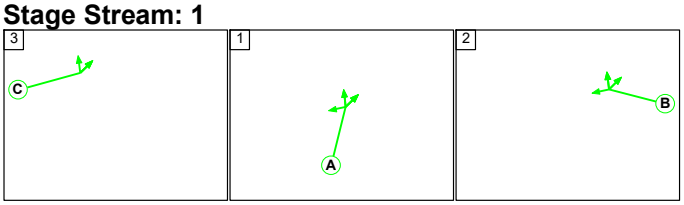
Full Input Data And Results

(Internal 2)				Arm 9 Right	31.20	86.5 %		
11/1 (Main Road (E) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Internal 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Internal 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Internal 4 Lane 3)	Infinite Saturation Flow						Inf	Inf
13/1 (A12 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
13/2 (A12 South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
14/1 (Internal 3 Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
14/2 (Internal 3 Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800

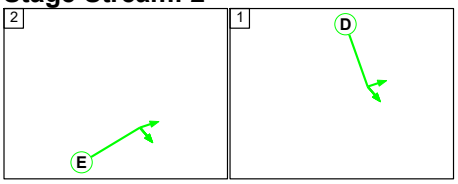
Scenario 1: '2019 Base Year 6-7AM' (FG1: '17BY_6-7AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

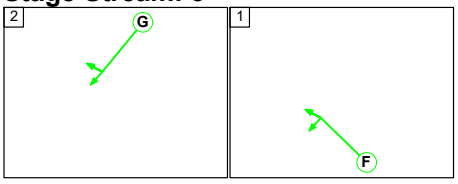
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	21	7	13
Change Point	56	26	38

Stage Stream: 2

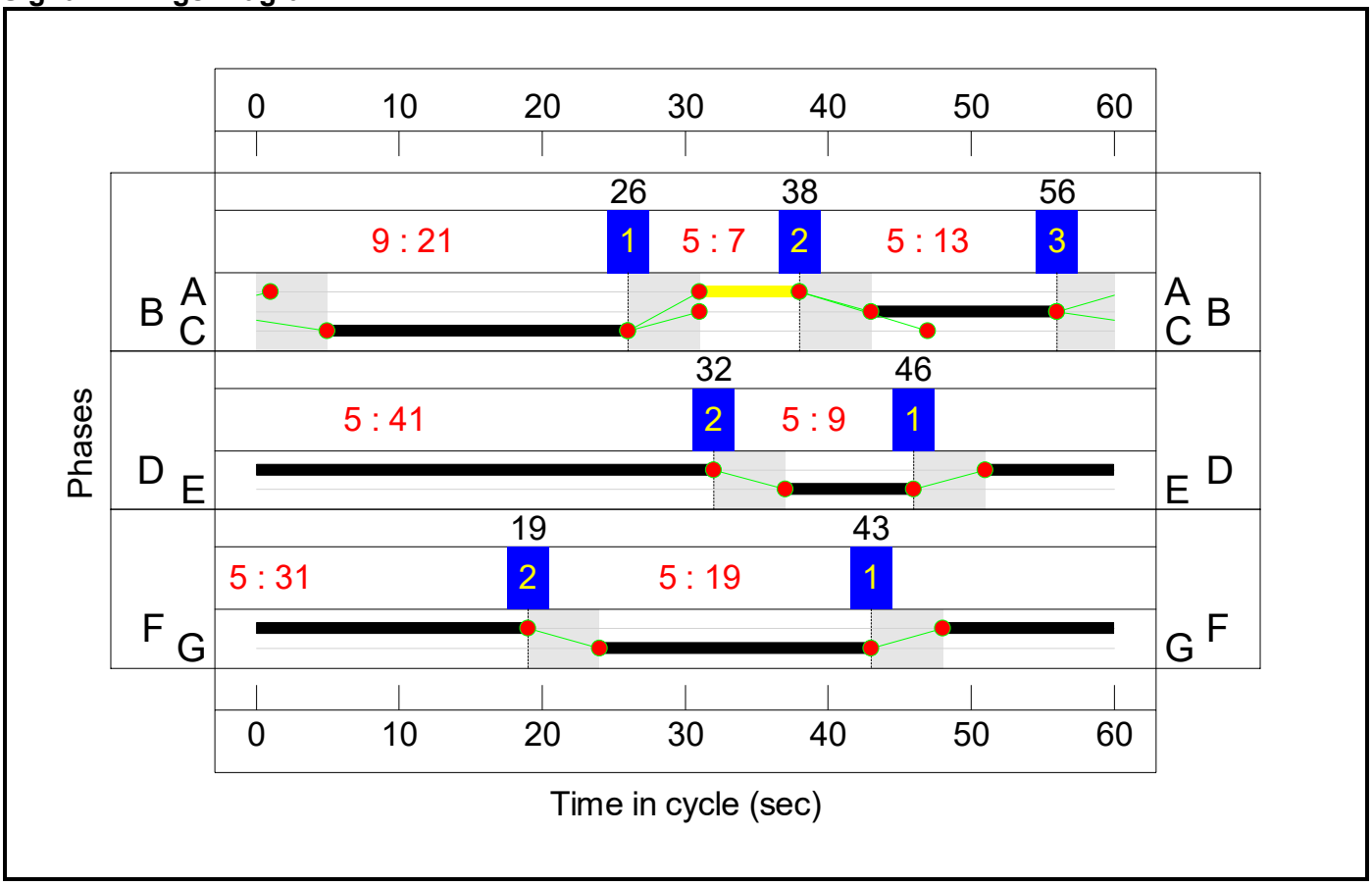
Stage	2	1
Duration	9	41
Change Point	32	46

Full Input Data And Results

Stage Stream: 3

Stage	2	1
Duration	19	31
Change Point	19	43

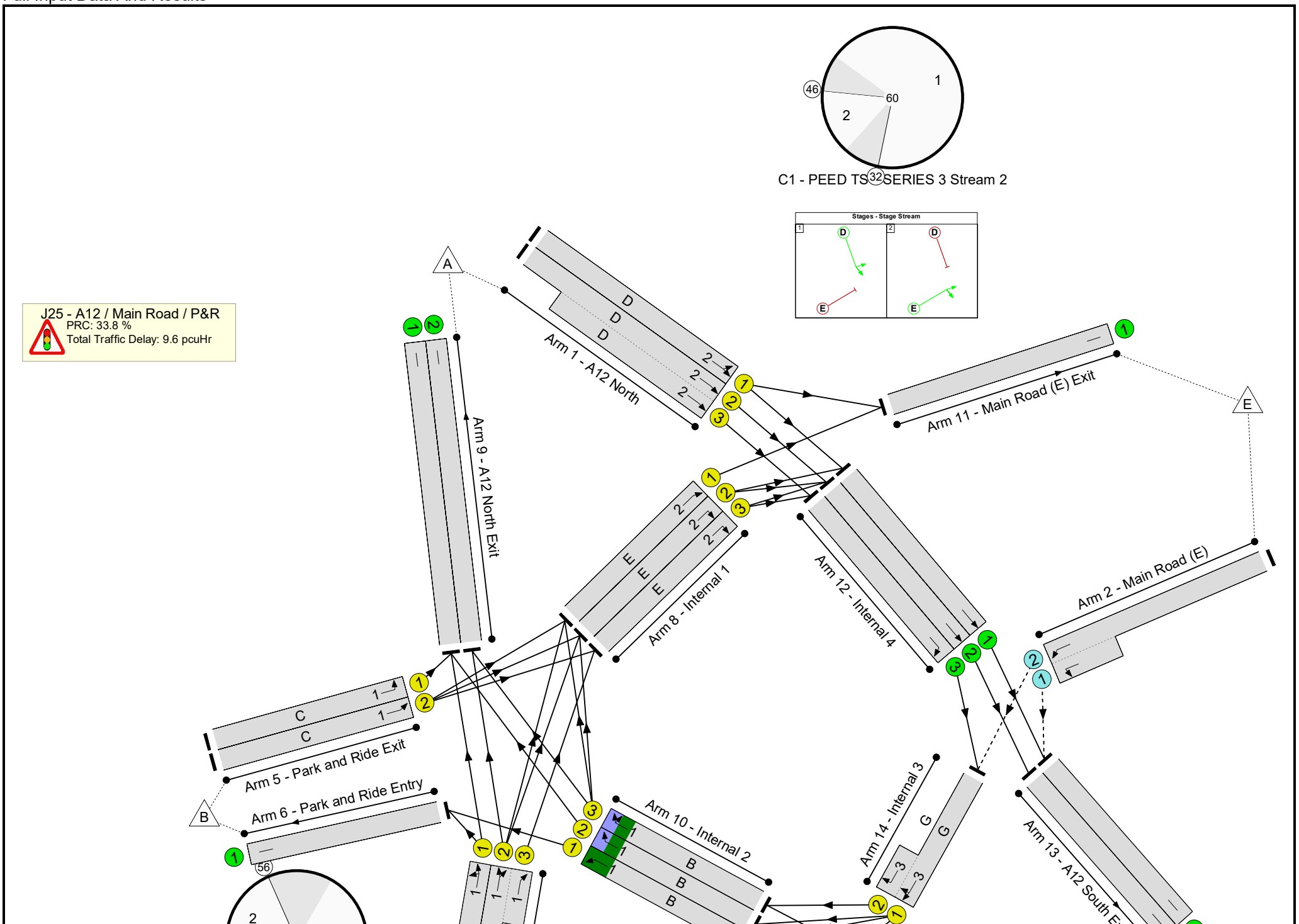
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	41	-	270	1965	1375	19.6%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	41	-	543	2105:2115	1320+481	30.2 : 30.2%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	40	950:1845	72+645	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	31	-	412	2070:1910	1058+533	25.9 : 25.9%
3/3	A12 South Ahead	U	3	N/A	F		1	31	-	213	2084	1111	19.2%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	123	2034	271	45.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	315	2175:2175	281+187	67.3 : 67.3%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	21	-	0	1995	732	0.0%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	21	-	2	2125	779	0.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	7	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	9	-	44	1993	332	13.2%
8/2	Internal 1 Right	U	2	N/A	E		1	9	-	99	2137	356	27.8%
8/3	Internal 1 Right	U	2	N/A	E		1	9	-	128	2127	354	36.1%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	260	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	6	1932	966	0.6%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	277	2066	1033	26.8%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	214	2066	1033	20.7%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	45	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	19	-	149	1800:1800	600+4	24.7 : 24.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**80**	**0**	**0**	**6.4**	**3.1**	**0.0**	**9.6**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**80**	**0**	**0**	**6.4**	**3.1**	**0.0**	**9.6**	**-**	**-**	**-**	**-**
1/1	270	270	-	-	-	0.2	0.1	-	0.4	4.8	1.5	0.1	1.6
1/2+1/3	543	543	-	-	-	0.5	0.2	-	0.7	4.7	2.4	0.2	2.6
2/2+2/1	40	40	80	0	0	0.0	0.0	-	0.0	2.7	0.0	0.0	0.0
3/2+3/1	412	412	-	-	-	0.8	0.2	-	1.0	8.9	2.4	0.2	2.6
3/3	213	213	-	-	-	0.4	0.1	-	0.5	9.3	1.8	0.1	2.0
4/1	123	123	-	-	-	0.8	0.4	-	1.2	36.1	1.9	0.4	2.3
4/2+4/3	315	315	-	-	-	2.1	1.0	-	3.1	36.0	2.9	1.0	4.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	14.7	0.0	0.0	0.0
6/1	7	7	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	44	44	-	-	-	0.1	0.1	-	0.2	15.3	0.2	0.1	0.3
8/2	99	99	-	-	-	0.0	0.2	-	0.2	8.6	0.2	0.2	0.4
8/3	128	128	-	-	-	0.0	0.3	-	0.3	9.3	0.7	0.3	0.9
9/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	260	260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	6	6	-	-	-	0.0	0.0	-	0.0	6.9	0.0	0.0	0.0
10/2	277	277	-	-	-	0.4	0.2	-	0.6	7.5	1.0	0.2	1.2
10/3	214	214	-	-	-	0.3	0.1	-	0.4	7.3	0.7	0.1	0.9
11/1	45	45	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	318	318	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	149	149	-	-	-	0.6	0.2	-	0.7	17.7	1.9	0.2	2.0

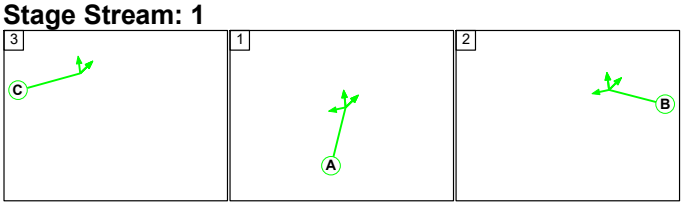
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	33.8	Total Delay for Signalled Lanes (pcuHr):	5.41	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	149.3	Total Delay for Signalled Lanes (pcuHr):	1.81	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	247.6	Total Delay for Signalled Lanes (pcuHr):	2.30	Cycle Time (s):	60
	PRC Over All Lanes (%):	33.8	Total Delay Over All Lanes(pcuHr):	9.56		

Full Input Data And Results

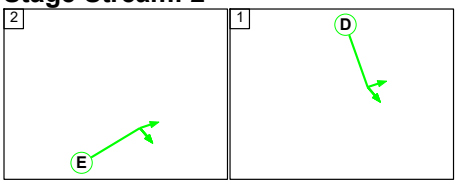
Scenario 2: '2019 Base Year 7-8AM' (FG2: '17BY_7-8AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

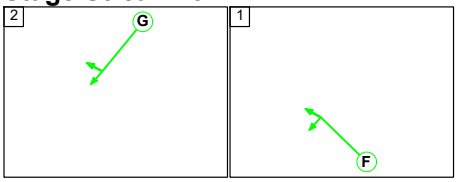
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	15	19
Change Point	10	26	46

Stage Stream: 2

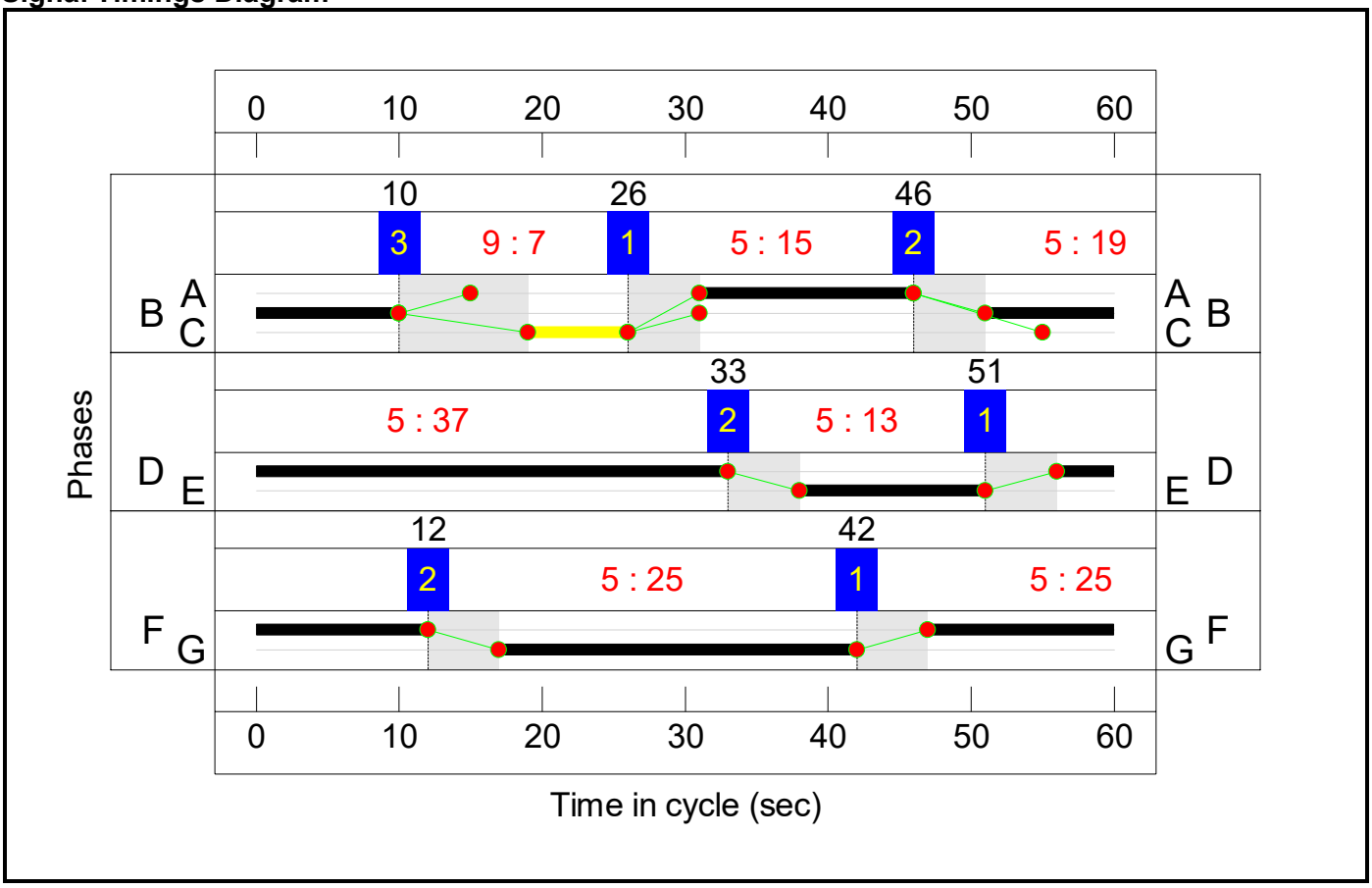
Stage	2	1
Duration	13	37
Change Point	33	51

Stage Stream: 3

Stage	2	1
Duration	25	25
Change Point	12	42

Full Input Data And Results

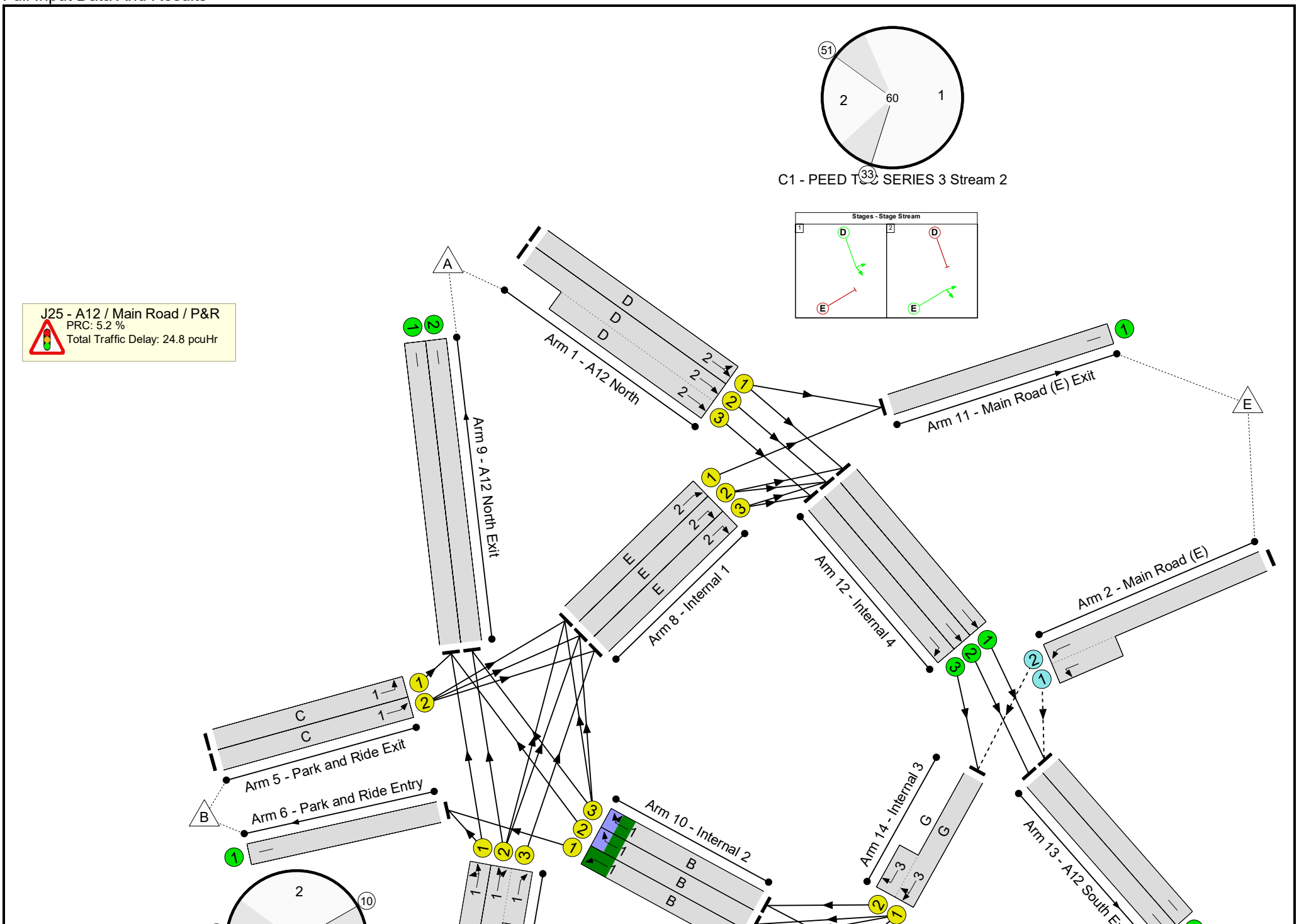
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.5%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.5%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	488	1965	1244	39.2%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	965	2105:2115	1178+667	52.3 : 52.3%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	83	950:1845	37+578	13.5 : 13.5%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	929	2070:1908	897+497	66.7 : 66.7%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	529	2084	903	58.6%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	15	-	421	2032	542	77.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	15	-	670	2175:2175	442+341	85.5 : 85.5%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	3	1995	266	1.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	4	2125	283	1.4%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	632	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	105	1993	465	22.6%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	271	2137	499	54.3%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	292	2127	496	58.8%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1009	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	19	-	41	1932	1095	3.7%
10/2	Internal 2 Right	U	1	N/A	B		1	19	-	598	2066	1171	51.1%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	19	-	541	2066	1171	46.2%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	107	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1044	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	349	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	699	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1044	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	25	-	354	1800:1800	772+27	44.3 : 44.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**166**	**0**	**0**	**14.8**	**10.0**	**0.0**	**24.8**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**166**	**0**	**0**	**14.8**	**10.0**	**0.0**	**24.8**	**-**	**-**	**-**	**-**
1/1	488	488	-	-	-	0.7	0.3	-	1.1	7.7	3.9	0.3	4.3
1/2+1/3	965	965	-	-	-	1.4	0.5	-	2.0	7.4	5.3	0.5	5.9
2/2+2/1	83	83	166	0	0	0.0	0.1	-	0.1	3.4	0.0	0.1	0.1
3/2+3/1	929	929	-	-	-	3.3	1.0	-	4.3	16.7	7.8	1.0	8.8
3/3	529	529	-	-	-	1.9	0.7	-	2.6	17.7	6.6	0.7	7.3
4/1	421	421	-	-	-	2.4	1.7	-	4.1	34.8	6.4	1.7	8.1
4/2+4/3	670	670	-	-	-	3.6	2.8	-	6.4	34.6	7.2	2.8	10.0
5/1	3	3	-	-	-	0.0	0.0	-	0.0	29.8	0.0	0.0	0.0
5/2	4	4	-	-	-	0.0	0.0	-	0.0	29.4	0.1	0.0	0.1
6/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	105	105	-	-	-	0.2	0.1	-	0.4	12.0	0.6	0.1	0.8
8/2	271	271	-	-	-	0.2	0.6	-	0.8	10.0	1.3	0.6	1.9
8/3	292	292	-	-	-	0.2	0.7	-	0.9	11.0	2.6	0.7	3.3
9/1	1009	1009	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	41	41	-	-	-	0.0	0.0	-	0.0	1.7	0.0	0.0	0.0
10/2	598	598	-	-	-	0.0	0.5	-	0.5	3.1	0.0	0.5	0.5
10/3	541	541	-	-	-	0.0	0.4	-	0.5	3.0	0.1	0.4	0.5
11/1	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1044	1044	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	349	349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	699	699	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1044	1044	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	354	354	-	-	-	0.8	0.4	-	1.2	11.9	4.1	0.4	4.5

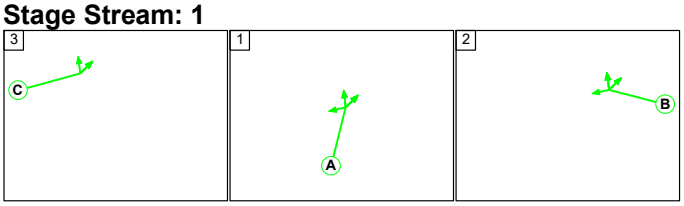
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	5.2	Total Delay for Signalled Lanes (pcuHr):	11.58	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	53.0	Total Delay for Signalled Lanes (pcuHr):	5.04	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	35.0	Total Delay for Signalled Lanes (pcuHr):	8.09	Cycle Time (s):	60
	PRC Over All Lanes (%):	5.2	Total Delay Over All Lanes(pcuHr):	24.79		

Full Input Data And Results

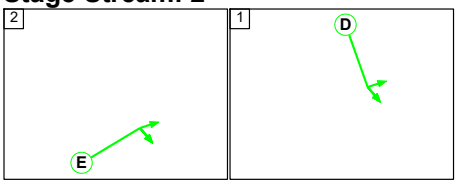
Scenario 3: '2019 Base Year 8-9AM' (FG3: '17BY_8-9AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

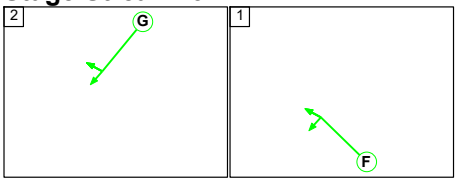
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	21	13
Change Point	39	55	21

Stage Stream: 2

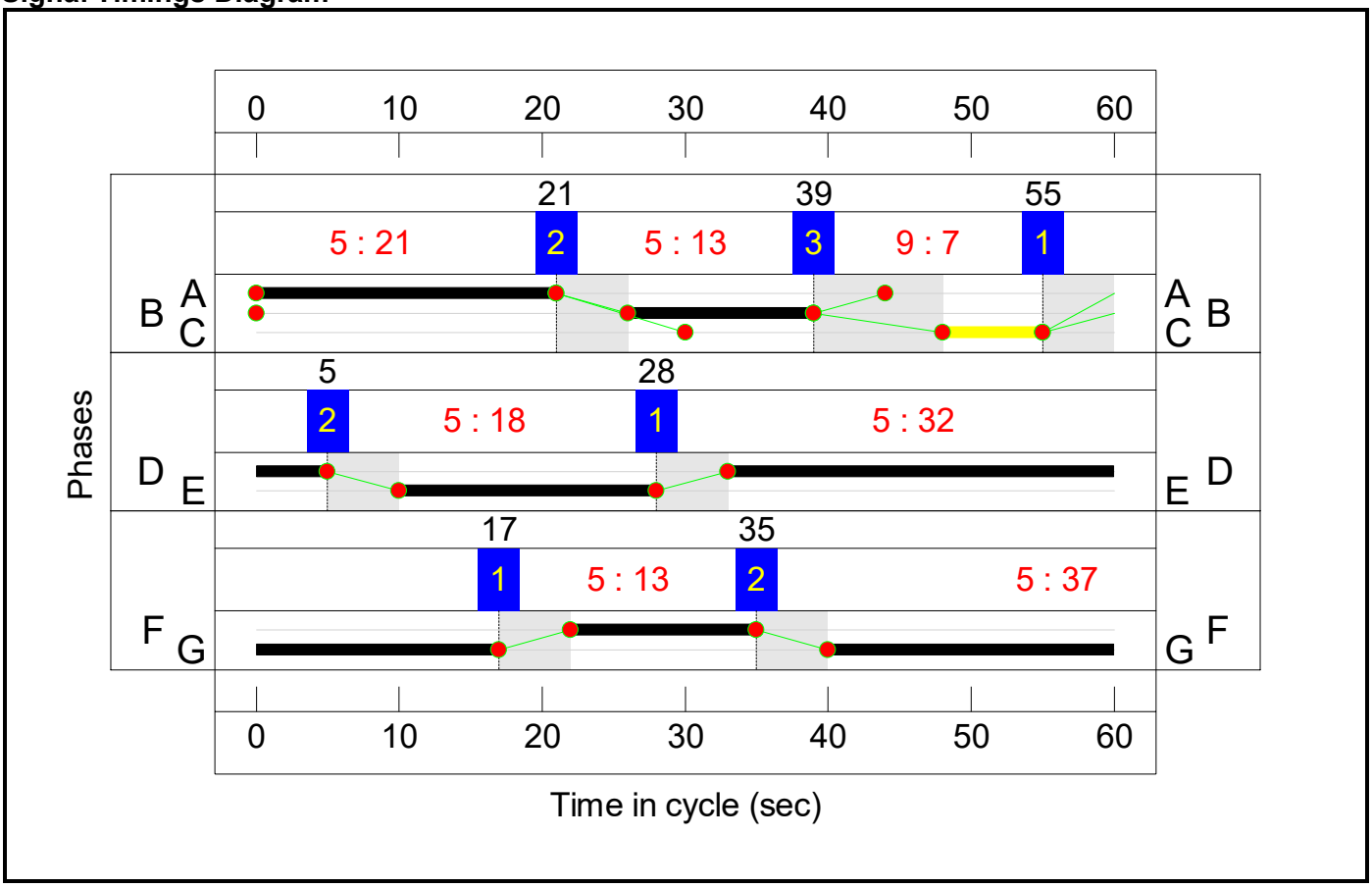
Stage	2	1
Duration	18	32
Change Point	5	28

Stage Stream: 3

Stage	2	1
Duration	37	13
Change Point	35	17

Full Input Data And Results

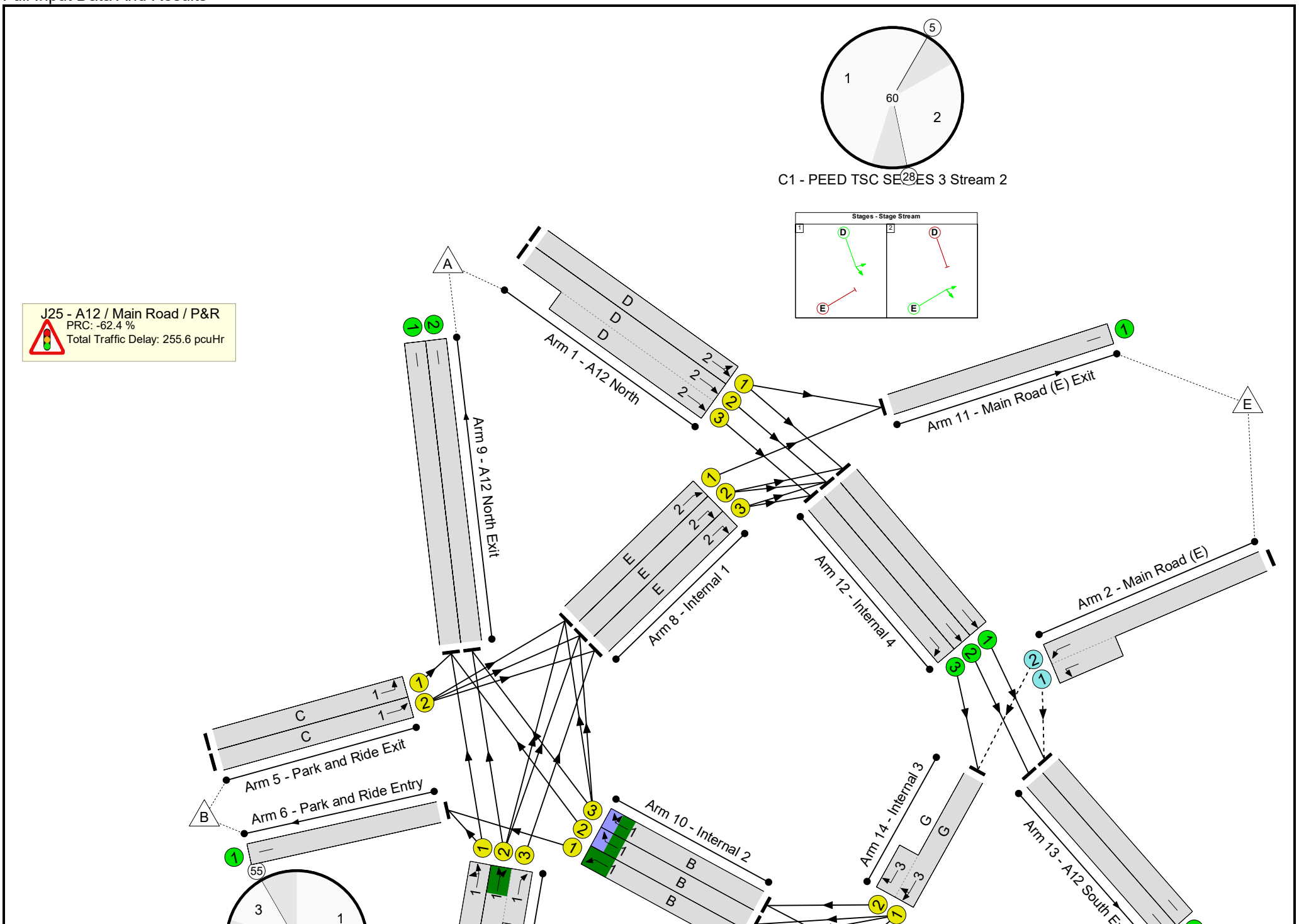
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**146.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**146.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	32	-	601	1965	1081	55.6%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	32	-	1115	2105:2115	1067+595	67.1 : 67.1%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	146	950:1845	81+543	23.4 : 23.4%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	13	-	1136	2070:1908	483+432	146.2 : 99.6%
3/3	A12 South Ahead	U	3	N/A	F		1	13	-	683	2084	486	140.5%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	21	-	386	2033	745	51.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	21	-	838	2175:2175	513+432	88.7 : 88.7%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	5	1995	266	1.9%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	14	2125	283	4.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	18	-	141	1993	631	20.3%
8/2	Internal 1 Right	U	2	N/A	E		1	18	-	371	2137	677	54.8%
8/3	Internal 1 Right	U	2	N/A	E		1	18	-	384	2127	674	57.0%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1104	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	50	1932	902	5.5%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	719	2066	964	51.4%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	695	2066	964	51.7%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	148	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1284	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	400	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	907	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1284	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	37	-	419	1800:1800	1125+33	36.2 : 36.2%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**292**	**0**	**0**	**32.7**	**222.9**	**0.0**	**255.6**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**292**	**0**	**0**	**32.7**	**222.9**	**0.0**	**255.6**	**-**	**-**	**-**	**-**
1/1	601	601	-	-	-	1.5	0.6	-	2.1	12.5	6.3	0.6	7.0
1/2+1/3	1115	1115	-	-	-	2.7	1.0	-	3.7	11.9	8.0	1.0	9.0
2/2+2/1	146	146	292	0	0	0.0	0.2	-	0.2	4.0	0.1	0.2	0.2
3/2+3/1	1136	913	-	-	-	12.8	114.0	-	126.8	401.8	19.0	114.0	133.0
3/3	683	486	-	-	-	9.3	100.1	-	109.3	576.3	14.7	100.1	114.7
4/1	386	386	-	-	-	1.6	0.5	-	2.1	19.8	4.9	0.5	5.5
4/2+4/3	838	838	-	-	-	3.9	3.7	-	7.5	32.3	9.5	3.7	13.2
5/1	5	5	-	-	-	0.0	0.0	-	0.0	29.9	0.1	0.0	0.1
5/2	14	14	-	-	-	0.1	0.0	-	0.1	29.6	0.2	0.0	0.2
6/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	128	128	-	-	-	0.3	0.1	-	0.4	11.8	1.2	0.1	1.3
8/2	371	371	-	-	-	0.3	0.6	-	0.9	8.6	4.4	0.6	5.0
8/3	384	384	-	-	-	0.3	0.7	-	0.9	8.8	4.4	0.7	5.0
9/1	881	881	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	50	50	-	-	-	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
10/2	496	496	-	-	-	0.0	0.5	-	0.6	4.1	0.1	0.5	0.6
10/3	498	498	-	-	-	0.0	0.5	-	0.6	4.1	0.1	0.5	0.6
11/1	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1284	1284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	907	907	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1284	1284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	419	419	-	-	-	0.0	0.3	-	0.3	2.7	5.5	0.3	5.7

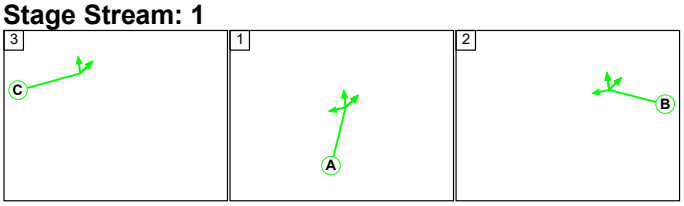
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	1.5	Total Delay for Signalled Lanes (pcuHr):	10.98	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	34.1	Total Delay for Signalled Lanes (pcuHr):	8.01	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-62.4	Total Delay for Signalled Lanes (pcuHr):	236.42	Cycle Time (s):	60
	PRC Over All Lanes (%):	-62.4	Total Delay Over All Lanes(pcuHr):	255.58		

Full Input Data And Results

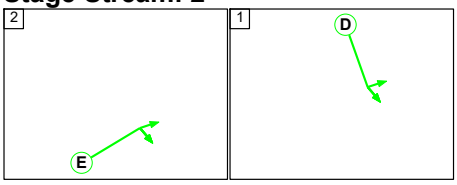
Scenario 4: '2019 Base Year 3-4PM' (FG4: '17BY_3-4PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

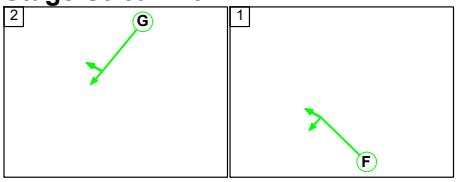
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	10	39
Change Point	21	37	52

Stage Stream: 2

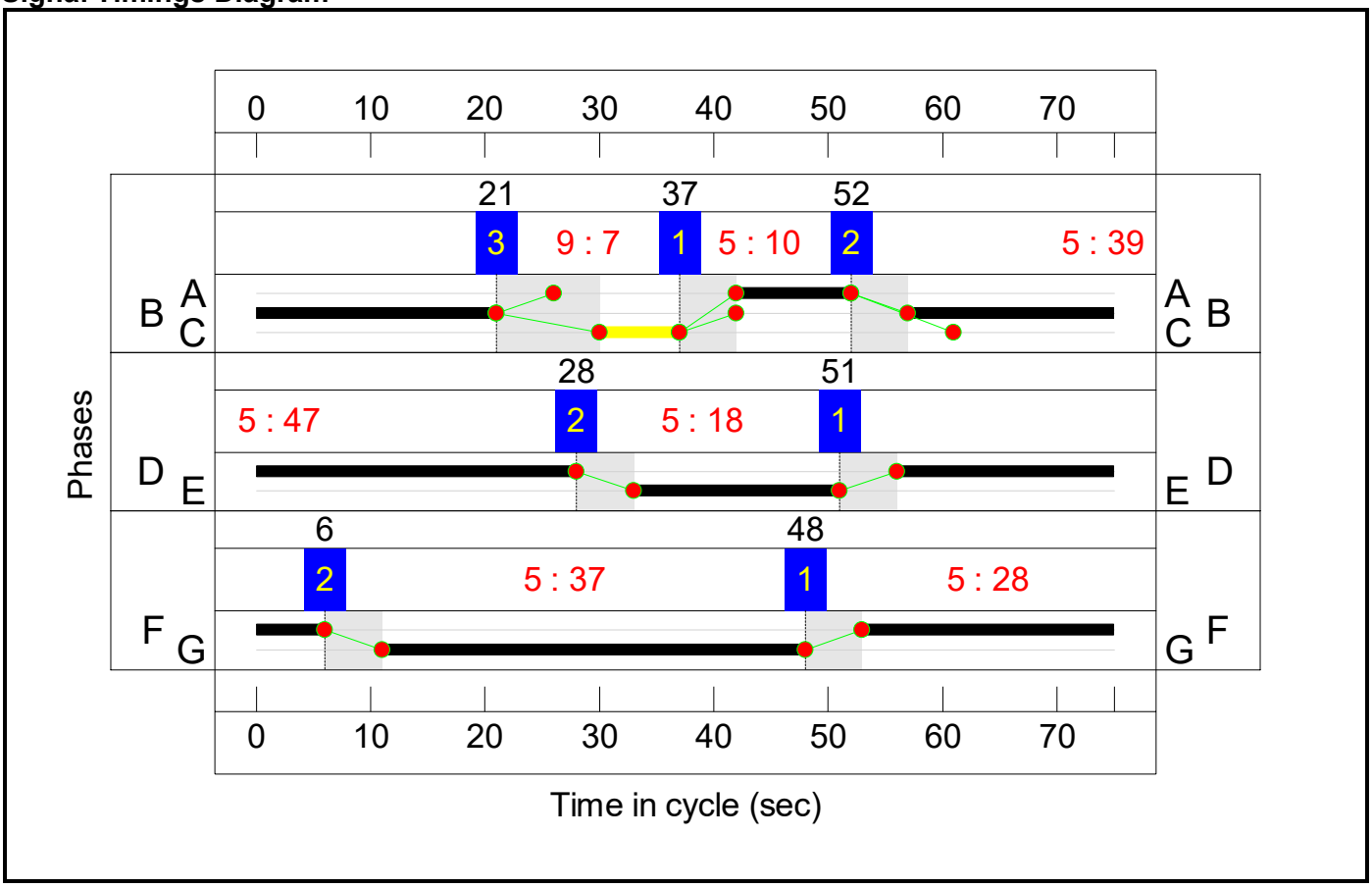
Stage	2	1
Duration	18	47
Change Point	28	51

Stage Stream: 3

Stage	2	1
Duration	37	28
Change Point	6	48

Full Input Data And Results

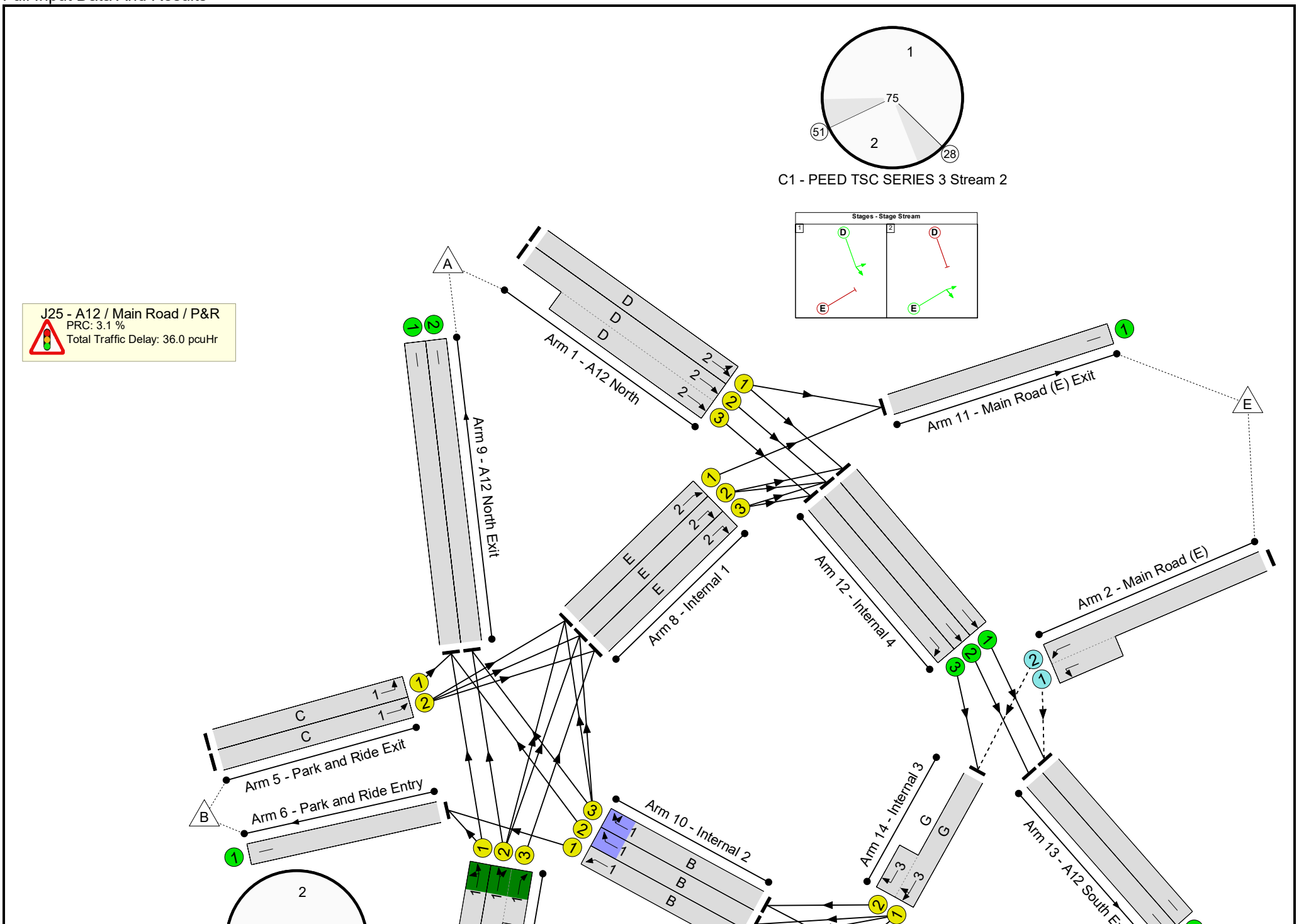
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	47	-	527	1964	1257	41.9%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	47	-	995	2105:2115	1110+683	55.5 : 55.5%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	229	950:1845	302+376	33.8 : 33.8%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	28	-	1302	2070:1910	790+701	87.3 : 87.3%
3/3	A12 South Ahead	U	3	N/A	F		1	28	-	650	2084	806	80.7%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	10	-	373	2035	678	55.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	10	-	641	2175:2175	476+440	69.9 : 69.9%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	4	1995	213	1.9%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	9	2125	227	4.0%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1079	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	18	-	156	1993	505	30.9%
8/2	Internal 1 Right	U	2	N/A	E		1	18	-	288	2137	541	53.2%
8/3	Internal 1 Right	U	2	N/A	E		1	18	-	314	2127	539	58.3%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1075	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	39	-	2	1932	1030	0.2%
10/2	Internal 2 Right	U	1	N/A	B		1	39	-	698	2066	1102	63.3%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	39	-	654	2066	1102	59.4%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	168	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1074	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	786	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1074	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	37	-	481	1800:1800	912+8	52.3 : 52.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**458**	**0**	**0**	**23.9**	**12.0**	**0.0**	**36.0**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**458**	**0**	**0**	**23.9**	**12.0**	**0.0**	**36.0**	**-**	**-**	**-**	**-**
1/1	527	527	-	-	-	1.0	0.4	-	1.3	9.1	5.3	0.4	5.6
1/2+1/3	995	995	-	-	-	1.8	0.6	-	2.4	8.8	6.5	0.6	7.1
2/2+2/1	229	229	458	0	0	0.1	0.3	-	0.3	4.8	0.5	0.3	0.7
3/2+3/1	1302	1302	-	-	-	7.6	3.3	-	10.9	30.2	13.2	3.3	16.6
3/3	650	650	-	-	-	3.7	2.0	-	5.7	31.8	11.9	2.0	13.9
4/1	373	373	-	-	-	2.1	0.6	-	2.7	26.3	6.3	0.6	6.9
4/2+4/3	641	641	-	-	-	3.5	1.2	-	4.7	26.3	7.3	1.2	8.4
5/1	4	4	-	-	-	0.0	0.0	-	0.0	39.0	0.1	0.0	0.1
5/2	9	9	-	-	-	0.1	0.0	-	0.1	38.6	0.2	0.0	0.2
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1079	1079	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	156	156	-	-	-	1.1	0.2	-	1.3	29.9	2.6	0.2	2.8
8/2	288	288	-	-	-	0.4	0.6	-	1.0	12.6	0.8	0.6	1.4
8/3	314	314	-	-	-	0.5	0.7	-	1.2	13.5	1.8	0.7	2.5
9/1	1075	1075	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	2	2	-	-	-	0.0	0.0	-	0.0	1.8	0.0	0.0	0.0
10/2	698	698	-	-	-	0.0	0.9	-	0.9	4.7	0.1	0.9	1.0
10/3	654	654	-	-	-	0.0	0.7	-	0.8	4.1	0.1	0.7	0.8
11/1	168	168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1074	1074	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1074	1074	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	481	481	-	-	-	2.0	0.5	-	2.6	19.3	8.5	0.5	9.1

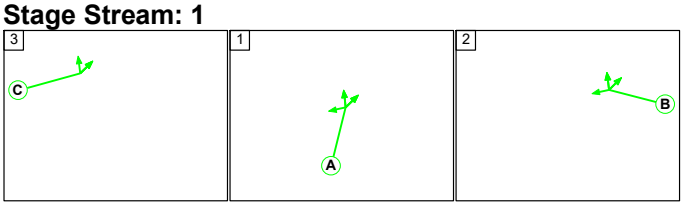
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	28.7	Total Delay for Signalled Lanes (pcuHr):	9.20	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	54.4	Total Delay for Signalled Lanes (pcuHr):	7.23	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	3.1	Total Delay for Signalled Lanes (pcuHr):	19.22	Cycle Time (s):	75
	PRC Over All Lanes (%):	3.1	Total Delay Over All Lanes(pcuHr):	35.96		

Full Input Data And Results

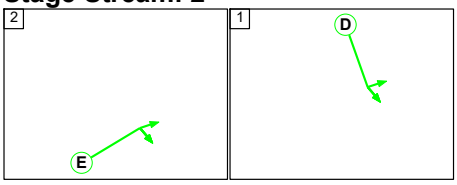
Scenario 5: '2019 Base Year 5-6PM' (FG5: '17BY_5-6PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

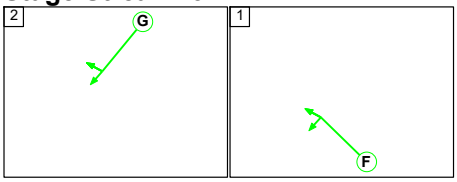
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	9	7	40
Change Point	24	42	54

Stage Stream: 2

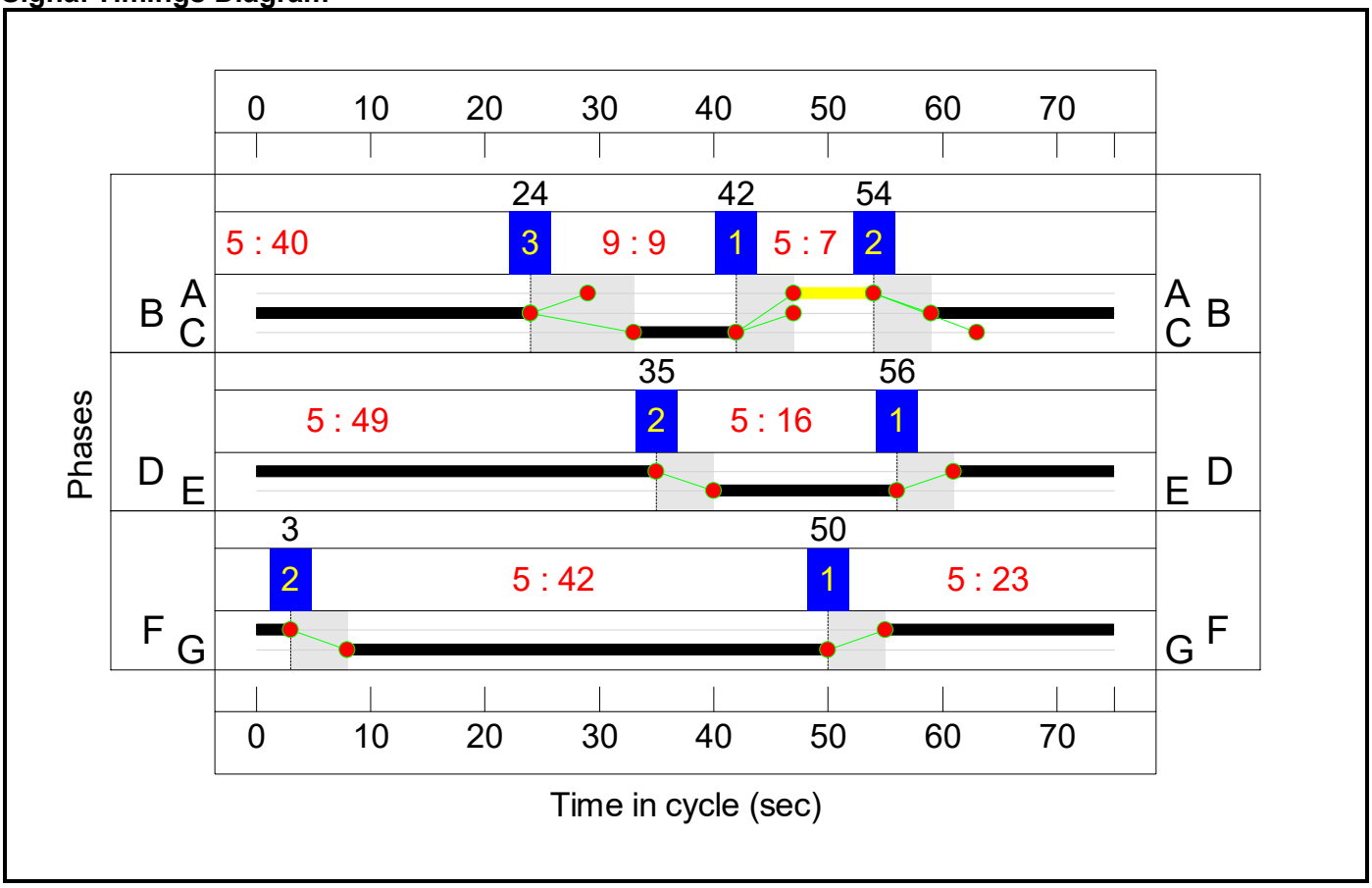
Stage	2	1
Duration	16	49
Change Point	35	56

Stage Stream: 3

Stage	2	1
Duration	42	23
Change Point	3	50

Full Input Data And Results

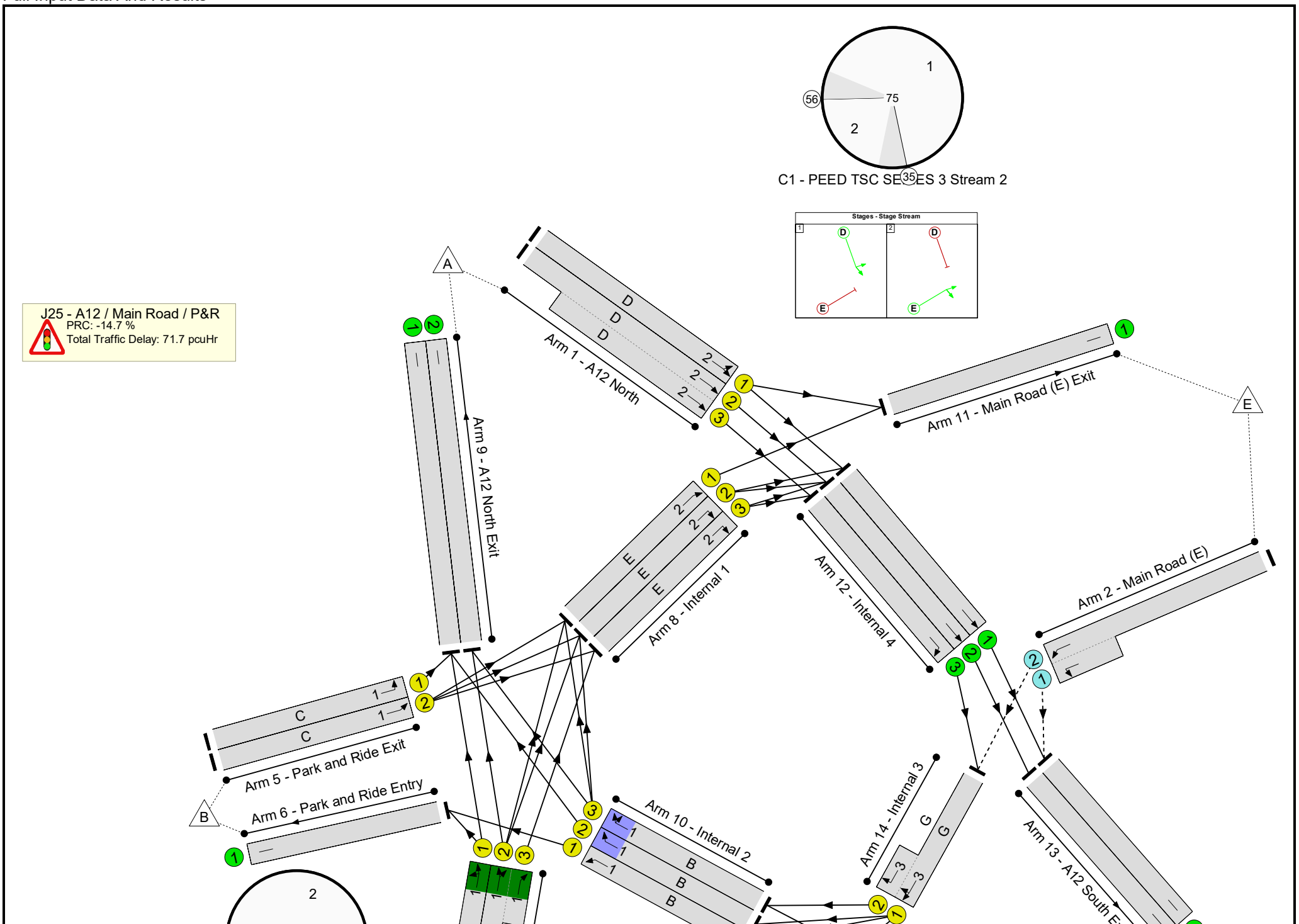
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	49	-	472	1964	1309	36.0%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	49	-	947	2105:2115	1134+747	50.3 : 50.3%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	288	950:1845	341+355	41.4 : 41.4%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	23	-	1314	2070:1910	662+611	103.1 : 103.2%
3/3	A12 South Ahead	U	3	N/A	F		1	23	-	648	2084	667	97.2%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	302	2034	597	50.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	554	2175:2175	430+400	66.7 : 66.7%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	9	-	20	1995	266	7.5%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	9	-	22	2125	283	7.8%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1133	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	16	-	211	1993	452	46.7%
8/2	Internal 1 Right	U	2	N/A	E		1	16	-	200	2137	484	41.3%
8/3	Internal 1 Right	U	2	N/A	E		1	16	-	281	2127	482	58.3%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1008	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	534	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	40	-	8	1932	1056	0.7%
10/2	Internal 2 Right	U	1	N/A	B		1	40	-	688	2066	1129	59.1%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	40	-	650	2066	1129	57.6%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	565	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	952	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	712	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	952	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	42	-	517	1800:1800	1032+4	49.9 : 49.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**576**	**0**	**0**	**25.9**	**45.8**	**0.0**	**71.7**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**576**	**0**	**0**	**25.9**	**45.8**	**0.0**	**71.7**	**-**	**-**	**-**	**-**
1/1	472	472	-	-	-	0.7	0.3	-	1.0	7.6	4.2	0.3	4.5
1/2+1/3	947	947	-	-	-	1.4	0.5	-	1.9	7.4	5.4	0.5	5.9
2/2+2/1	288	288	576	0	0	0.1	0.4	-	0.4	5.2	0.6	0.4	0.9
3/2+3/1	1314	1274	-	-	-	10.2	30.8	-	41.1	112.5	14.2	30.8	45.1
3/3	648	648	-	-	-	4.5	8.9	-	13.4	74.4	13.3	8.9	22.2
4/1	302	302	-	-	-	1.8	0.5	-	2.4	28.1	5.2	0.5	5.7
4/2+4/3	554	554	-	-	-	3.3	1.0	-	4.3	28.0	5.9	1.0	6.9
5/1	20	20	-	-	-	0.2	0.0	-	0.2	35.9	0.4	0.0	0.4
5/2	22	22	-	-	-	0.2	0.0	-	0.2	35.5	0.4	0.0	0.4
6/1	10	10	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1113	1113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	211	211	-	-	-	1.5	0.4	-	2.0	33.8	4.0	0.4	4.4
8/2	200	200	-	-	-	0.2	0.4	-	0.6	10.5	1.8	0.4	2.1
8/3	281	281	-	-	-	0.4	0.7	-	1.1	13.6	4.8	0.7	5.5
9/1	987	987	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	534	534	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	4.7	0.0	0.0	0.0
10/2	667	667	-	-	-	0.0	0.7	-	0.7	4.0	0.1	0.7	0.8
10/3	650	650	-	-	-	0.0	0.7	-	0.7	3.8	0.1	0.7	0.7
11/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	565	565	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	952	952	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	952	952	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	517	517	-	-	-	1.2	0.5	-	1.7	12.2	7.3	0.5	7.8

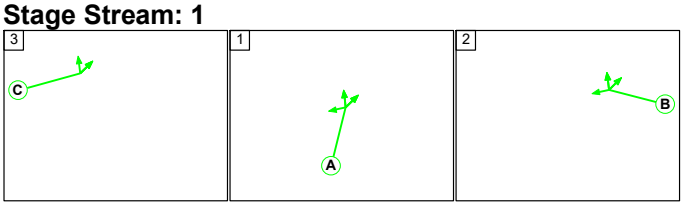
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	34.9	Total Delay for Signalled Lanes (pcuHr):	8.52	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	54.4	Total Delay for Signalled Lanes (pcuHr):	6.57	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-14.7	Total Delay for Signalled Lanes (pcuHr):	56.20	Cycle Time (s):	75
	PRC Over All Lanes (%):	-14.7	Total Delay Over All Lanes(pcuHr):	71.70		

Full Input Data And Results

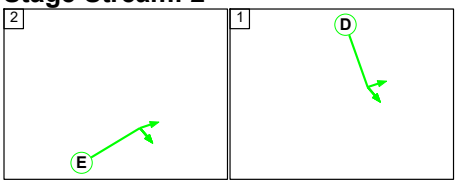
Scenario 6: '2023 Reference Case 6-7AM' (FG11: '23RC_6-7AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

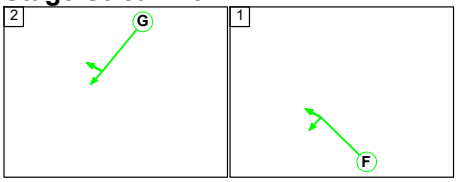
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	21	7	13
Change Point	56	26	38

Stage Stream: 2

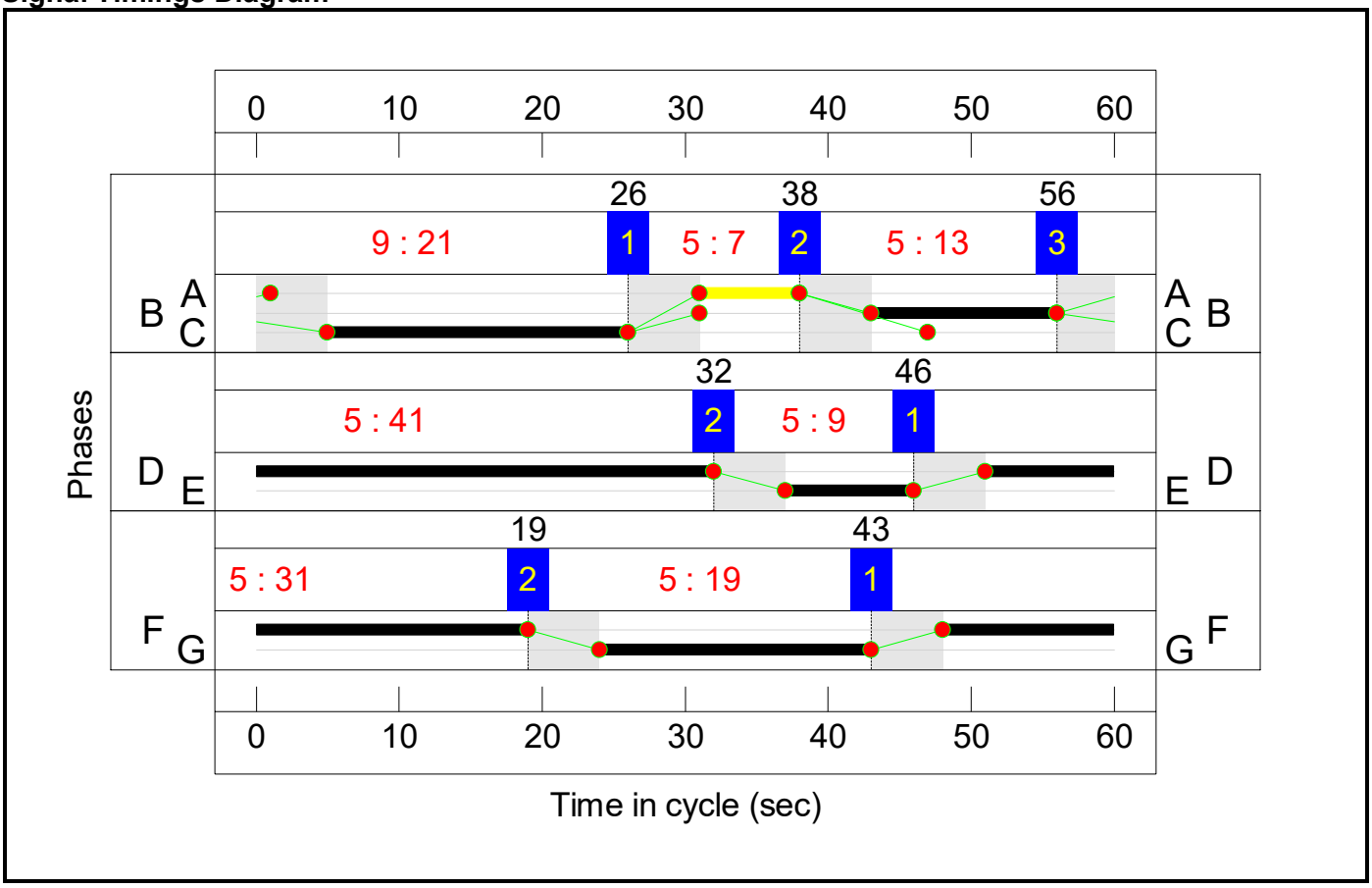
Stage	2	1
Duration	9	41
Change Point	32	46

Stage Stream: 3

Stage	2	1
Duration	19	31
Change Point	19	43

Full Input Data And Results

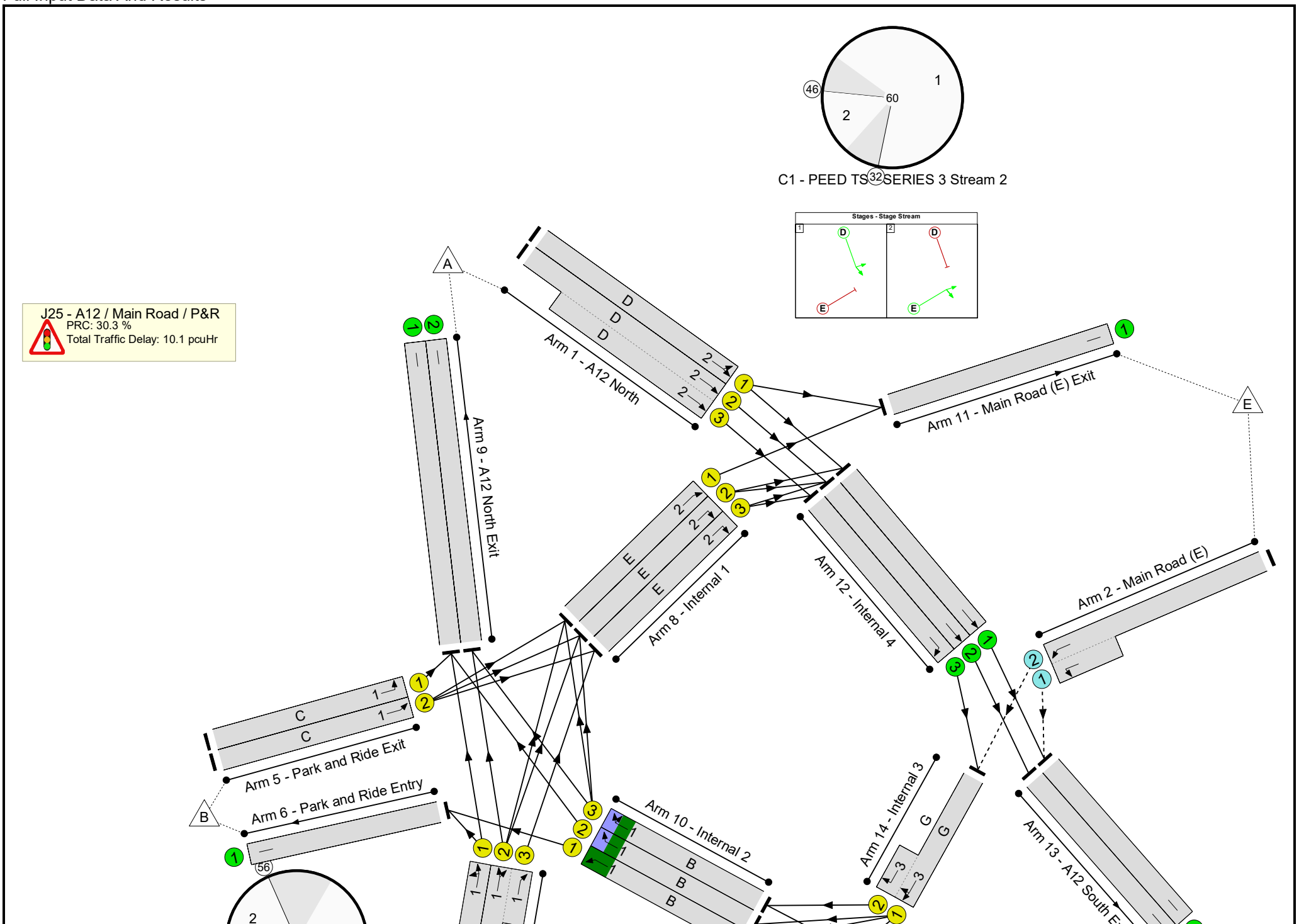
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**69.1%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**69.1%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	41	-	299	1964	1375	21.7%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	41	-	565	2105:2115	1328+450	31.8 : 31.8%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	41	950:1845	89+641	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	31	-	435	2070:1909	1059+524	27.5 : 27.5%
3/3	A12 South Ahead	U	3	N/A	F		1	31	-	231	2084	1111	20.8%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	133	2034	271	49.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	323	2175:2175	281+187	69.1 : 69.1%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	21	-	1	1995	732	0.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	21	-	2	2125	779	0.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	280	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	9	-	42	1993	332	12.6%
8/2	Internal 1 Right	U	2	N/A	E		1	9	-	97	2137	356	27.2%
8/3	Internal 1 Right	U	2	N/A	E		1	9	-	131	2127	354	37.0%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	8	1932	966	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	294	2066	1033	28.5%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	232	2066	1033	22.5%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	52	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	602	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	143	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	373	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	602	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	19	-	148	1800:1800	600+4	24.5 : 24.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**82**	**0**	**0**	**6.8**	**3.4**	**0.0**	**10.1**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**82**	**0**	**0**	**6.8**	**3.4**	**0.0**	**10.1**	**-**	**-**	**-**	**-**
1/1	299	299	-	-	-	0.3	0.1	-	0.4	4.9	1.7	0.1	1.9
1/2+1/3	565	565	-	-	-	0.5	0.2	-	0.7	4.8	2.6	0.2	2.8
2/2+2/1	41	41	82	0	0	0.0	0.0	-	0.0	2.6	0.0	0.0	0.0
3/2+3/1	435	435	-	-	-	0.9	0.2	-	1.1	9.0	2.6	0.2	2.8
3/3	231	231	-	-	-	0.5	0.1	-	0.6	9.4	2.0	0.1	2.1
4/1	133	133	-	-	-	0.9	0.5	-	1.4	37.1	2.0	0.5	2.5
4/2+4/3	323	323	-	-	-	2.2	1.1	-	3.3	36.7	3.1	1.1	4.2
5/1	1	1	-	-	-	0.0	0.0	-	0.0	14.8	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	14.7	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	42	42	-	-	-	0.1	0.1	-	0.2	15.6	0.2	0.1	0.3
8/2	97	97	-	-	-	0.0	0.2	-	0.2	8.6	0.2	0.2	0.4
8/3	131	131	-	-	-	0.1	0.3	-	0.3	9.4	0.7	0.3	0.9
9/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	7.5	0.0	0.0	0.0
10/2	294	294	-	-	-	0.4	0.2	-	0.6	7.6	1.0	0.2	1.2
10/3	232	232	-	-	-	0.3	0.1	-	0.5	7.3	0.8	0.1	1.0
11/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	143	143	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	373	373	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	148	148	-	-	-	0.6	0.2	-	0.7	17.7	1.9	0.2	2.0

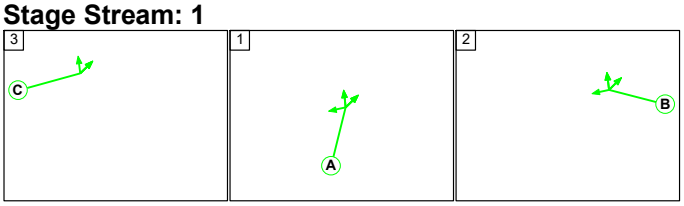
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	30.3	Total Delay for Signalled Lanes (pcuHr):	5.78	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	143.5	Total Delay for Signalled Lanes (pcuHr):	1.91	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	227.4	Total Delay for Signalled Lanes (pcuHr):	2.42	Cycle Time (s):	60
	PRC Over All Lanes (%):	30.3	Total Delay Over All Lanes(pcuHr):	10.14		

Full Input Data And Results

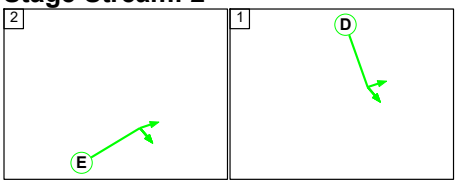
Scenario 7: '2023 Reference Case 7-8AM' (FG12: '23RC_7-8AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

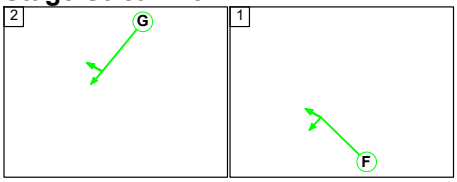
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	15	19
Change Point	10	26	46

Stage Stream: 2

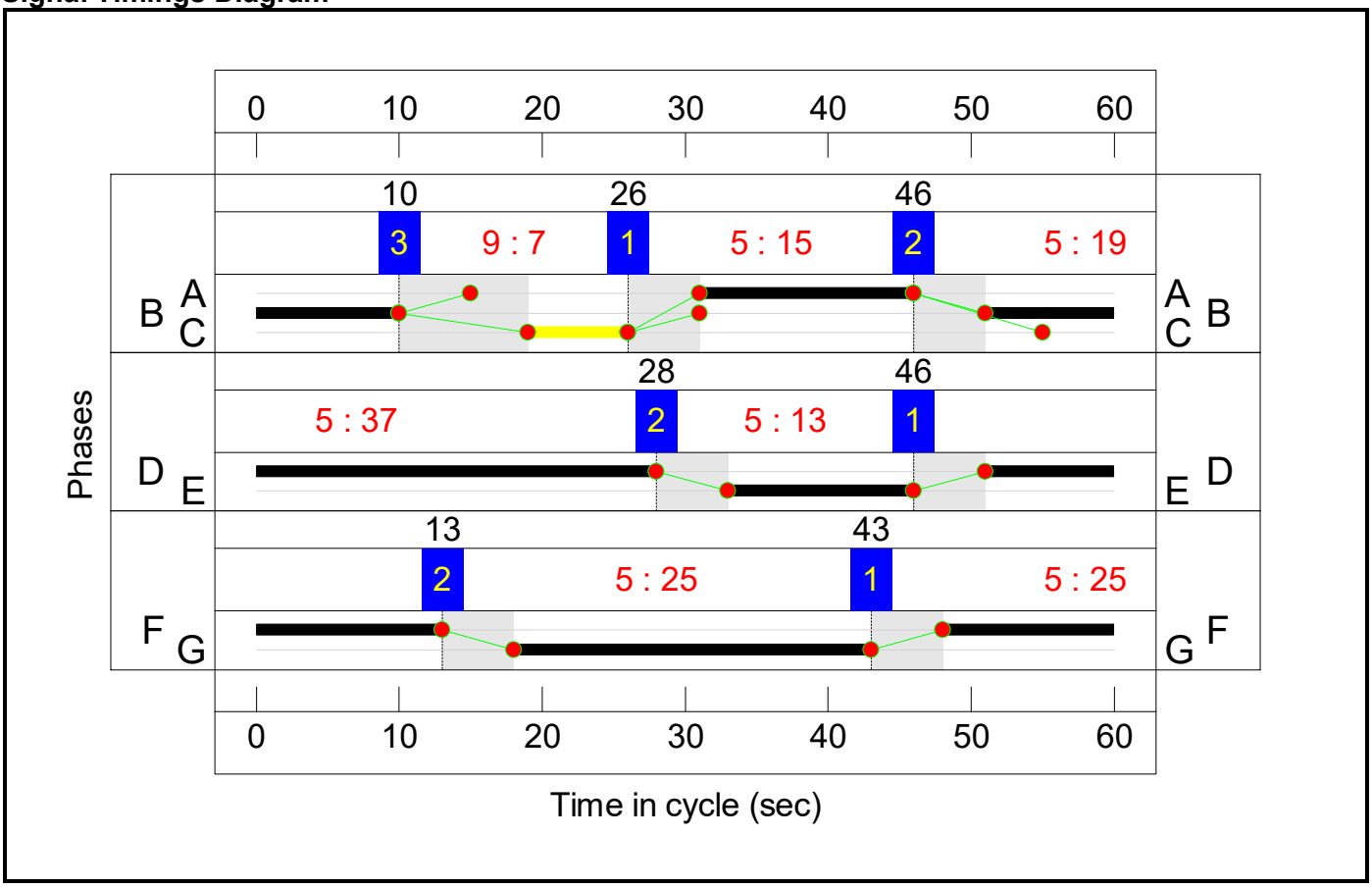
Stage	2	1
Duration	13	37
Change Point	28	46

Stage Stream: 3

Stage	2	1
Duration	25	25
Change Point	13	43

Full Input Data And Results

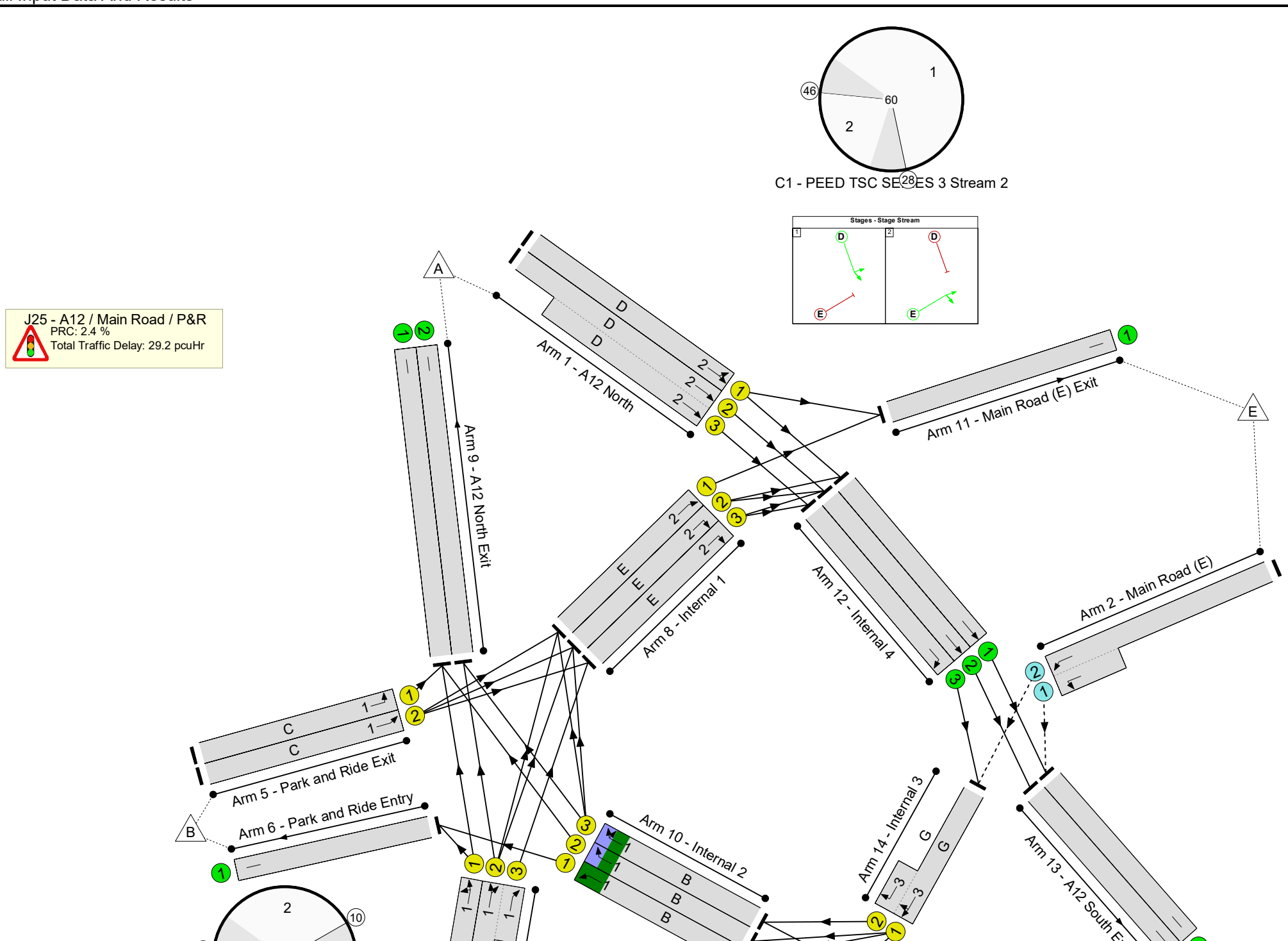
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.9%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.9%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	532	1964	1244	42.8%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	1003	2105:2115	1183+634	55.2 : 55.2%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	95	950:1845	91+572	14.3 : 14.3%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	984	2070:1908	897+486	71.1 : 71.1%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	574	2084	903	63.6%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	15	-	440	2032	542	81.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	15	-	683	2175:2175	445+332	87.9 : 87.9%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	3	1995	266	1.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	4	2125	283	1.4%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	107	1993	465	23.0%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	271	2137	499	54.3%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	294	2127	496	59.2%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1068	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	601	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	19	-	44	1932	1095	4.0%
10/2	Internal 2 Right	U	1	N/A	B		1	19	-	638	2066	1171	54.5%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	19	-	586	2066	1171	50.1%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	350	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	732	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	25	-	363	1800:1800	773+26	45.4 : 45.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**190**	**0**	**0**	**17.6**	**11.6**	**0.0**	**29.2**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**190**	**0**	**0**	**17.6**	**11.6**	**0.0**	**29.2**	**-**	**-**	**-**	**-**
1/1	532	532	-	-	-	0.8	0.4	-	1.2	8.1	4.4	0.4	4.8
1/2+1/3	1003	1003	-	-	-	1.5	0.6	-	2.1	7.7	5.6	0.6	6.2
2/2+2/1	95	95	190	0	0	0.0	0.1	-	0.1	3.3	0.0	0.1	0.1
3/2+3/1	984	984	-	-	-	3.6	1.2	-	4.8	17.6	8.7	1.2	9.9
3/3	574	574	-	-	-	2.1	0.9	-	3.0	18.7	7.3	0.9	8.2
4/1	440	440	-	-	-	2.5	2.1	-	4.6	37.6	6.8	2.1	8.9
4/2+4/3	683	683	-	-	-	3.7	3.4	-	7.1	37.5	7.7	3.4	11.1
5/1	3	3	-	-	-	0.0	0.0	-	0.0	29.8	0.0	0.0	0.0
5/2	4	4	-	-	-	0.0	0.0	-	0.0	29.4	0.1	0.0	0.1
6/1	57	57	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	653	653	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	107	107	-	-	-	0.4	0.1	-	0.5	18.0	0.7	0.1	0.9
8/2	271	271	-	-	-	0.8	0.6	-	1.4	18.1	1.1	0.6	1.7
8/3	294	294	-	-	-	0.8	0.7	-	1.5	18.6	1.1	0.7	1.8
9/1	1068	1068	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	601	601	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	44	44	-	-	-	0.0	0.0	-	0.0	2.4	0.0	0.0	0.0
10/2	638	638	-	-	-	0.0	0.6	-	0.6	3.4	0.0	0.6	0.6
10/3	586	586	-	-	-	0.0	0.5	-	0.5	3.3	0.1	0.5	0.6
11/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1083	1083	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	350	350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1083	1083	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	363	363	-	-	-	1.2	0.4	-	1.6	16.3	4.9	0.4	5.3

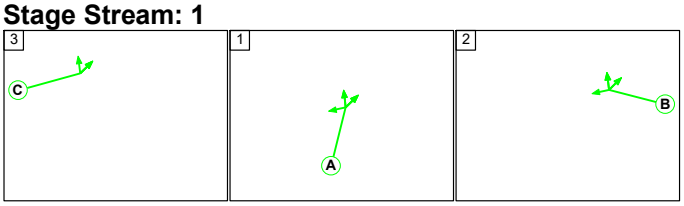
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	12.94	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	51.9	Total Delay for Signalled Lanes (pcuHr):	6.76	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	26.5	Total Delay for Signalled Lanes (pcuHr):	9.46	Cycle Time (s):	60
	PRC Over All Lanes (%):	2.4	Total Delay Over All Lanes(pcuHr):	29.24		

Full Input Data And Results

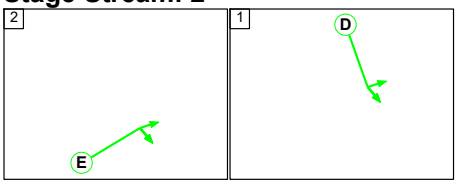
Scenario 8: '2023 Reference Case 8-9AM' (FG13: '23RC_8-9AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

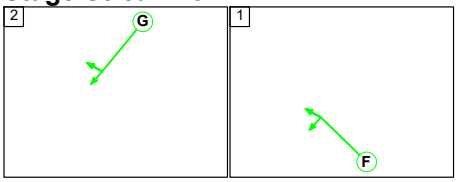
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	21	13
Change Point	39	55	21

Stage Stream: 2

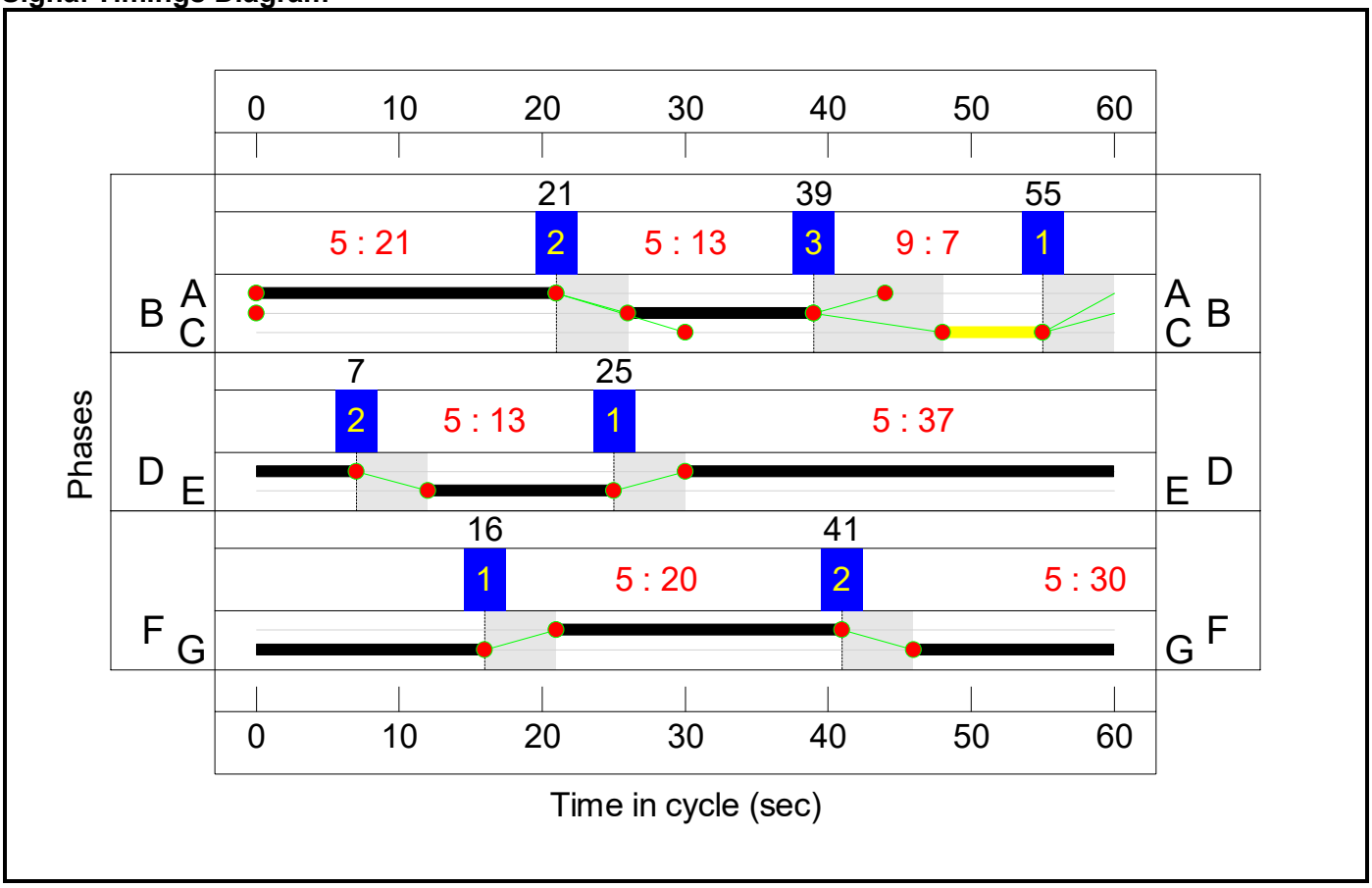
Stage	2	1
Duration	13	37
Change Point	7	25

Stage Stream: 3

Stage	2	1
Duration	30	20
Change Point	41	16

Full Input Data And Results

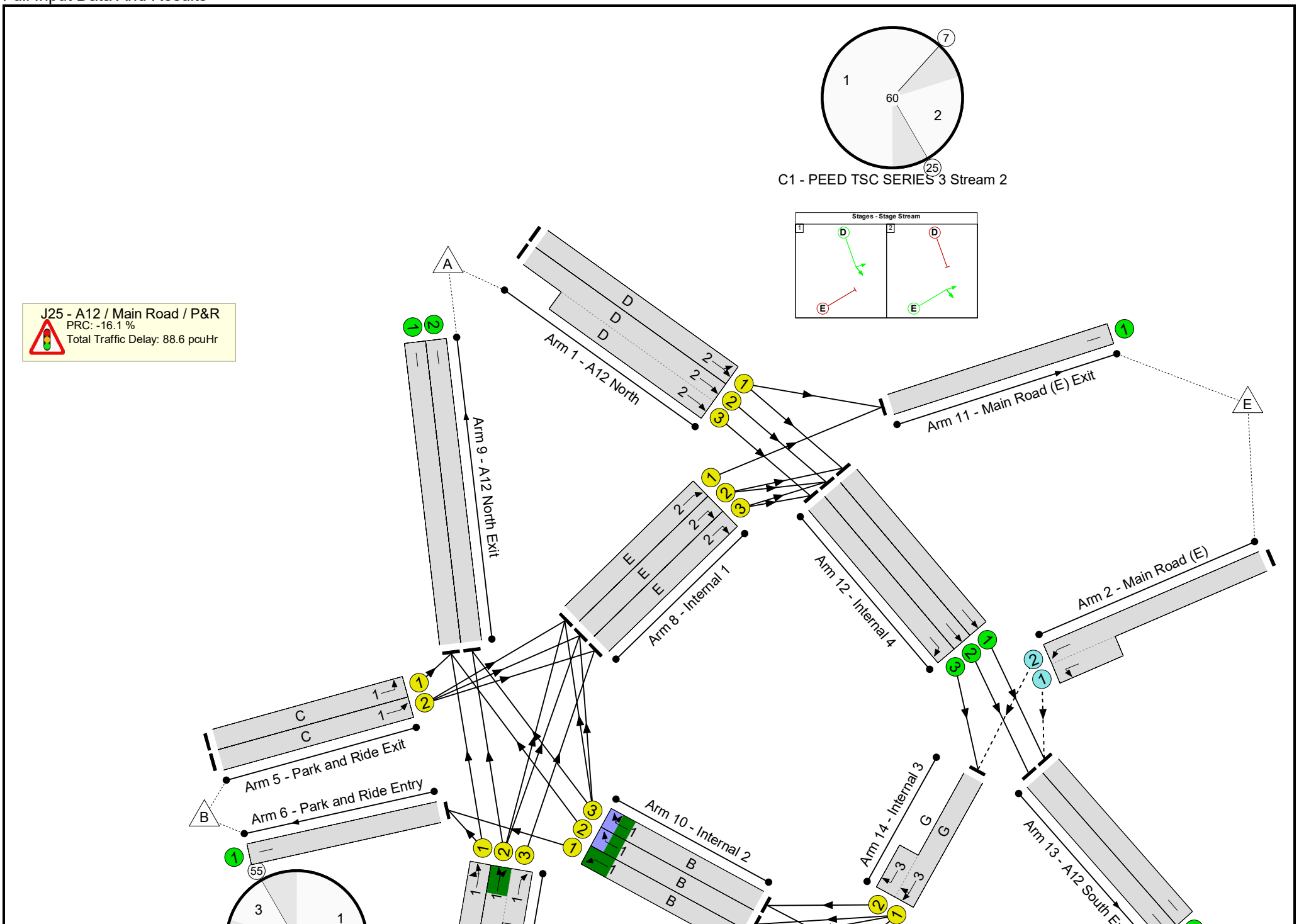
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**104.5%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**104.5%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	619	1964	1244	49.8%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	1161	2105:2115	1176+682	62.5 : 62.5%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	163	950:1845	127+542	24.3 : 24.3%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	20	-	1229	2070:1908	725+452	104.5 : 104.5%
3/3	A12 South Ahead	U	3	N/A	F		1	20	-	741	2084	729	101.6%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	21	-	411	2034	746	55.1%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	21	-	857	2175:2175	517+422	91.3 : 91.3%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	6	1995	266	2.3%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	14	2125	283	4.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	851	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	166	1993	465	35.5%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	371	2137	499	74.4%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	386	2127	496	77.8%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1182	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	700	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	54	1932	902	6.0%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	771	2066	964	76.6%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	752	2066	964	76.8%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	186	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	785	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1305	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1305	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	30	-	458	1800:1800	924+23	48.4 : 48.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**326**	**0**	**0**	**22.7**	**65.9**	**0.0**	**88.6**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**326**	**0**	**0**	**22.7**	**65.9**	**0.0**	**88.6**	**-**	**-**	**-**	**-**
1/1	619	619	-	-	-	1.0	0.5	-	1.5	8.8	5.5	0.5	6.0
1/2+1/3	1161	1161	-	-	-	1.9	0.8	-	2.7	8.4	6.7	0.8	7.6
2/2+2/1	163	163	326	0	0	0.0	0.2	-	0.2	3.9	0.1	0.2	0.3
3/2+3/1	1229	1196	-	-	-	7.1	35.1	-	42.2	123.7	13.2	35.1	48.3
3/3	741	729	-	-	-	4.3	16.8	-	21.1	102.6	12.5	16.8	29.4
4/1	411	411	-	-	-	1.7	0.6	-	2.3	20.4	5.4	0.6	6.0
4/2+4/3	857	857	-	-	-	4.0	4.7	-	8.7	36.6	10.1	4.7	14.9
5/1	6	6	-	-	-	0.0	0.0	-	0.0	29.9	0.1	0.0	0.1
5/2	14	14	-	-	-	0.1	0.0	-	0.1	29.6	0.2	0.0	0.2
6/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	851	851	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	165	165	-	-	-	0.5	0.3	-	0.8	17.5	2.0	0.3	2.3
8/2	371	371	-	-	-	0.5	1.4	-	2.0	18.9	5.4	1.4	6.9
8/3	386	386	-	-	-	0.7	1.7	-	2.4	21.9	5.6	1.7	7.3
9/1	1150	1150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	54	54	-	-	-	0.0	0.0	-	0.0	3.3	0.1	0.0	0.1
10/2	739	739	-	-	-	0.1	1.6	-	1.7	8.2	0.4	1.6	2.0
10/3	740	740	-	-	-	0.1	1.6	-	1.7	8.2	0.4	1.6	2.0
11/1	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	785	785	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1305	1305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1305	1305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	458	458	-	-	-	0.7	0.5	-	1.1	8.8	4.9	0.5	5.3

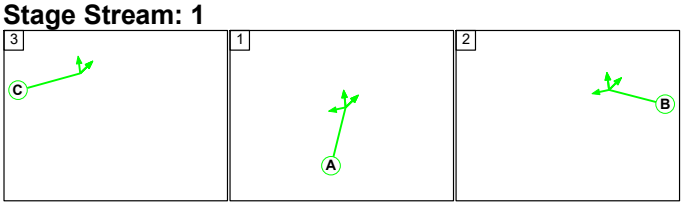
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-1.5	Total Delay for Signalled Lanes (pcuHr):	14.65	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	15.7	Total Delay for Signalled Lanes (pcuHr):	9.31	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-16.1	Total Delay for Signalled Lanes (pcuHr):	64.45	Cycle Time (s):	60
	PRC Over All Lanes (%):	-16.1	Total Delay Over All Lanes(pcuHr):	88.59		

Full Input Data And Results

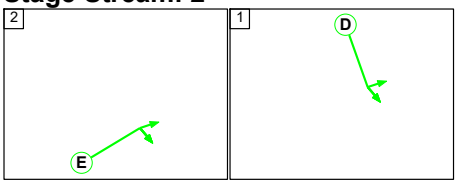
Scenario 9: '2023 Reference Case 3-4PM' (FG14: '23RC_3-4PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

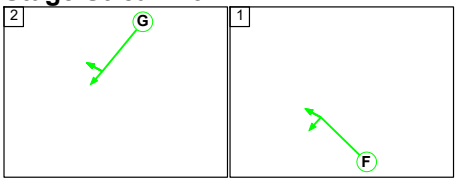
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	15	7	34
Change Point	21	45	57

Stage Stream: 2

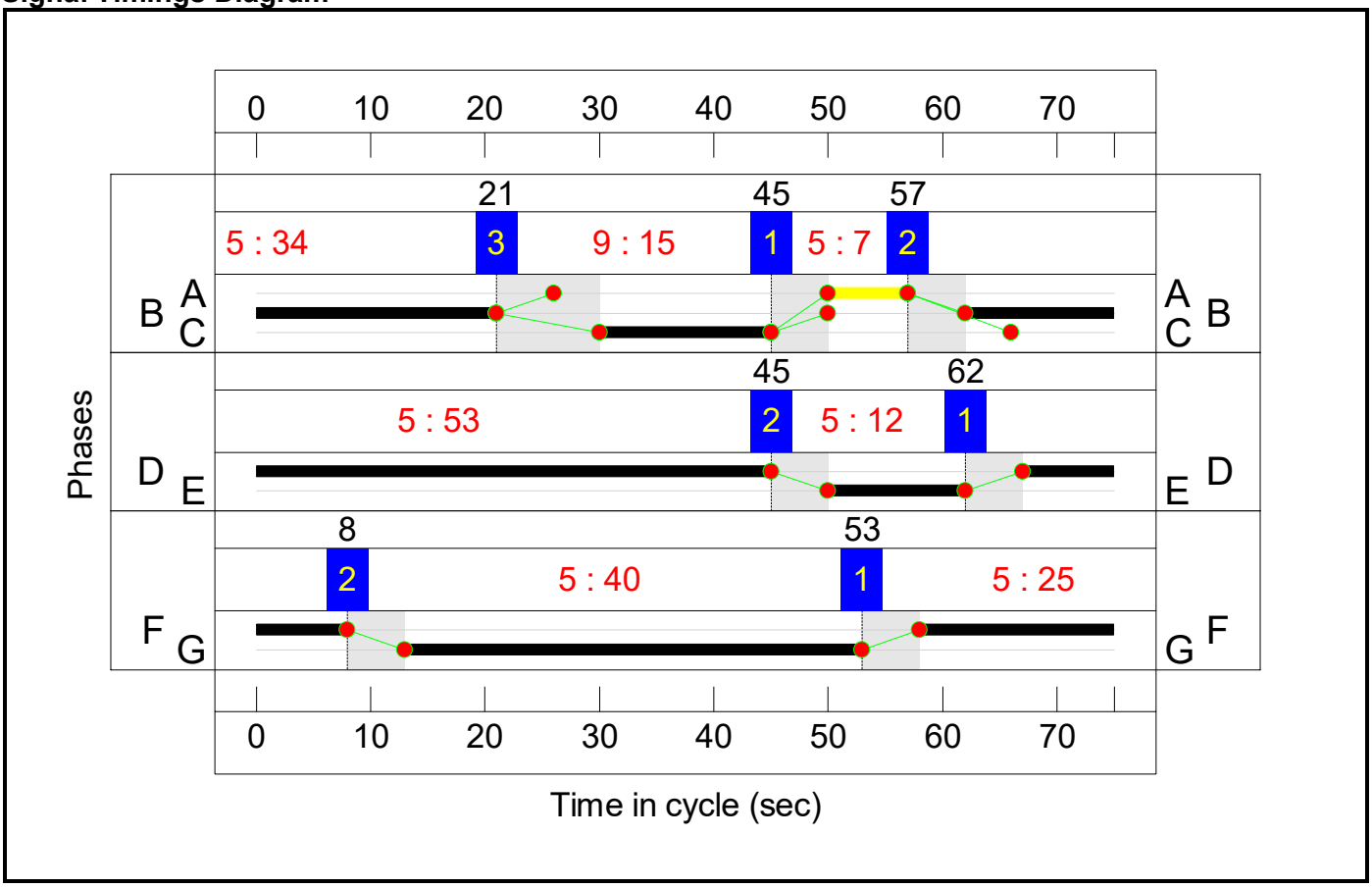
Stage	2	1
Duration	12	53
Change Point	45	62

Stage Stream: 3

Stage	2	1
Duration	40	25
Change Point	8	53

Full Input Data And Results

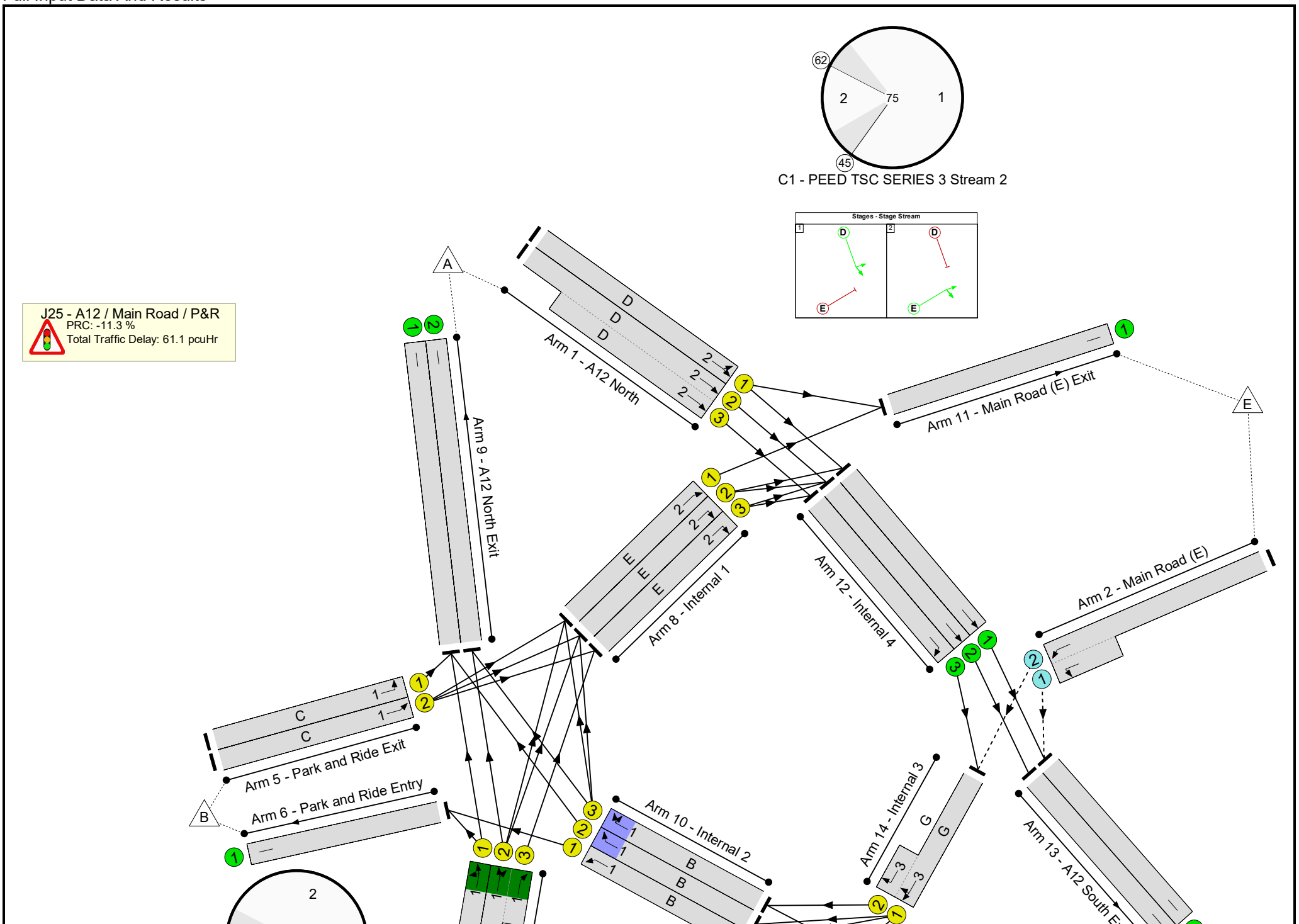
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	53	-	550	1964	1414	38.9%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	53	-	1046	2105:2115	1210+764	53.0 : 53.0%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	275	950:1845	290+260	50.0 : 50.0%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	1353	2070:1910	718+656	100.2 : 96.6%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	691	2084	722	95.6%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	398	2035	597	66.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	654	2175:2175	444+367	80.7 : 80.7%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	15	-	5	1995	426	1.2%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	15	-	11	2125	453	2.4%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1171	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	12	-	179	1993	345	51.8%
8/2	Internal 1 Right	U	2	N/A	E		1	12	-	302	2137	370	81.5%
8/3	Internal 1 Right	U	2	N/A	E		1	12	-	300	2127	369	81.4%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1128	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	34	-	2	1932	902	0.2%
10/2	Internal 2 Right	U	1	N/A	B		1	34	-	725	2066	964	75.1%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	34	-	697	2066	964	72.3%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	693	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1091	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	406	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1091	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	40	-	551	1800:1800	984+11	55.4 : 55.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**550**	**0**	**0**	**26.6**	**34.5**	**0.0**	**61.1**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**550**	**0**	**0**	**26.6**	**34.5**	**0.0**	**61.1**	**-**	**-**	**-**	**-**
1/1	550	550	-	-	-	0.6	0.3	-	0.9	6.2	4.4	0.3	4.7
1/2+1/3	1046	1046	-	-	-	1.2	0.6	-	1.7	5.9	5.3	0.6	5.9
2/2+2/1	275	275	550	0	0	0.1	0.5	-	0.6	7.6	0.7	0.5	1.2
3/2+3/1	1353	1352	-	-	-	9.1	14.6	-	23.7	63.2	15.0	14.6	29.6
3/3	691	691	-	-	-	4.6	7.5	-	12.0	62.8	14.0	7.5	21.5
4/1	398	398	-	-	-	2.6	1.0	-	3.6	32.2	7.2	1.0	8.2
4/2+4/3	654	654	-	-	-	4.1	2.0	-	6.2	33.9	8.9	2.0	11.0
5/1	5	5	-	-	-	0.0	0.0	-	0.0	27.9	0.1	0.0	0.1
5/2	11	11	-	-	-	0.1	0.0	-	0.1	27.7	0.2	0.0	0.2
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1171	1171	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	179	179	-	-	-	1.6	0.5	-	2.1	42.4	3.6	0.5	4.1
8/2	302	302	-	-	-	0.6	2.1	-	2.7	32.2	6.0	2.1	8.1
8/3	300	300	-	-	-	0.6	2.1	-	2.7	32.3	6.0	2.1	8.0
9/1	1127	1127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	2	2	-	-	-	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
10/2	724	724	-	-	-	0.0	1.5	-	1.5	7.6	0.1	1.5	1.6
10/3	697	697	-	-	-	0.0	1.3	-	1.3	6.9	0.1	1.3	1.4
11/1	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	693	693	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1091	1091	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1091	1091	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	551	551	-	-	-	1.2	0.6	-	1.9	12.1	7.4	0.6	8.0

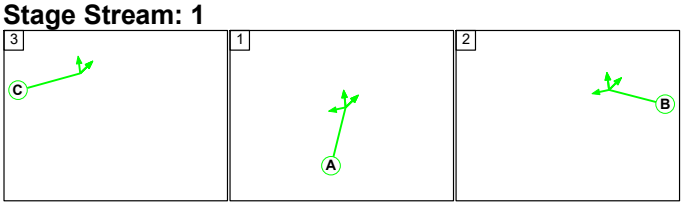
C1 - PEED TSC SERIES 3 Stream: 1 PRC for Signalled Lanes (%): 11.6 Total Delay for Signalled Lanes (pcuHr): 12.70 Cycle Time (s): 75
C1 - PEED TSC SERIES 3 Stream: 2 PRC for Signalled Lanes (%): 10.4 Total Delay for Signalled Lanes (pcuHr): 10.17 Cycle Time (s): 75
C1 - PEED TSC SERIES 3 Stream: 3 PRC for Signalled Lanes (%): -11.3 Total Delay for Signalled Lanes (pcuHr): 37.64 Cycle Time (s): 75
PRC Over All Lanes (%): -11.3 Total Delay Over All Lanes(pcuHr): 61.09

Full Input Data And Results

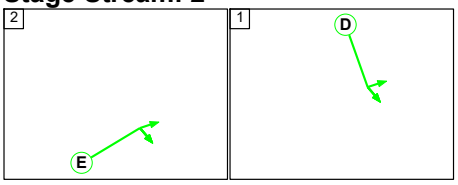
Scenario 10: '2023 Reference Case 5-6PM' (FG15: '23RC_5-6PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

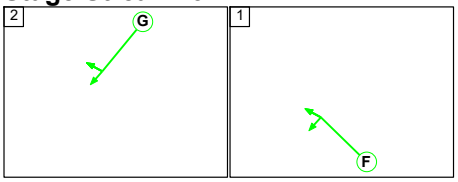
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	9	7	40
Change Point	24	42	54

Stage Stream: 2

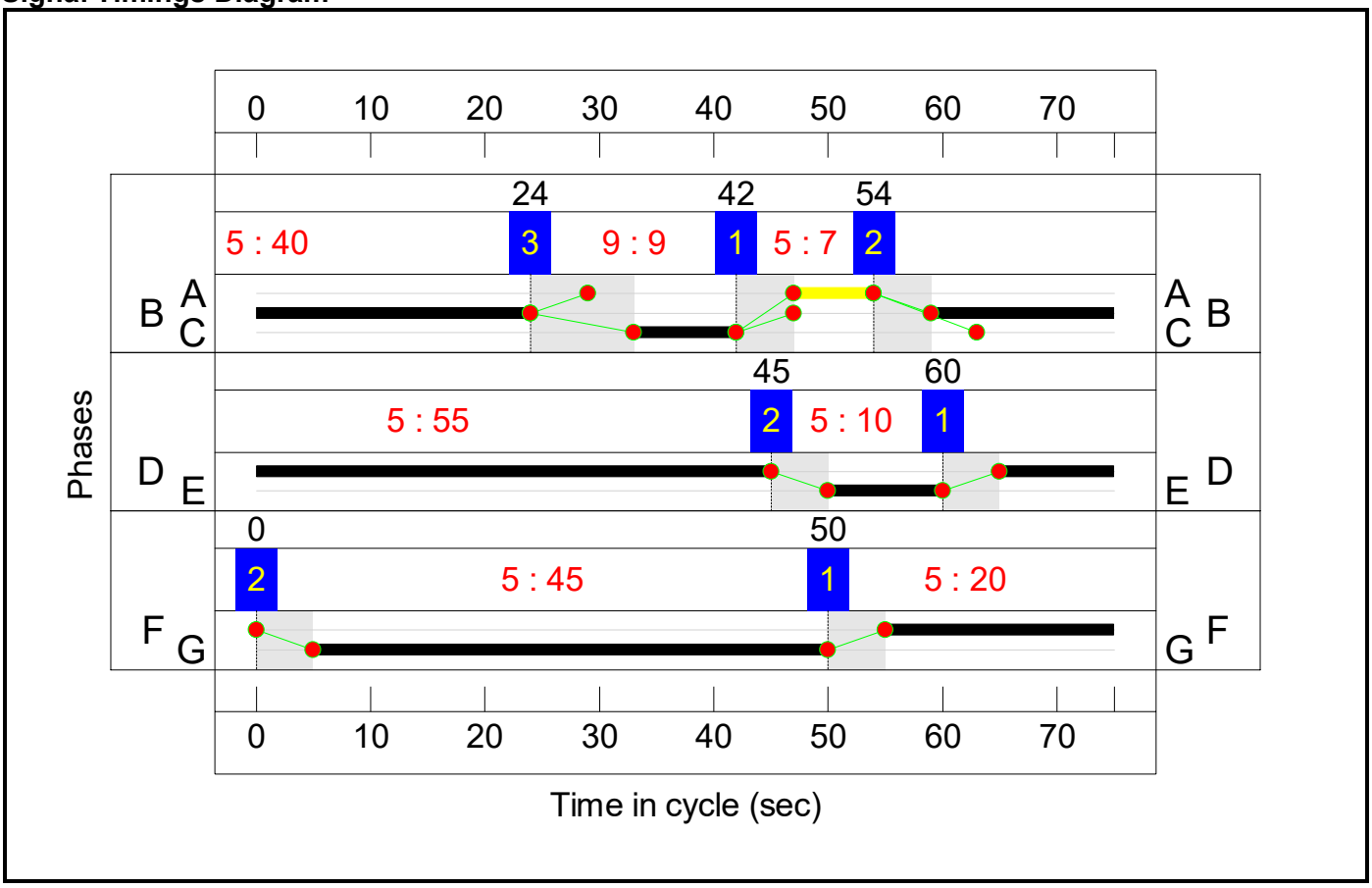
Stage	2	1
Duration	10	55
Change Point	45	60

Stage Stream: 3

Stage	2	1
Duration	45	20
Change Point	0	50

Full Input Data And Results

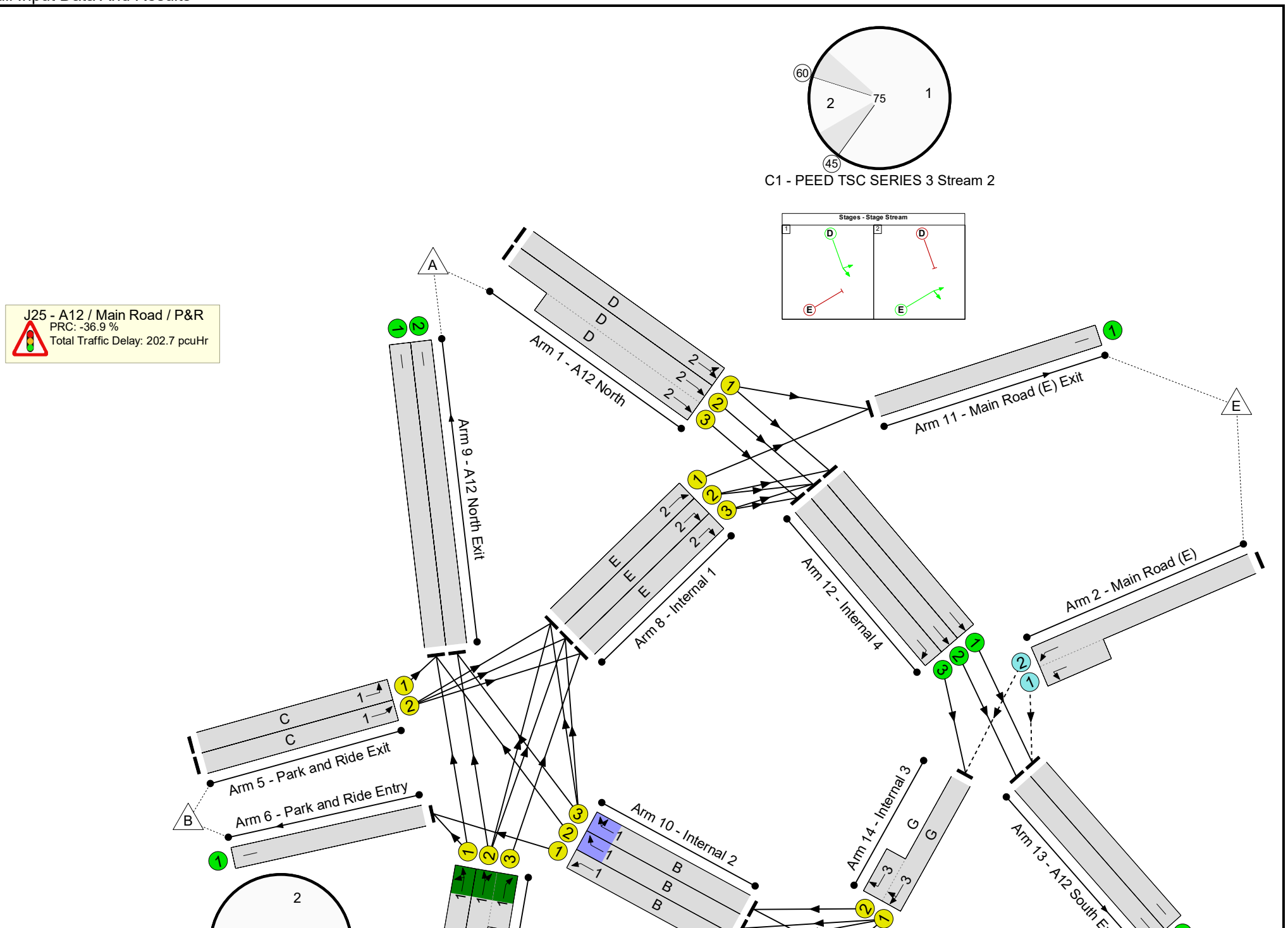
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**123.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**123.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	55	-	528	1964	1466	36.0%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	55	-	1001	2105:2115	1243+790	49.2 : 49.2%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	400	950:1845	319+195	77.8 : 77.8%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	20	-	1305	2070:1910	580+535	123.2 : 110.5%
3/3	A12 South Ahead	U	3	N/A	F		1	20	-	691	2084	584	118.4%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	303	2034	597	50.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	551	2175:2175	432+395	66.6 : 66.6%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	9	-	21	1995	266	7.9%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	9	-	23	2125	283	8.1%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1213	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	10	-	238	1993	292	73.8%
8/2	Internal 1 Right	U	2	N/A	E		1	10	-	176	2137	313	56.1%
8/3	Internal 1 Right	U	2	N/A	E		1	10	-	273	2127	312	87.5%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	40	-	8	1932	1056	0.7%
10/2	Internal 2 Right	U	1	N/A	B		1	40	-	718	2066	1129	51.7%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	40	-	694	2066	1129	51.9%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	608	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	389	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	760	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	45	-	637	1800:1800	1104+5	57.4 : 57.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**800**	**0**	**0**	**36.5**	**166.2**	**0.0**	**202.7**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**800**	**0**	**0**	**36.5**	**166.2**	**0.0**	**202.7**	**-**	**-**	**-**	**-**
1/1	528	528	-	-	-	0.5	0.3	-	0.8	5.2	3.7	0.3	3.9
1/2+1/3	1001	1001	-	-	-	0.9	0.5	-	1.4	5.0	4.4	0.5	4.9
2/2+2/1	400	400	800	0	0	0.2	1.7	-	1.9	16.8	1.9	1.7	3.6
3/2+3/1	1305	1114	-	-	-	15.2	98.6	-	113.8	313.9	20.2	98.6	118.8
3/3	691	584	-	-	-	9.9	56.8	-	66.7	347.4	18.3	56.8	75.1
4/1	303	303	-	-	-	1.9	0.5	-	2.4	28.1	5.2	0.5	5.7
4/2+4/3	551	551	-	-	-	3.3	1.0	-	4.3	28.0	5.9	1.0	6.9
5/1	21	21	-	-	-	0.2	0.0	-	0.2	35.9	0.4	0.0	0.4
5/2	23	23	-	-	-	0.2	0.0	-	0.2	35.5	0.4	0.0	0.5
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1157	1157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	216	216	-	-	-	2.0	1.4	-	3.4	55.9	4.4	1.4	5.8
8/2	176	176	-	-	-	0.4	0.6	-	1.1	22.1	3.4	0.6	4.0
8/3	273	273	-	-	-	0.8	3.0	-	3.8	50.5	5.6	3.0	8.6
9/1	906	906	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	7	7	-	-	-	0.0	0.0	-	0.0	4.4	0.0	0.0	0.0
10/2	584	584	-	-	-	0.0	0.5	-	0.5	3.4	0.0	0.5	0.6
10/3	587	587	-	-	-	0.0	0.5	-	0.6	3.4	0.1	0.5	0.6
11/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	973	973	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	760	760	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	973	973	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	637	637	-	-	-	1.1	0.7	-	1.7	9.8	7.5	0.7	8.2

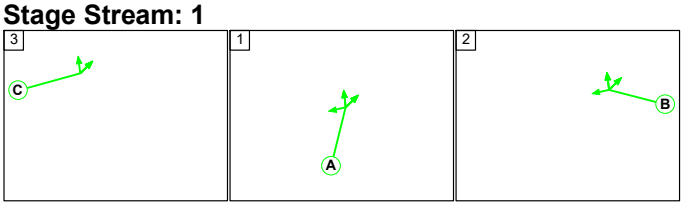
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	35.1	Total Delay for Signalled Lanes (pcuHr):	8.20	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	2.8	Total Delay for Signalled Lanes (pcuHr):	10.40	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-36.9	Total Delay for Signalled Lanes (pcuHr):	182.22	Cycle Time (s):	75
	PRC Over All Lanes (%):	-36.9	Total Delay Over All Lanes(pcuHr):	202.69		

Full Input Data And Results

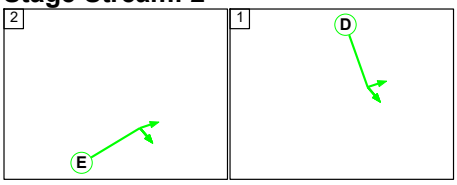
Scenario 11: '2023 Early Years 6-7AM' (FG6: '23EY_6-7AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

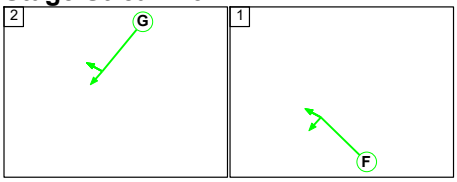
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	21	7	13
Change Point	56	26	38

Stage Stream: 2

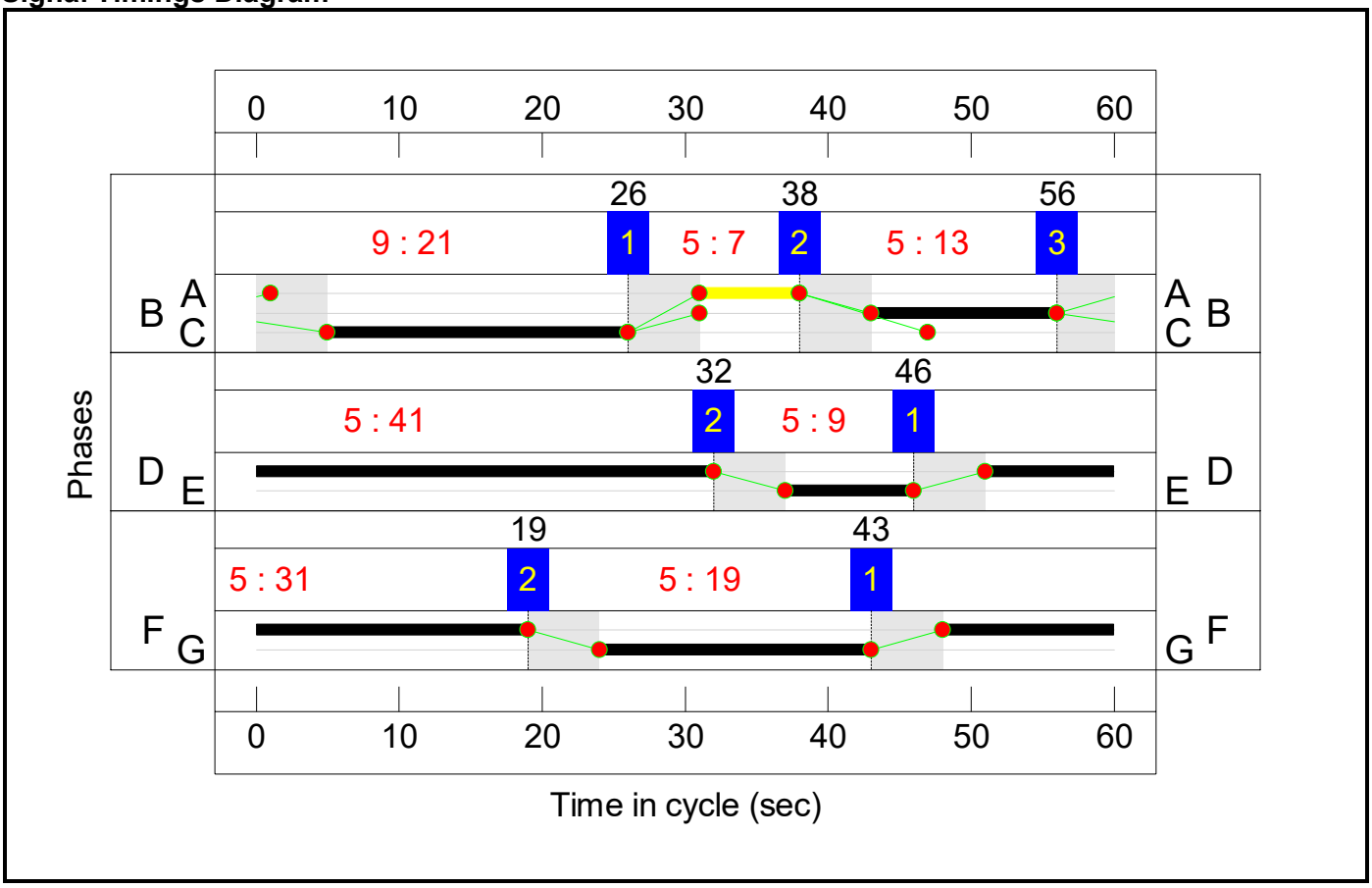
Stage	2	1
Duration	9	41
Change Point	32	46

Stage Stream: 3

Stage	2	1
Duration	19	31
Change Point	19	43

Full Input Data And Results

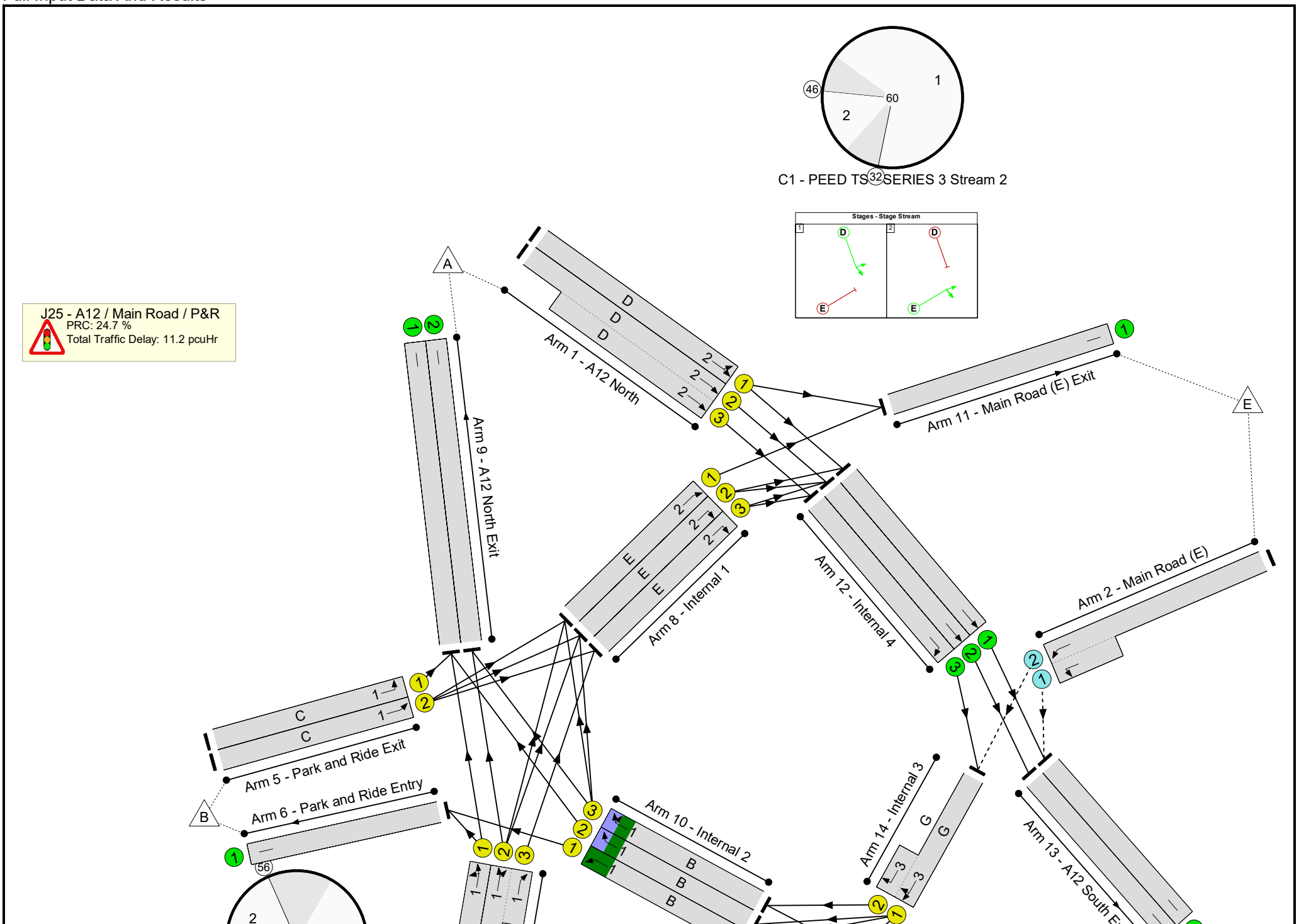
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	41	-	305	1964	1375	22.2%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	41	-	572	2105:2115	1327+451	32.2 : 32.2%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	40	950:1845	71+639	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	31	-	485	2070:1909	1063+453	32.0 : 32.0%
3/3	A12 South Ahead	U	3	N/A	F		1	31	-	287	2084	1111	25.8%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	146	2034	271	53.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	335	2175:2175	281+183	72.2 : 72.2%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	21	-	1	1995	732	0.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	21	-	2	2125	779	0.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	9	-	43	1993	332	12.9%
8/2	Internal 1 Right	U	2	N/A	E		1	9	-	97	2137	356	27.2%
8/3	Internal 1 Right	U	2	N/A	E		1	9	-	132	2127	354	37.2%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	8	1932	966	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	341	2066	1033	33.0%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	290	2066	1033	28.1%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	53	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	343	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	608	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	608	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	19	-	149	1800:1800	600+12	24.3 : 24.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**80**	**0**	**0**	**7.4**	**3.8**	**0.0**	**11.2**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**80**	**0**	**0**	**7.4**	**3.8**	**0.0**	**11.2**	**-**	**-**	**-**	**-**
1/1	305	305	-	-	-	0.3	0.1	-	0.4	4.9	1.8	0.1	1.9
1/2+1/3	572	572	-	-	-	0.5	0.2	-	0.8	4.8	2.6	0.2	2.8
2/2+2/1	40	40	80	0	0	0.0	0.0	-	0.0	2.7	0.0	0.0	0.0
3/2+3/1	485	485	-	-	-	1.0	0.2	-	1.3	9.4	3.1	0.2	3.4
3/3	287	287	-	-	-	0.6	0.2	-	0.8	9.8	2.6	0.2	2.7
4/1	146	146	-	-	-	1.0	0.6	-	1.6	38.5	2.3	0.6	2.8
4/2+4/3	335	335	-	-	-	2.3	1.3	-	3.6	38.2	3.2	1.3	4.5
5/1	1	1	-	-	-	0.0	0.0	-	0.0	14.8	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	14.7	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	282	282	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	43	43	-	-	-	0.1	0.1	-	0.2	15.5	0.2	0.1	0.3
8/2	97	97	-	-	-	0.1	0.2	-	0.2	9.2	0.2	0.2	0.4
8/3	132	132	-	-	-	0.0	0.3	-	0.3	9.1	0.6	0.3	0.9
9/1	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	7.5	0.0	0.0	0.0
10/2	341	341	-	-	-	0.5	0.2	-	0.7	7.7	1.2	0.2	1.4
10/3	290	290	-	-	-	0.4	0.2	-	0.6	7.6	1.0	0.2	1.2
11/1	53	53	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	343	343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	149	149	-	-	-	0.6	0.2	-	0.7	17.6	1.9	0.2	2.0

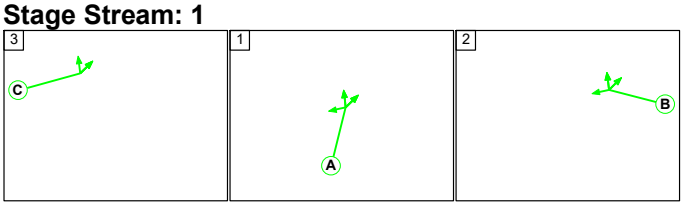
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	24.7	Total Delay for Signalled Lanes (pcuHr):	6.49	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	141.7	Total Delay for Signalled Lanes (pcuHr):	1.94	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	181.4	Total Delay for Signalled Lanes (pcuHr):	2.77	Cycle Time (s):	60
	PRC Over All Lanes (%):	24.7	Total Delay Over All Lanes(pcuHr):	11.22		

Full Input Data And Results

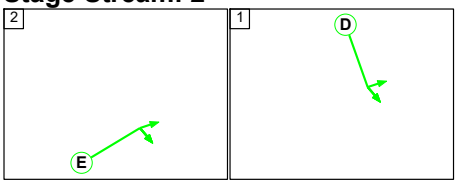
Scenario 12: '2023 Early Years 7-8AM' (FG7: '23EY_7-8AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

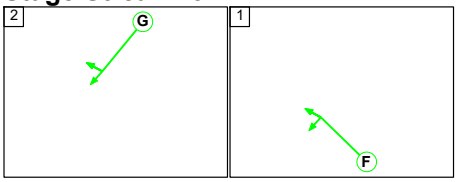
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	15	19
Change Point	10	26	46

Stage Stream: 2

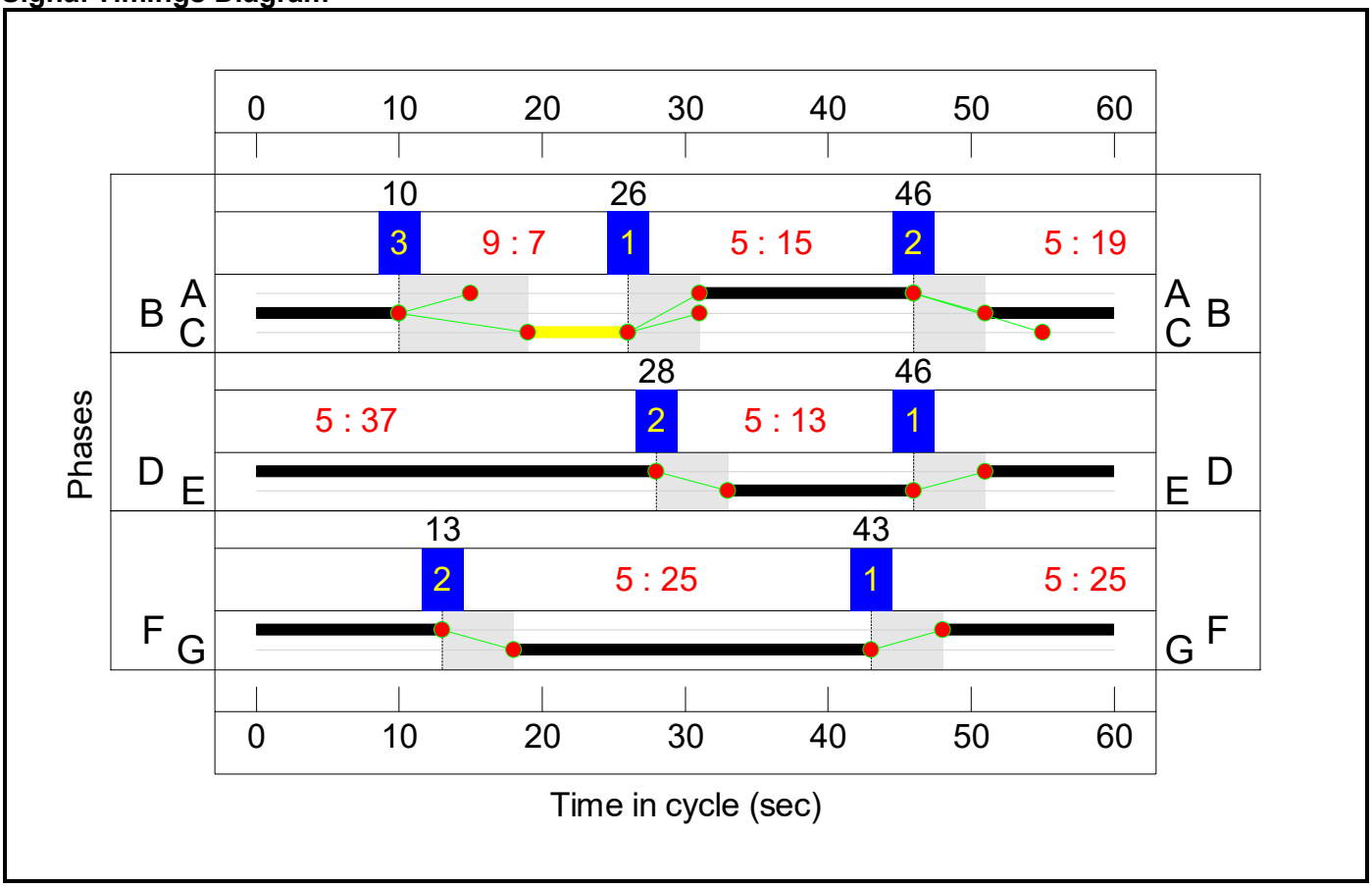
Stage	2	1
Duration	13	37
Change Point	28	46

Stage Stream: 3

Stage	2	1
Duration	25	25
Change Point	13	43

Full Input Data And Results

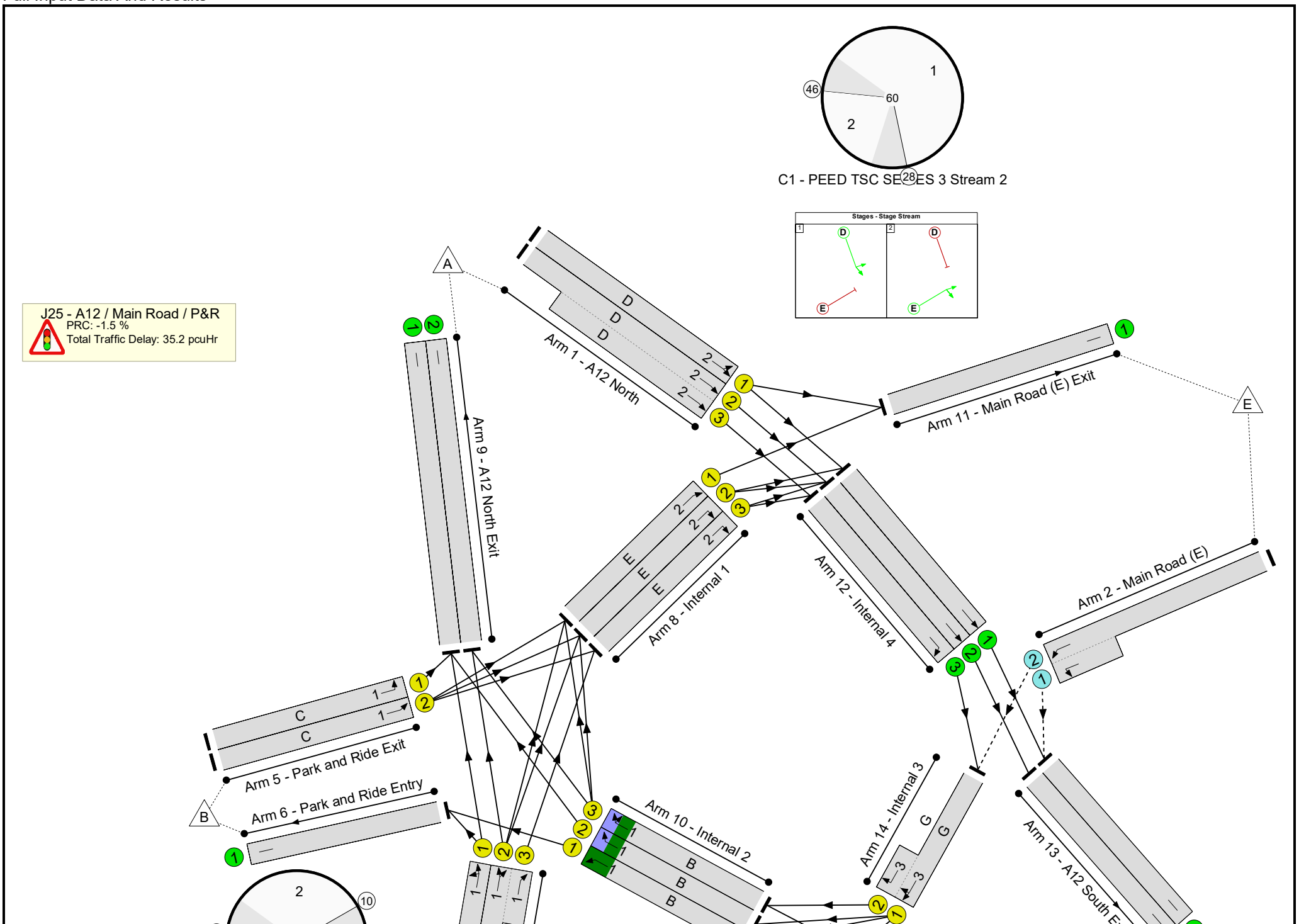
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.4%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.4%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	544	1963	1243	43.8%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	1020	2105:2115	1184+632	56.2 : 56.2%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	92	950:1845	70+572	14.3 : 14.3%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	1075	2070:1908	897+431	80.9 : 80.9%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	678	2084	903	75.1%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	15	-	471	2032	542	86.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	15	-	705	2175:2175	448+324	91.4 : 91.4%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	3	1995	266	1.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	3	2125	283	1.1%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	95	1993	465	20.4%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	273	2137	499	54.7%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	297	2127	496	59.8%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1187	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	733	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	19	-	44	1932	1095	4.0%
10/2	Internal 2 Right	U	1	N/A	B		1	19	-	726	2066	1171	62.0%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	19	-	690	2066	1171	58.9%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	123	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	652	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1099	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1099	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	25	-	365	1800:1800	773+26	45.7 : 45.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**184**	**0**	**0**	**19.4**	**15.8**	**0.0**	**35.2**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**184**	**0**	**0**	**19.4**	**15.8**	**0.0**	**35.2**	**-**	**-**	**-**	**-**
1/1	544	544	-	-	-	0.8	0.4	-	1.2	8.2	4.5	0.4	4.9
1/2+1/3	1020	1020	-	-	-	1.6	0.6	-	2.2	7.8	5.9	0.6	6.6
2/2+2/1	92	92	184	0	0	0.0	0.1	-	0.1	3.4	0.0	0.1	0.1
3/2+3/1	1075	1075	-	-	-	4.1	2.1	-	6.2	20.8	10.5	2.1	12.6
3/3	678	678	-	-	-	2.7	1.5	-	4.2	22.2	9.4	1.5	10.9
4/1	471	471	-	-	-	2.7	3.1	-	5.8	44.4	7.5	3.1	10.5
4/2+4/3	705	705	-	-	-	3.9	4.6	-	8.6	43.7	8.3	4.6	13.0
5/1	3	3	-	-	-	0.0	0.0	-	0.0	29.8	0.0	0.0	0.0
5/2	3	3	-	-	-	0.0	0.0	-	0.0	29.4	0.0	0.0	0.0
6/1	57	57	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	95	95	-	-	-	0.4	0.1	-	0.5	18.9	0.7	0.1	0.8
8/2	273	273	-	-	-	0.9	0.6	-	1.5	19.6	1.2	0.6	1.8
8/3	297	297	-	-	-	0.9	0.7	-	1.7	20.2	1.3	0.7	2.0
9/1	1187	1187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	733	733	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	44	44	-	-	-	0.0	0.0	-	0.0	2.4	0.0	0.0	0.0
10/2	726	726	-	-	-	0.0	0.8	-	0.8	4.0	0.0	0.8	0.8
10/3	690	690	-	-	-	0.0	0.7	-	0.8	3.9	0.1	0.7	0.8
11/1	123	123	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	652	652	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1099	1099	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1099	1099	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	365	365	-	-	-	1.2	0.4	-	1.7	16.3	4.9	0.4	5.3

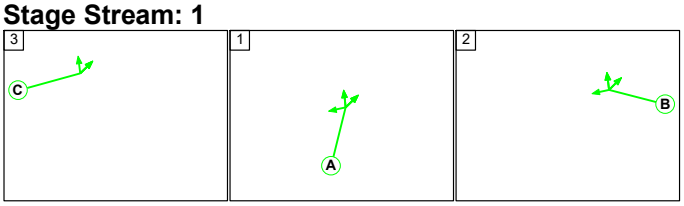
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-1.5	Total Delay for Signalled Lanes (pcuHr):	16.01	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	50.4	Total Delay for Signalled Lanes (pcuHr):	7.09	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	11.2	Total Delay for Signalled Lanes (pcuHr):	12.06	Cycle Time (s):	60
	PRC Over All Lanes (%):	-1.5	Total Delay Over All Lanes(pcuHr):	35.24		

Full Input Data And Results

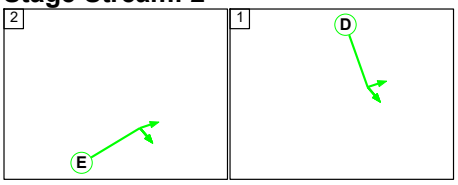
Scenario 13: '2023 Early Years 8-9AM' (FG8: '23EY_8-9AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

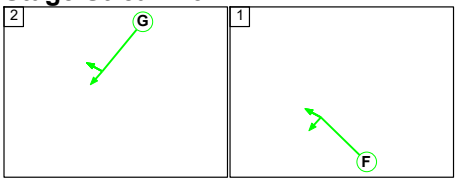
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	21	13
Change Point	39	55	21

Stage Stream: 2

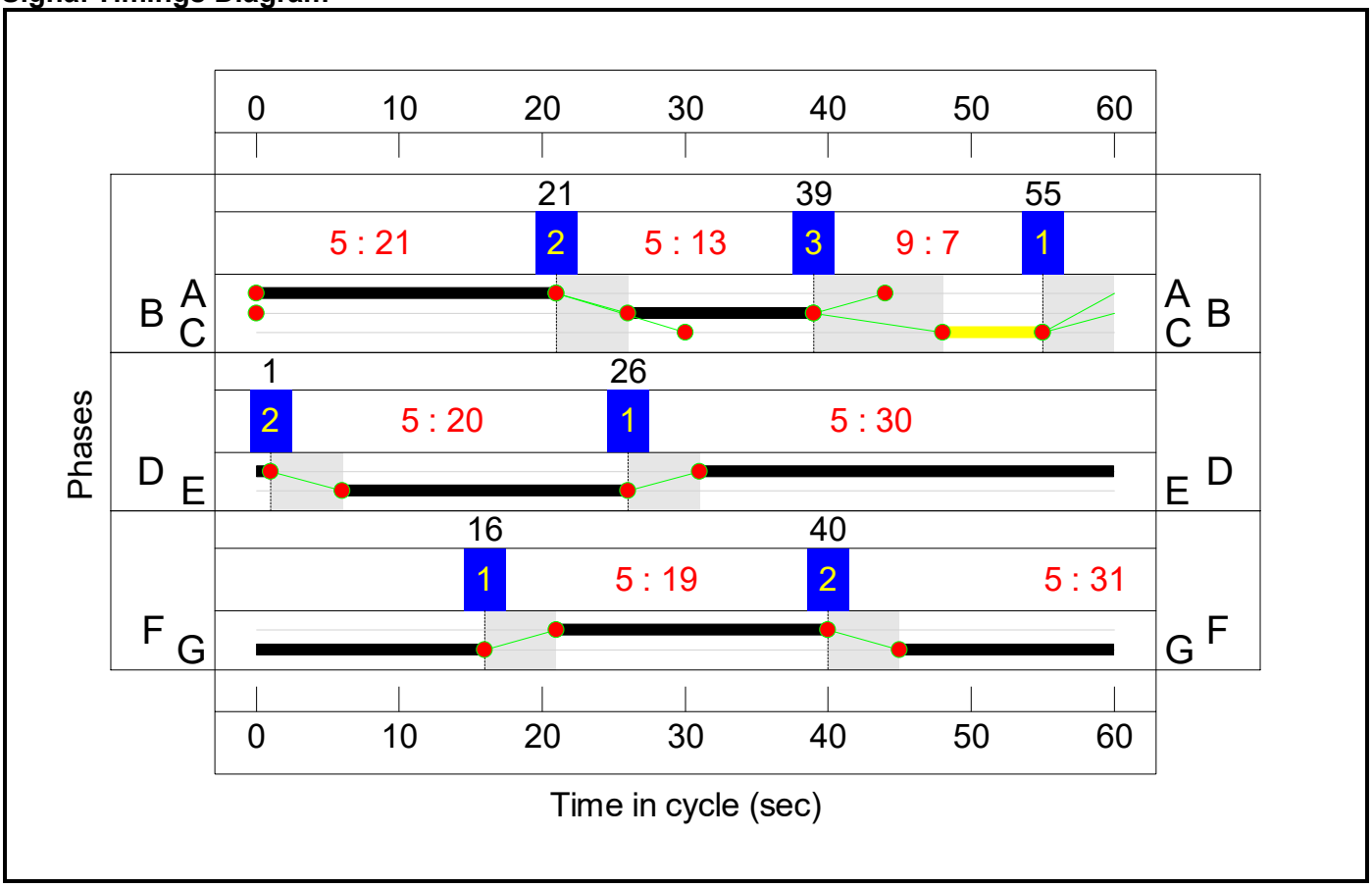
Stage	2	1
Duration	20	30
Change Point	1	26

Stage Stream: 3

Stage	2	1
Duration	31	19
Change Point	40	16

Full Input Data And Results

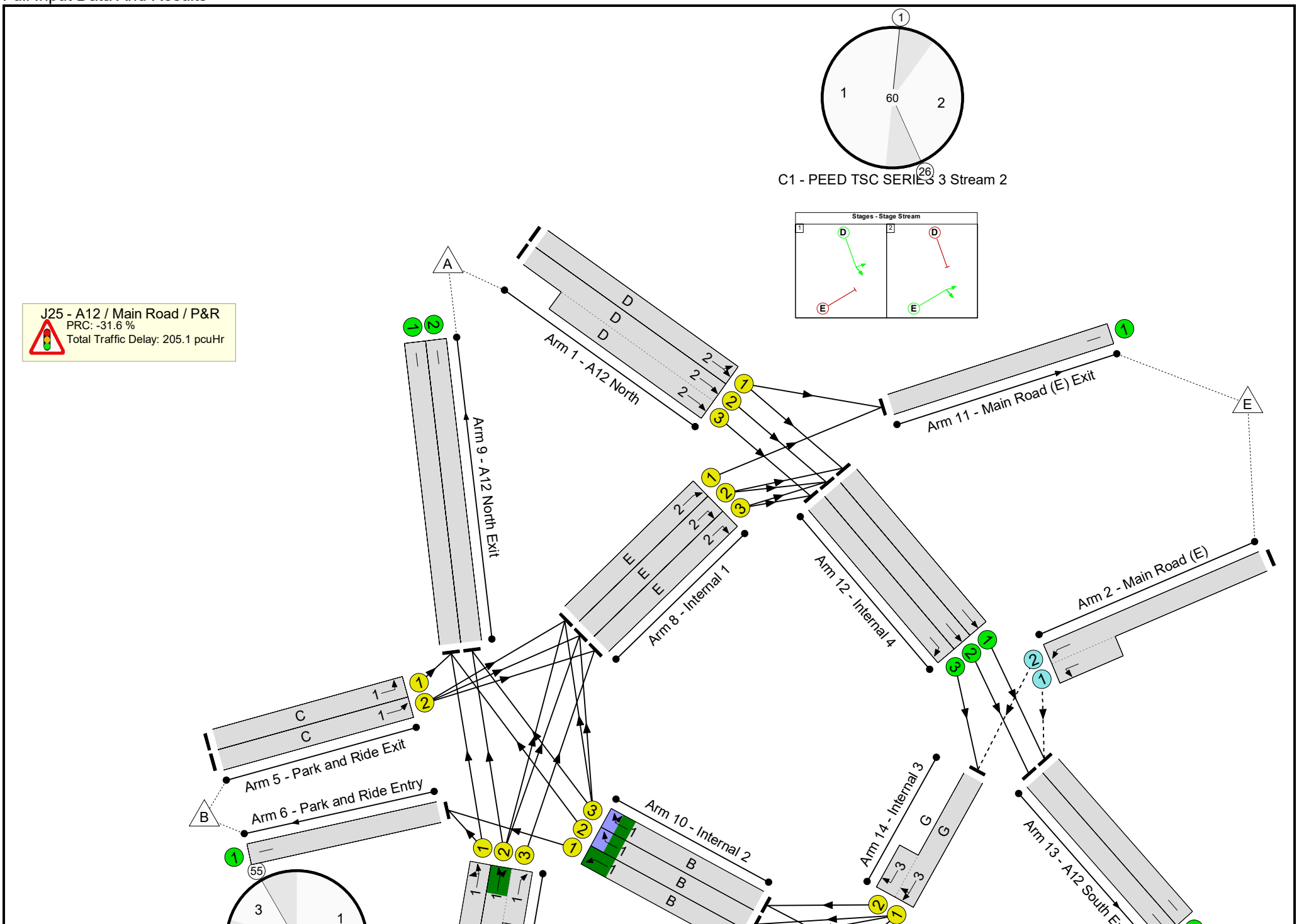
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.4%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.4%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	30	-	639	1964	1015	63.0%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	30	-	1167	2105:2115	1022+568	73.4 : 73.4%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	163	950:1845	126+537	24.6 : 24.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	19	-	1289	2070:1908	690+399	118.4 : 118.4%
3/3	A12 South Ahead	U	3	N/A	F		1	19	-	807	2084	695	116.2%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	21	-	419	2034	746	56.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	21	-	866	2175:2175	517+420	92.4 : 92.4%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	6	1995	266	2.3%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	14	2125	283	4.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	842	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	20	-	166	1993	698	22.8%
8/2	Internal 1 Right	U	2	N/A	E		1	20	-	377	2137	748	50.4%
8/3	Internal 1 Right	U	2	N/A	E		1	20	-	389	2127	744	52.3%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1249	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	767	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	54	1932	902	6.0%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	830	2066	964	72.9%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	819	2066	964	73.3%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	807	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1326	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	939	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1326	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	31	-	449	1800:1800	952+26	45.9 : 45.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**326**	**0**	**0**	**29.6**	**175.5**	**0.0**	**205.1**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**326**	**0**	**0**	**29.6**	**175.5**	**0.0**	**205.1**	**-**	**-**	**-**	**-**
1/1	639	639	-	-	-	1.8	0.8	-	2.7	15.2	7.5	0.8	8.3
1/2+1/3	1167	1167	-	-	-	3.3	1.4	-	4.7	14.3	9.4	1.4	10.7
2/2+2/1	163	163	326	0	0	0.0	0.2	-	0.2	4.0	0.2	0.2	0.3
3/2+3/1	1289	1162	-	-	-	9.9	103.3	-	113.3	316.3	20.1	103.3	123.4
3/3	807	695	-	-	-	7.2	59.6	-	66.8	297.8	15.3	59.6	74.9
4/1	419	419	-	-	-	1.8	0.6	-	2.4	20.6	5.5	0.6	6.1
4/2+4/3	866	866	-	-	-	4.1	5.3	-	9.4	38.9	10.3	5.3	15.6
5/1	6	6	-	-	-	0.0	0.0	-	0.0	29.9	0.1	0.0	0.1
5/2	14	14	-	-	-	0.1	0.0	-	0.1	29.6	0.2	0.0	0.2
6/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	842	842	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	159	159	-	-	-	0.3	0.1	-	0.5	10.5	0.9	0.1	1.1
8/2	377	377	-	-	-	0.1	0.5	-	0.6	5.9	0.8	0.5	1.3
8/3	389	389	-	-	-	0.1	0.5	-	0.7	6.4	1.3	0.5	1.8
9/1	1122	1122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	662	662	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	54	54	-	-	-	0.0	0.0	-	0.0	3.2	0.1	0.0	0.1
10/2	703	703	-	-	-	0.1	1.3	-	1.4	7.1	0.4	1.3	1.7
10/3	707	707	-	-	-	0.1	1.4	-	1.4	7.2	0.4	1.4	1.7
11/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	807	807	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1326	1326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	939	939	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1326	1326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	449	449	-	-	-	0.6	0.4	-	1.0	8.0	5.3	0.4	5.7

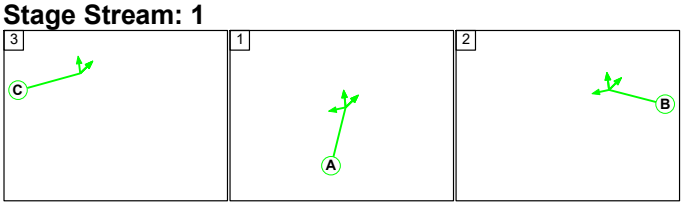
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-2.6	Total Delay for Signalled Lanes (pcuHr):	14.78	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	22.6	Total Delay for Signalled Lanes (pcuHr):	9.12	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-31.6	Total Delay for Signalled Lanes (pcuHr):	181.02	Cycle Time (s):	60
	PRC Over All Lanes (%):	-31.6	Total Delay Over All Lanes(pcuHr):	205.10		

Full Input Data And Results

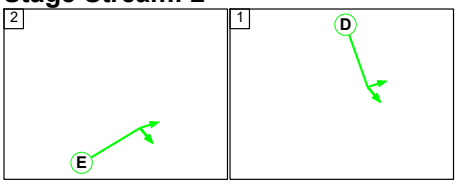
Scenario 14: '2023 Early Years 3-4PM' (FG9: '23EY_3-4PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

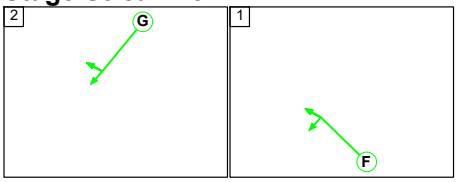
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	15	7	34
Change Point	21	45	57

Stage Stream: 2

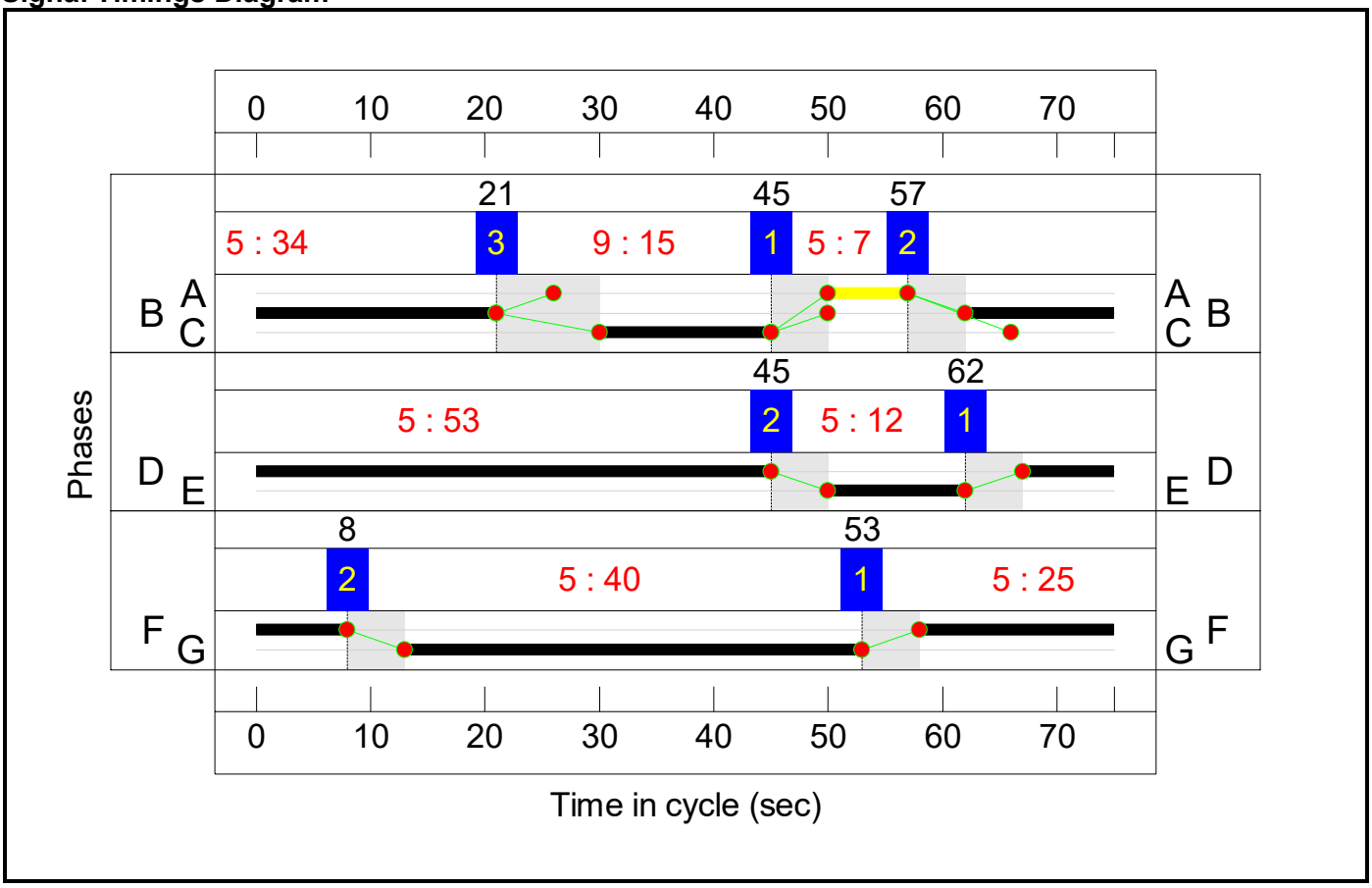
Stage	2	1
Duration	12	53
Change Point	45	62

Stage Stream: 3

Stage	2	1
Duration	40	25
Change Point	8	53

Full Input Data And Results

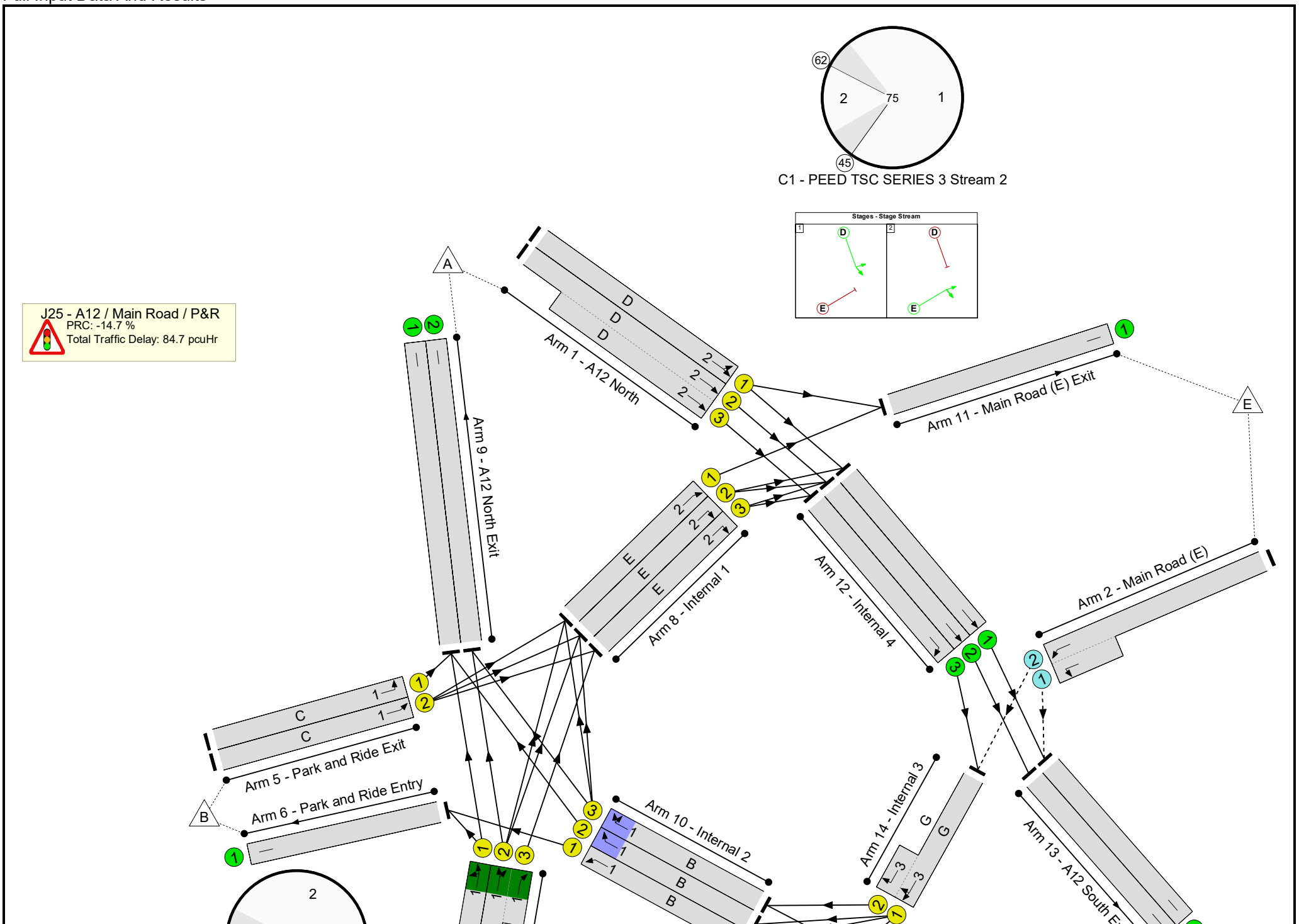
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	53	-	585	1965	1415	41.3%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	53	-	1080	2105:2115	1212+756	54.9 : 54.9%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	275	950:1845	281+252	51.6 : 51.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	1370	2070:1910	718+609	103.3 : 103.3%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	721	2084	722	99.8%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	387	2035	597	64.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	634	2175:2175	433+394	76.7 : 76.7%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	15	-	5	1995	426	1.2%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	15	-	11	2125	453	2.4%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1176	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	12	-	186	1993	345	53.8%
8/2	Internal 1 Right	U	2	N/A	E		1	12	-	262	2137	370	70.7%
8/3	Internal 1 Right	U	2	N/A	E		1	12	-	308	2127	369	83.5%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1141	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	614	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	34	-	2	1932	902	0.2%
10/2	Internal 2 Right	U	1	N/A	B		1	34	-	749	2066	964	75.3%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	34	-	725	2066	964	75.2%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	189	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1103	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1103	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	40	-	561	1800:1800	984+7	56.6 : 56.6%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**550**	**0**	**0**	**27.6**	**57.1**	**0.0**	**84.7**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**550**	**0**	**0**	**27.6**	**57.1**	**0.0**	**84.7**	**-**	**-**	**-**	**-**
1/1	585	585	-	-	-	0.7	0.4	-	1.0	6.4	4.7	0.4	5.1
1/2+1/3	1080	1080	-	-	-	1.2	0.6	-	1.8	6.1	5.5	0.6	6.1
2/2+2/1	275	275	550	0	0	0.1	0.5	-	0.6	8.1	0.8	0.5	1.3
3/2+3/1	1370	1347	-	-	-	10.0	32.3	-	42.2	111.0	15.7	32.3	48.0
3/3	721	721	-	-	-	4.9	13.1	-	18.0	89.7	14.8	13.1	27.9
4/1	387	387	-	-	-	2.5	0.9	-	3.4	31.6	7.0	0.9	7.9
4/2+4/3	634	634	-	-	-	3.9	1.6	-	5.5	31.5	7.9	1.6	9.5
5/1	5	5	-	-	-	0.0	0.0	-	0.0	27.9	0.1	0.0	0.1
5/2	11	11	-	-	-	0.1	0.0	-	0.1	27.7	0.2	0.0	0.2
6/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1176	1176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	186	186	-	-	-	1.6	0.6	-	2.2	43.1	3.7	0.6	4.3
8/2	262	262	-	-	-	0.5	1.2	-	1.7	23.3	5.1	1.2	6.2
8/3	308	308	-	-	-	0.7	2.4	-	3.0	35.6	6.1	2.4	8.5
9/1	1118	1118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	614	614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	2	2	-	-	-	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
10/2	726	726	-	-	-	0.0	1.5	-	1.5	7.7	0.1	1.5	1.6
10/3	725	725	-	-	-	0.0	1.5	-	1.5	7.6	0.1	1.5	1.6
11/1	189	189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1103	1103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	843	843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1103	1103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	561	561	-	-	-	1.3	0.7	-	1.9	12.3	7.6	0.7	8.3

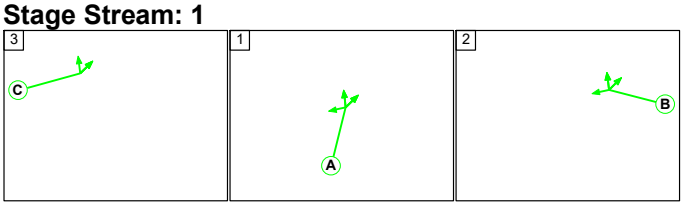
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	17.3	Total Delay for Signalled Lanes (pcuHr):	12.15	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	7.7	Total Delay for Signalled Lanes (pcuHr):	9.83	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-14.7	Total Delay for Signalled Lanes (pcuHr):	62.14	Cycle Time (s): 75
	PRC Over All Lanes (%):	-14.7	Total Delay Over All Lanes(pcuHr):	84.73	

Full Input Data And Results

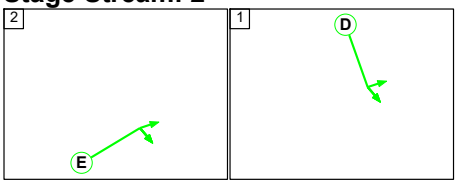
Scenario 15: '2023 Early Years 5-6PM' (FG10: '23EY_5-6PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

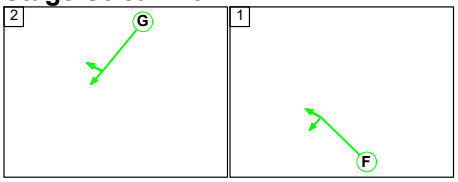
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	9	7	40
Change Point	24	42	54

Stage Stream: 2

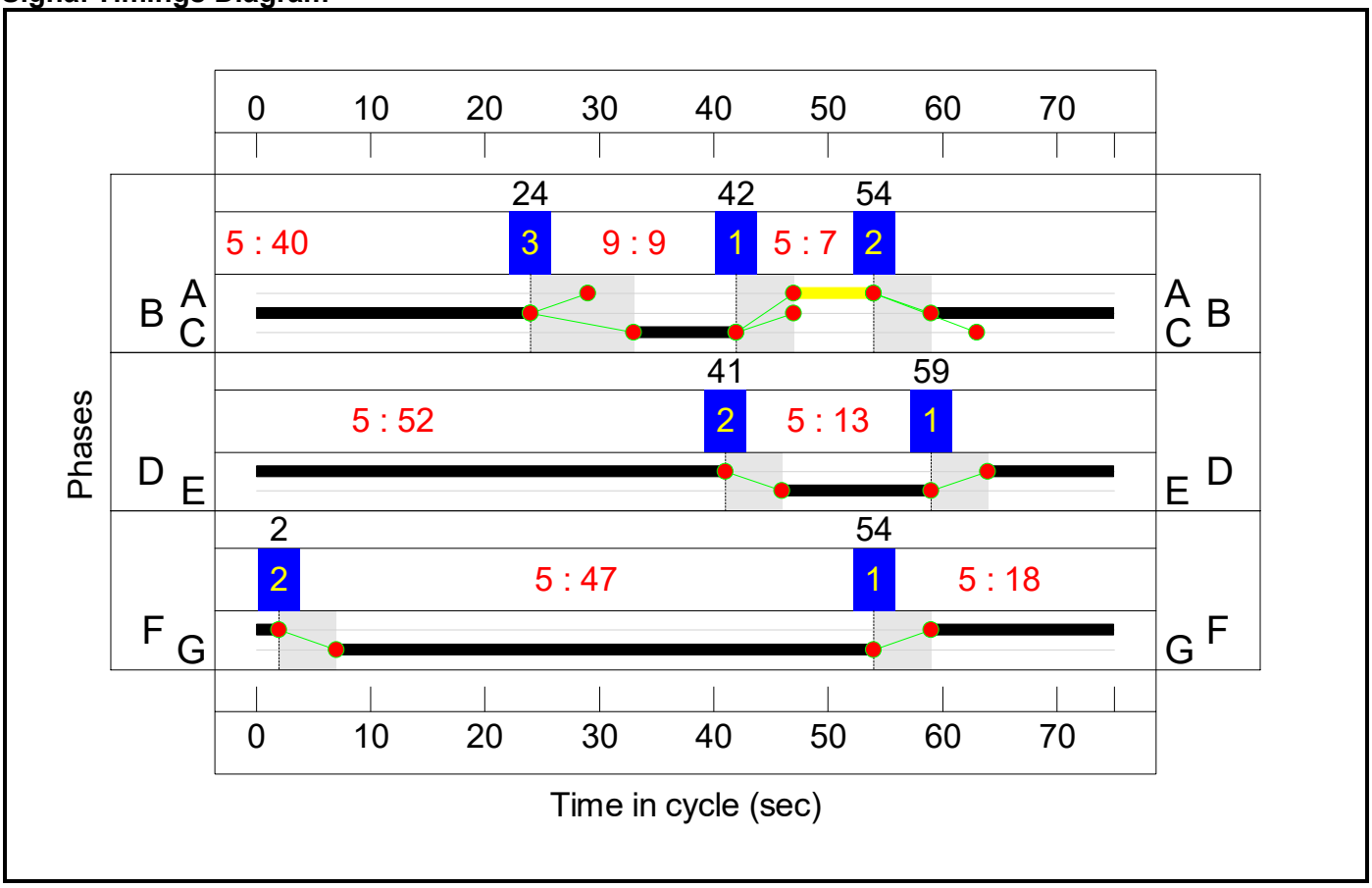
Stage	2	1
Duration	13	52
Change Point	41	59

Stage Stream: 3

Stage	2	1
Duration	47	18
Change Point	2	54

Full Input Data And Results

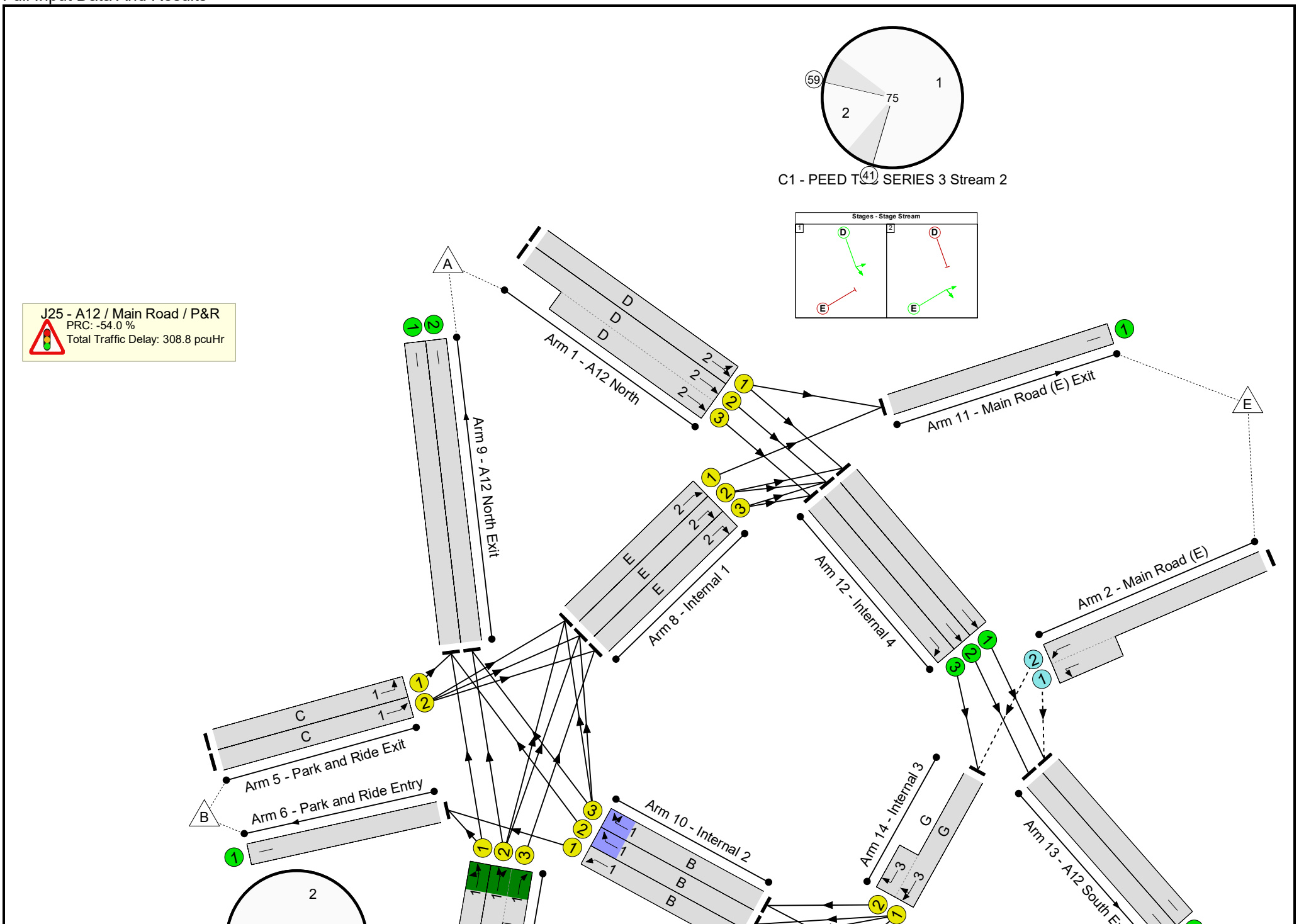
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**138.6%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**138.6%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	52	-	563	1964	1388	40.6%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	52	-	1040	2105:2115	1192+757	53.4 : 53.4%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	402	950:1845	316+192	79.0 : 79.0%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	18	-	1330	2070:1910	524+484	138.6 : 124.6%
3/3	A12 South Ahead	U	3	N/A	F		1	18	-	709	2084	528	134.3%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	291	2034	597	48.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	538	2175:2175	434+391	65.2 : 65.2%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	9	-	21	1995	266	7.9%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	9	-	23	2125	283	8.1%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1242	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	260	1993	372	58.8%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	156	2137	399	39.0%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	267	2127	397	67.2%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1041	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	40	-	8	1932	1056	0.6%
10/2	Internal 2 Right	U	1	N/A	B		1	40	-	731	2066	1129	46.8%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	40	-	712	2066	1129	47.0%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	268	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	981	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	785	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	981	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	47	-	654	1800:1800	1152+5	56.5 : 56.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**804**	**0**	**0**	**45.7**	**263.1**	**0.0**	**308.8**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**804**	**0**	**0**	**45.7**	**263.1**	**0.0**	**308.8**	**-**	**-**	**-**	**-**
1/1	563	563	-	-	-	0.7	0.3	-	1.0	6.7	4.7	0.3	5.0
1/2+1/3	1040	1040	-	-	-	1.3	0.6	-	1.8	6.4	5.5	0.6	6.0
2/2+2/1	402	402	804	0	0	0.2	1.8	-	2.0	18.3	2.5	1.8	4.3
3/2+3/1	1330	1008	-	-	-	21.3	162.9	-	184.2	498.5	25.3	162.9	188.2
3/3	709	528	-	-	-	13.3	92.4	-	105.8	537.0	21.3	92.4	113.8
4/1	291	291	-	-	-	1.8	0.5	-	2.2	27.7	4.9	0.5	5.4
4/2+4/3	538	538	-	-	-	3.2	0.9	-	4.1	27.7	5.6	0.9	6.5
5/1	21	21	-	-	-	0.2	0.0	-	0.2	35.9	0.4	0.0	0.4
5/2	23	23	-	-	-	0.2	0.0	-	0.2	35.5	0.4	0.0	0.5
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1124	1124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	219	219	-	-	-	1.7	0.7	-	2.4	39.2	4.4	0.7	5.1
8/2	155	155	-	-	-	0.3	0.3	-	0.6	13.2	2.7	0.3	3.1
8/3	267	267	-	-	-	0.5	1.0	-	1.6	20.9	5.1	1.0	6.1
9/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	7	7	-	-	-	0.0	0.0	-	0.0	5.5	0.0	0.0	0.0
10/2	528	528	-	-	-	0.0	0.4	-	0.5	3.1	0.1	0.4	0.5
10/3	531	531	-	-	-	0.0	0.4	-	0.5	3.1	0.0	0.4	0.5
11/1	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	633	633	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	981	981	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	785	785	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	981	981	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	654	654	-	-	-	1.1	0.6	-	1.7	9.4	7.8	0.6	8.4

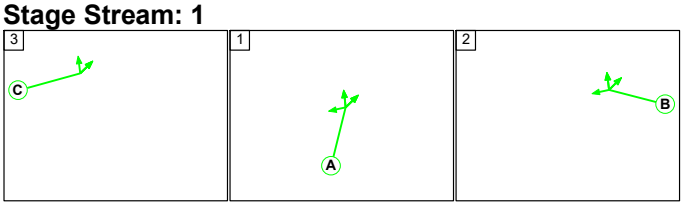
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	38.0	Total Delay for Signalled Lanes (pcuHr):	7.74	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	33.8	Total Delay for Signalled Lanes (pcuHr):	7.39	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-54.0	Total Delay for Signalled Lanes (pcuHr):	291.64	Cycle Time (s): 75
	PRC Over All Lanes (%):	-54.0	Total Delay Over All Lanes(pcuHr):	308.81	

Full Input Data And Results

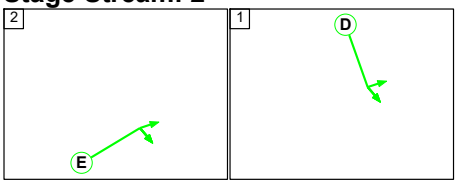
Scenario 16: '2028 Reference Case 6-7AM' (FG21: '28RC_6-7AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

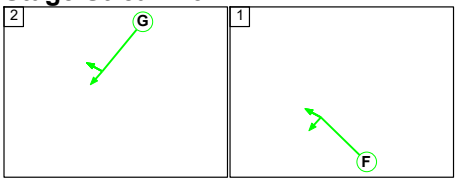
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	21	7	13
Change Point	56	26	38

Stage Stream: 2

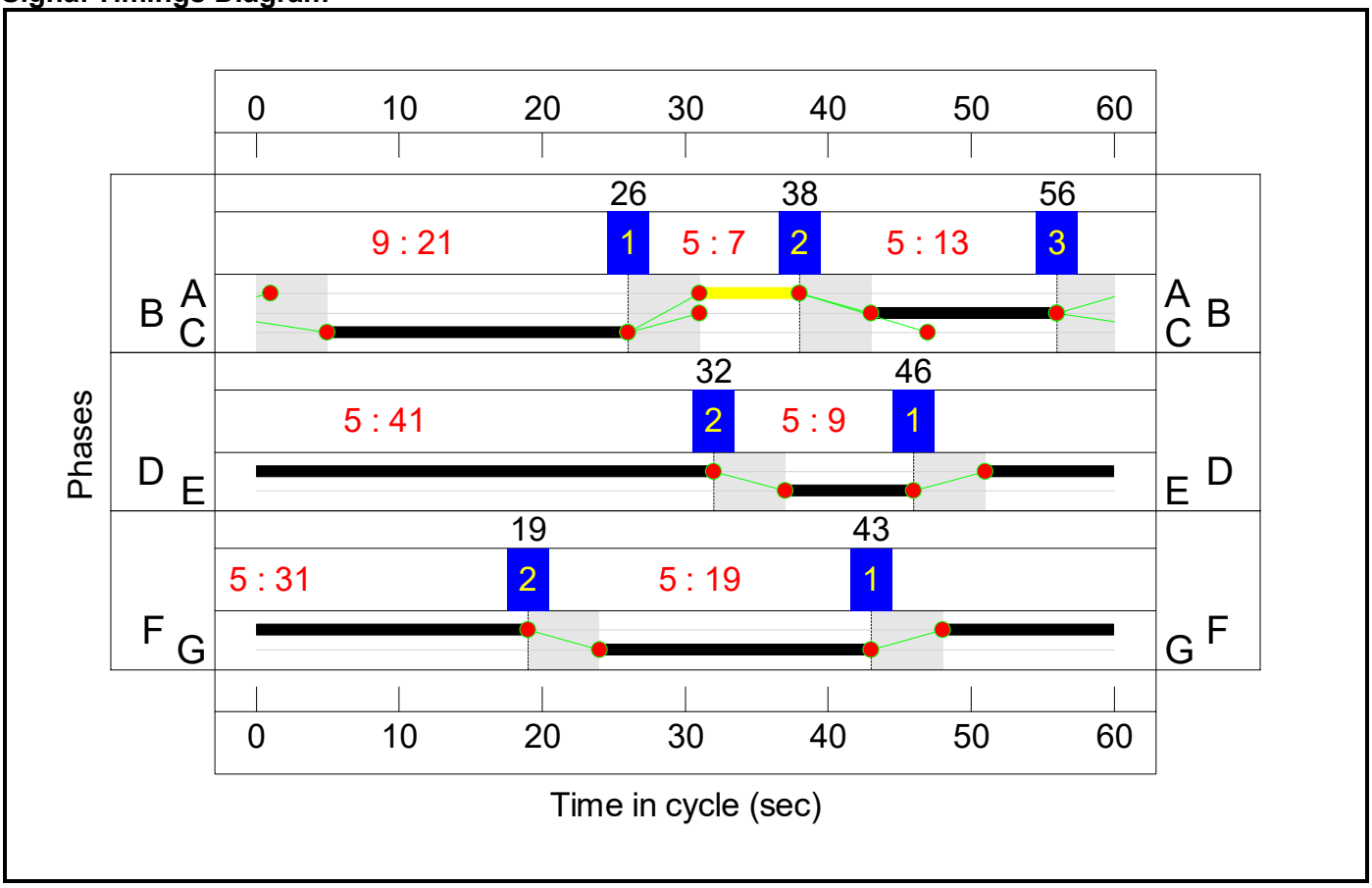
Stage	2	1
Duration	9	41
Change Point	32	46

Stage Stream: 3

Stage	2	1
Duration	19	31
Change Point	19	43

Full Input Data And Results

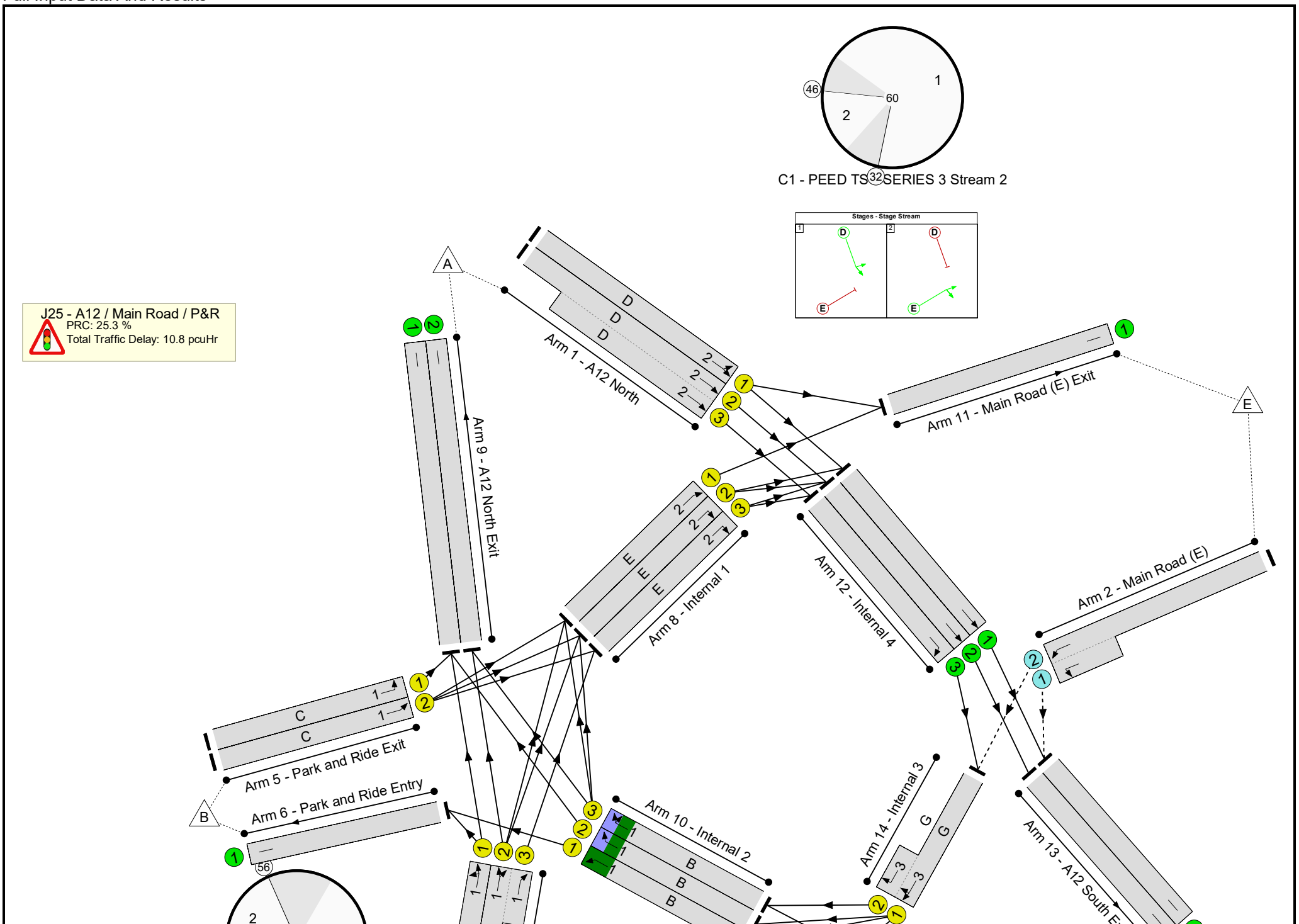
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.9%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.9%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	41	-	309	1964	1375	22.5%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	41	-	588	2105:2115	1323+469	32.8 : 32.8%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	43	950:1845	124+639	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	31	-	449	2070:1909	1059+516	28.5 : 28.5%
3/3	A12 South Ahead	U	3	N/A	F		1	31	-	242	2084	1111	21.8%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	146	2034	271	53.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	335	2175:2175	281+185	71.9 : 71.9%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	21	-	1	1995	732	0.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	21	-	2	2125	779	0.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	296	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	9	-	46	1993	332	13.8%
8/2	Internal 1 Right	U	2	N/A	E		1	9	-	95	2137	356	26.7%
8/3	Internal 1 Right	U	2	N/A	E		1	9	-	135	2127	354	38.1%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	451	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	8	1932	966	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	305	2066	1033	29.5%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	243	2066	1033	23.5%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	617	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	154	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	617	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	19	-	161	1800:1800	600+4	26.7 : 26.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**86**	**0**	**0**	**7.1**	**3.7**	**0.0**	**10.8**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**86**	**0**	**0**	**7.1**	**3.7**	**0.0**	**10.8**	**-**	**-**	**-**	**-**
1/1	309	309	-	-	-	0.3	0.1	-	0.4	4.9	1.8	0.1	1.9
1/2+1/3	588	588	-	-	-	0.5	0.2	-	0.8	4.8	2.7	0.2	2.9
2/2+2/1	43	43	86	0	0	0.0	0.0	-	0.0	2.5	0.0	0.0	0.0
3/2+3/1	449	449	-	-	-	0.9	0.2	-	1.1	9.1	2.7	0.2	2.9
3/3	242	242	-	-	-	0.5	0.1	-	0.6	9.5	2.1	0.1	2.2
4/1	146	146	-	-	-	1.0	0.6	-	1.6	38.5	2.3	0.6	2.8
4/2+4/3	335	335	-	-	-	2.3	1.3	-	3.5	38.0	3.2	1.3	4.5
5/1	1	1	-	-	-	0.0	0.0	-	0.0	14.8	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	14.7	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	296	296	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	46	46	-	-	-	0.1	0.1	-	0.2	15.1	0.2	0.1	0.3
8/2	95	95	-	-	-	0.0	0.2	-	0.2	8.6	0.2	0.2	0.3
8/3	135	135	-	-	-	0.1	0.3	-	0.4	9.6	0.7	0.3	1.0
9/1	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	7.5	0.0	0.0	0.0
10/2	305	305	-	-	-	0.4	0.2	-	0.6	7.6	1.1	0.2	1.3
10/3	243	243	-	-	-	0.3	0.2	-	0.5	7.4	0.8	0.2	1.0
11/1	57	57	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	617	617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	154	154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	617	617	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	161	161	-	-	-	0.6	0.2	-	0.8	17.9	2.1	0.2	2.3

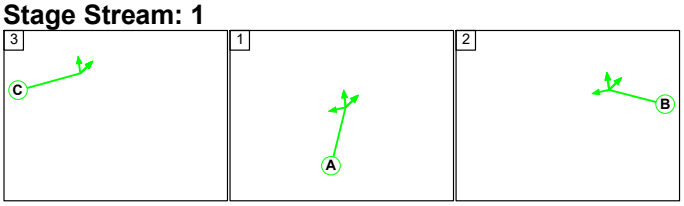
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	25.3	Total Delay for Signalled Lanes (pcuHr):	6.27	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	136.3	Total Delay for Signalled Lanes (pcuHr):	1.98	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	215.6	Total Delay for Signalled Lanes (pcuHr):	2.57	Cycle Time (s):	60
	PRC Over All Lanes (%):	25.3	Total Delay Over All Lanes(pcuHr):	10.85		

Full Input Data And Results

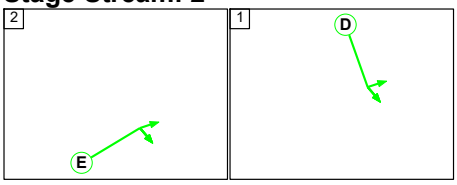
Scenario 17: '2028 Reference Case 7-8AM' (FG22: '28RC_7-8AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

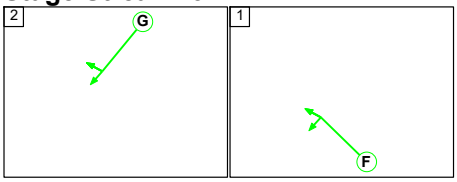
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	15	19
Change Point	10	26	46

Stage Stream: 2

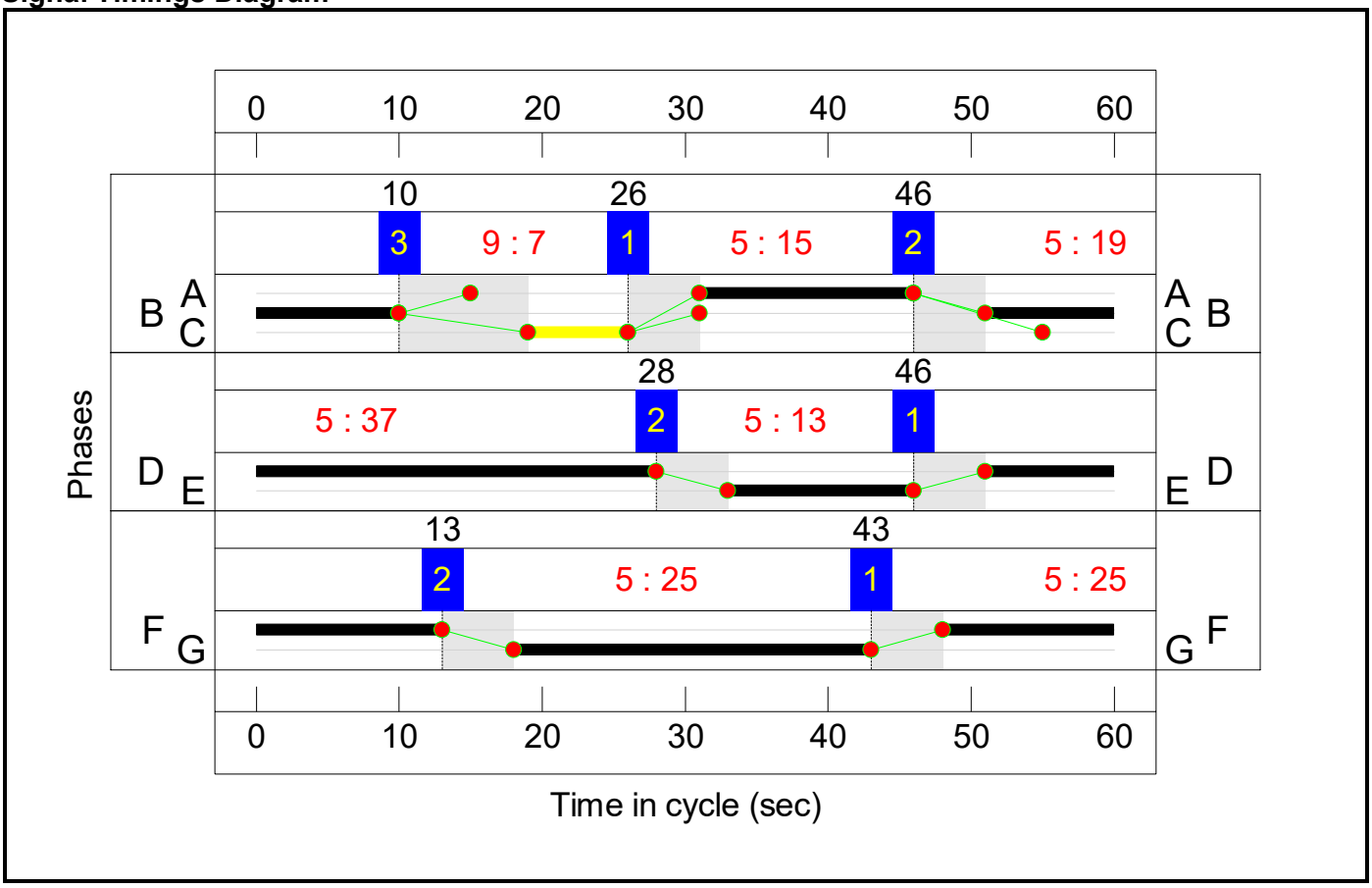
Stage	2	1
Duration	13	37
Change Point	28	46

Stage Stream: 3

Stage	2	1
Duration	25	25
Change Point	13	43

Full Input Data And Results

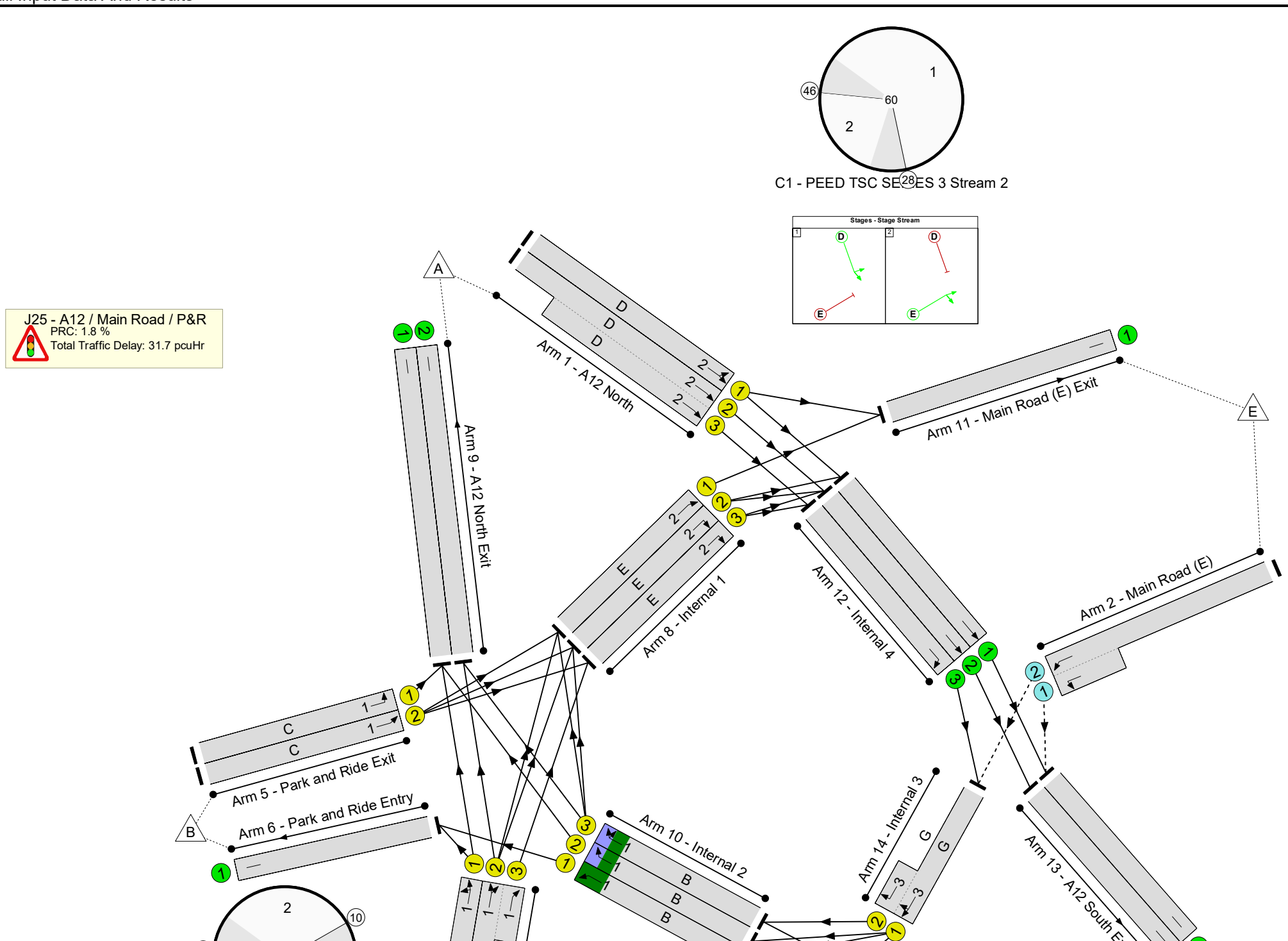
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.4%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.4%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	578	1959	1241	46.6%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	1047	2105:2115	1189+602	58.5 : 58.5%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	98	950:1845	104+576	14.4 : 14.4%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	1059	2070:1908	897+478	77.0 : 77.0%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	632	2084	903	70.0%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	15	-	444	2032	542	81.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	15	-	687	2175:2175	445+333	88.4 : 88.4%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	4	1995	266	1.5%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	3	2125	283	1.1%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	112	1993	465	24.1%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	273	2137	499	54.7%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	295	2127	496	59.4%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1126	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	19	-	46	1932	1095	4.2%
10/2	Internal 2 Right	U	1	N/A	B		1	19	-	692	2066	1171	59.1%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	19	-	643	2066	1171	54.9%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	193	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1127	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	716	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1127	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	25	-	367	1800:1800	775+24	46.0 : 46.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**196**	**0**	**0**	**18.7**	**13.0**	**0.0**	**31.7**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**196**	**0**	**0**	**18.7**	**13.0**	**0.0**	**31.7**	**-**	**-**	**-**	**-**
1/1	578	578	-	-	-	0.9	0.4	-	1.4	8.4	5.0	0.4	5.4
1/2+1/3	1047	1047	-	-	-	1.6	0.7	-	2.3	8.0	6.2	0.7	6.9
2/2+2/1	98	98	196	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
3/2+3/1	1059	1059	-	-	-	4.0	1.7	-	5.7	19.2	9.8	1.7	11.4
3/3	632	632	-	-	-	2.4	1.2	-	3.6	20.4	8.4	1.2	9.6
4/1	444	444	-	-	-	2.5	2.2	-	4.7	38.3	6.9	2.2	9.1
4/2+4/3	687	687	-	-	-	3.8	3.5	-	7.3	38.2	7.8	3.5	11.3
5/1	4	4	-	-	-	0.0	0.0	-	0.0	29.8	0.1	0.0	0.1
5/2	3	3	-	-	-	0.0	0.0	-	0.0	29.4	0.0	0.0	0.0
6/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	112	112	-	-	-	0.4	0.2	-	0.6	18.1	0.7	0.2	0.9
8/2	273	273	-	-	-	0.8	0.6	-	1.4	18.4	1.1	0.6	1.7
8/3	295	295	-	-	-	0.8	0.7	-	1.5	18.9	1.1	0.7	1.9
9/1	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	653	653	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	46	46	-	-	-	0.0	0.0	-	0.0	2.8	0.0	0.0	0.1
10/2	692	692	-	-	-	0.0	0.7	-	0.7	3.8	0.0	0.7	0.7
10/3	643	643	-	-	-	0.0	0.6	-	0.6	3.6	0.1	0.6	0.7
11/1	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	633	633	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1127	1127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	716	716	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1127	1127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	367	367	-	-	-	1.2	0.4	-	1.7	16.4	4.9	0.4	5.4

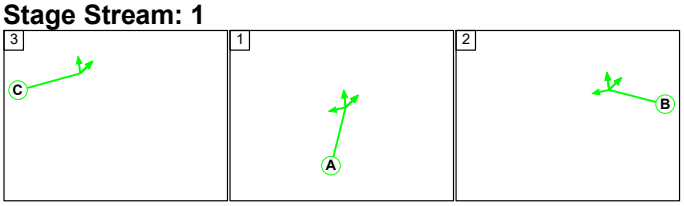
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	13.47	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	51.4	Total Delay for Signalled Lanes (pcuHr):	7.20	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	16.8	Total Delay for Signalled Lanes (pcuHr):	10.91	Cycle Time (s):	60
	PRC Over All Lanes (%):	1.8	Total Delay Over All Lanes(pcuHr):	31.66		

Full Input Data And Results

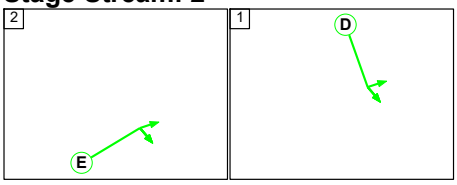
Scenario 18: '2028 Reference Case 8-9AM' (FG23: '28RC_8-9AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

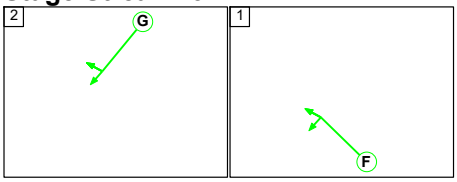
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	21	13
Change Point	39	55	21

Stage Stream: 2

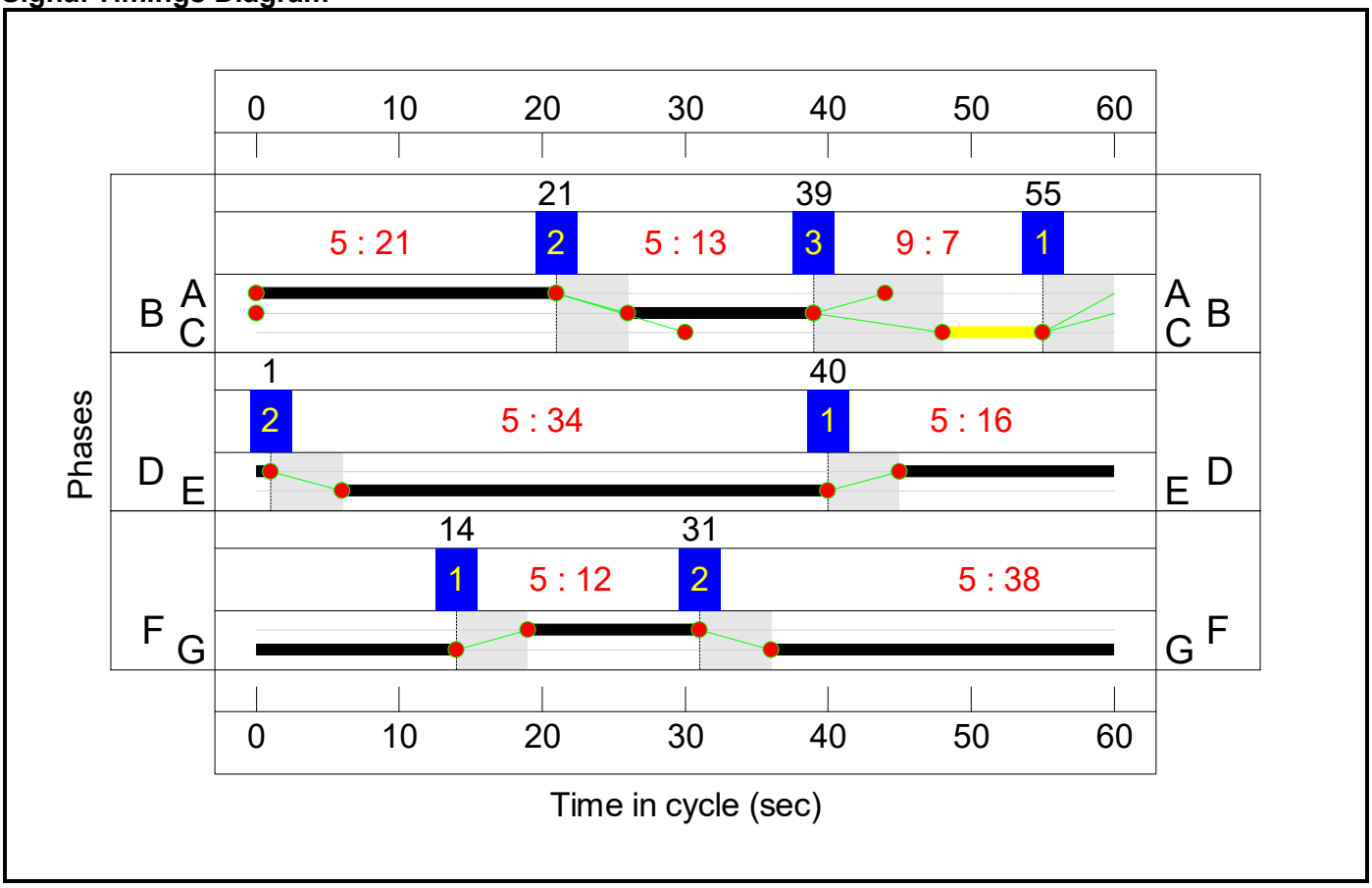
Stage	2	1
Duration	34	16
Change Point	1	40

Stage Stream: 3

Stage	2	1
Duration	38	12
Change Point	31	14

Full Input Data And Results

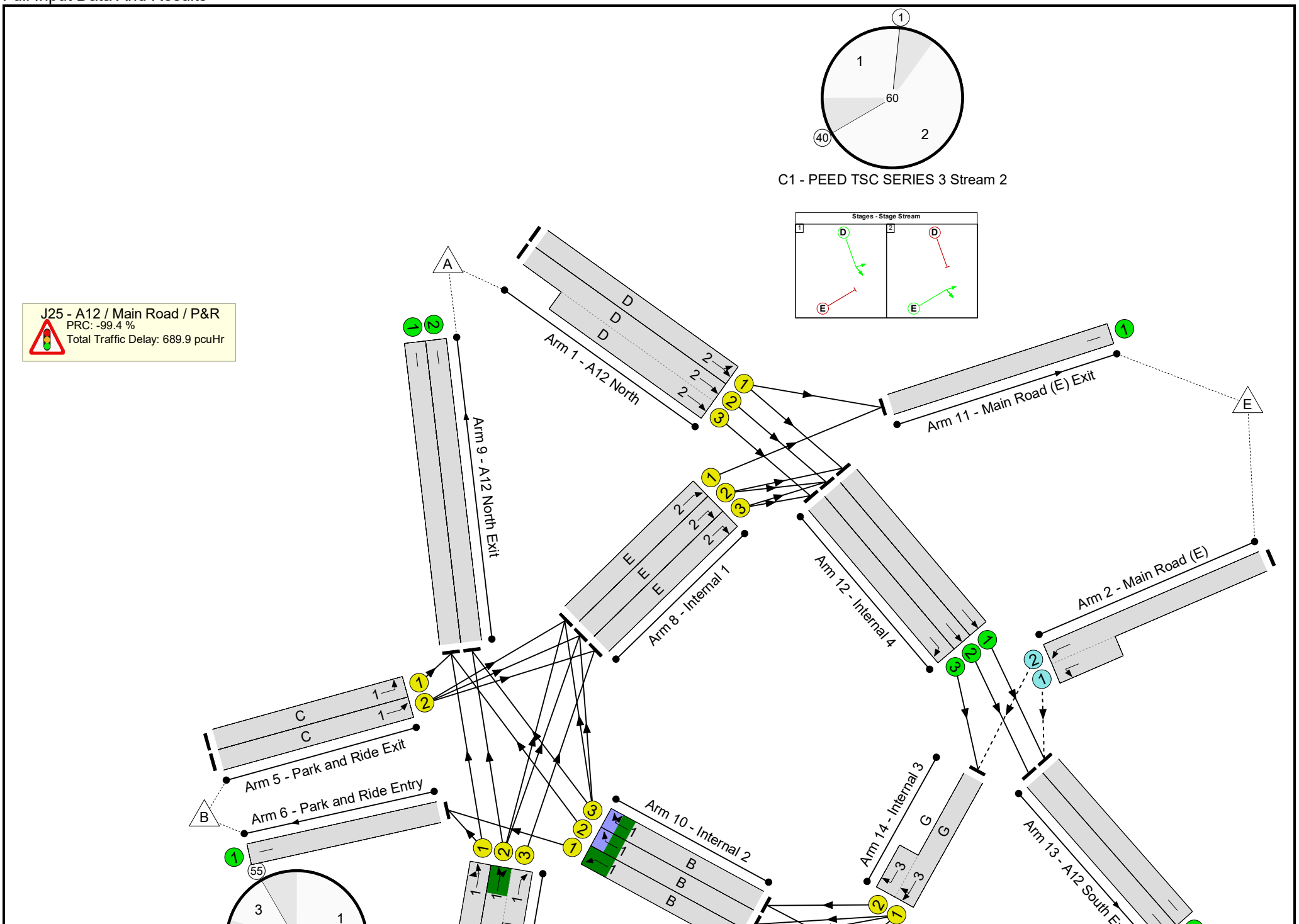
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**179.5%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**179.5%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	16	-	675	1964	556	121.3%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	16	-	1208	2105:2115	596+327	130.8 : 130.8%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	167	950:1845	152+554	23.6 : 23.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	12	-	1324	2070:1908	448+413	179.5 : 125.5%
3/3	A12 South Ahead	U	3	N/A	F		1	12	-	800	2084	452	177.2%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	21	-	469	2034	746	62.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	21	-	908	2175:2175	524+405	97.8 : 97.8%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	6	1995	266	2.3%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	14	2125	283	4.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	63	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	903	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	34	-	195	1993	1163	14.8%
8/2	Internal 1 Right	U	2	N/A	E		1	34	-	383	2137	1247	30.7%
8/3	Internal 1 Right	U	2	N/A	E		1	34	-	397	2127	1241	32.0%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1289	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	756	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	56	1932	902	5.0%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	821	2066	964	48.1%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	809	2066	964	47.7%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	217	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1367	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	976	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1367	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	38	-	465	1800:1800	1163+23	34.9 : 37.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**334**	**0**	**0**	**62.2**	**627.7**	**0.0**	**689.9**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**334**	**0**	**0**	**62.2**	**627.7**	**0.0**	**689.9**	**-**	**-**	**-**	**-**
1/1	675	556	-	-	-	8.1	62.0	-	70.1	374.1	14.5	62.0	76.4
1/2+1/3	1208	974	-	-	-	11.9	144.3	-	156.1	465.2	18.2	144.3	162.5
2/2+2/1	167	167	334	0	0	0.0	0.2	-	0.2	3.9	0.2	0.2	0.3
3/2+3/1	1324	862	-	-	-	20.6	232.5	-	253.1	688.1	25.8	232.5	258.3
3/3	800	452	-	-	-	14.3	175.4	-	189.6	853.3	19.2	175.4	194.5
4/1	469	469	-	-	-	2.0	0.8	-	2.9	22.1	6.4	0.8	7.2
4/2+4/3	908	908	-	-	-	4.4	10.8	-	15.2	60.4	11.9	10.8	22.7
5/1	6	6	-	-	-	0.0	0.0	-	0.0	29.9	0.1	0.0	0.1
5/2	14	14	-	-	-	0.1	0.0	-	0.1	29.6	0.2	0.0	0.2
6/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	758	758	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	172	172	-	-	-	0.1	0.1	-	0.2	3.3	0.3	0.1	0.3
8/2	383	383	-	-	-	0.1	0.2	-	0.3	2.6	0.6	0.2	0.9
8/3	397	397	-	-	-	0.0	0.2	-	0.2	2.2	0.6	0.2	0.8
9/1	932	932	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	430	430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	45	45	-	-	-	0.0	0.0	-	0.0	3.2	0.1	0.0	0.2
10/2	464	464	-	-	-	0.3	0.5	-	0.7	5.8	7.5	0.5	7.9
10/3	460	460	-	-	-	0.3	0.5	-	0.7	5.6	7.3	0.5	7.8
11/1	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	730	730	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1183	1183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	861	861	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1183	1183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	414	414	-	-	-	0.1	0.3	-	0.3	2.9	7.7	0.3	7.9

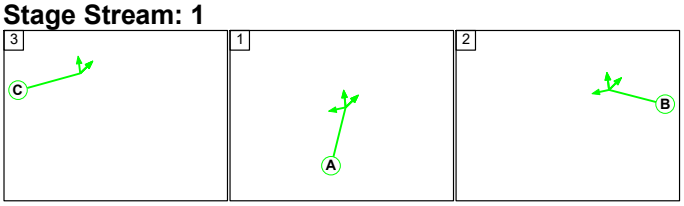
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-8.7	Total Delay for Signalled Lanes (pcuHr):	19.77	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	-45.3	Total Delay for Signalled Lanes (pcuHr):	226.91	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-99.4	Total Delay for Signalled Lanes (pcuHr):	443.02	Cycle Time (s): 60
	PRC Over All Lanes (%):	-99.4	Total Delay Over All Lanes(pcuHr):	689.89	

Full Input Data And Results

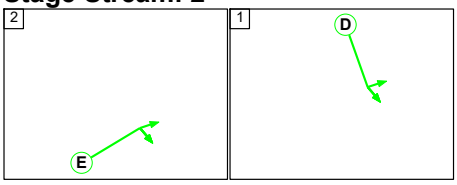
Scenario 19: '2028 Reference Case 3-4PM' (FG24: '28RC_3-4PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

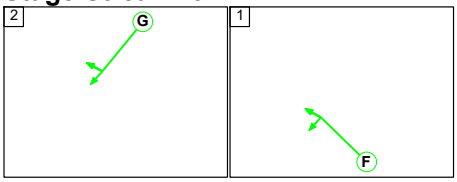
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	15	7	34
Change Point	21	45	57

Stage Stream: 2

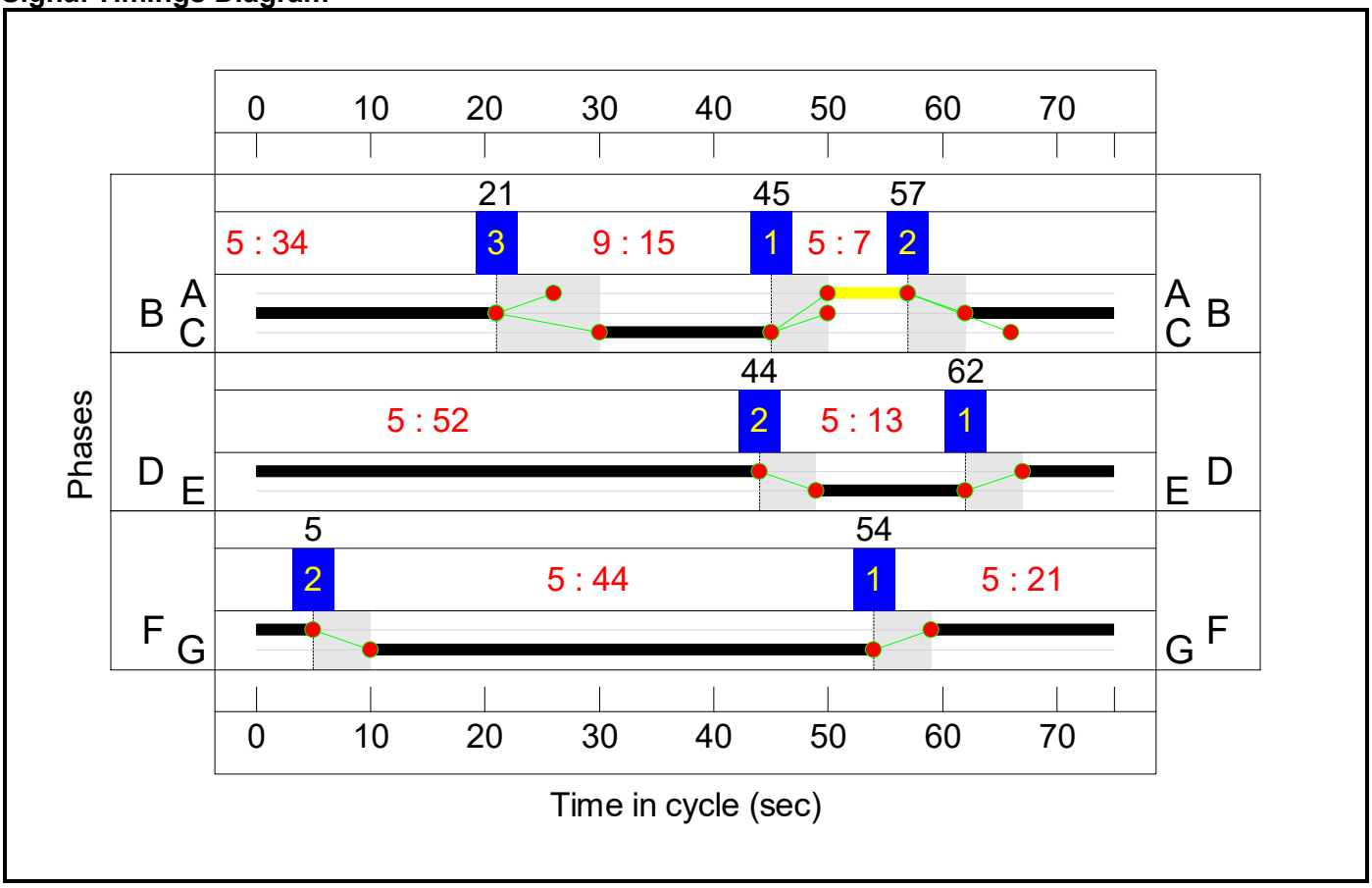
Stage	2	1
Duration	13	52
Change Point	44	62

Stage Stream: 3

Stage	2	1
Duration	44	21
Change Point	5	54

Full Input Data And Results

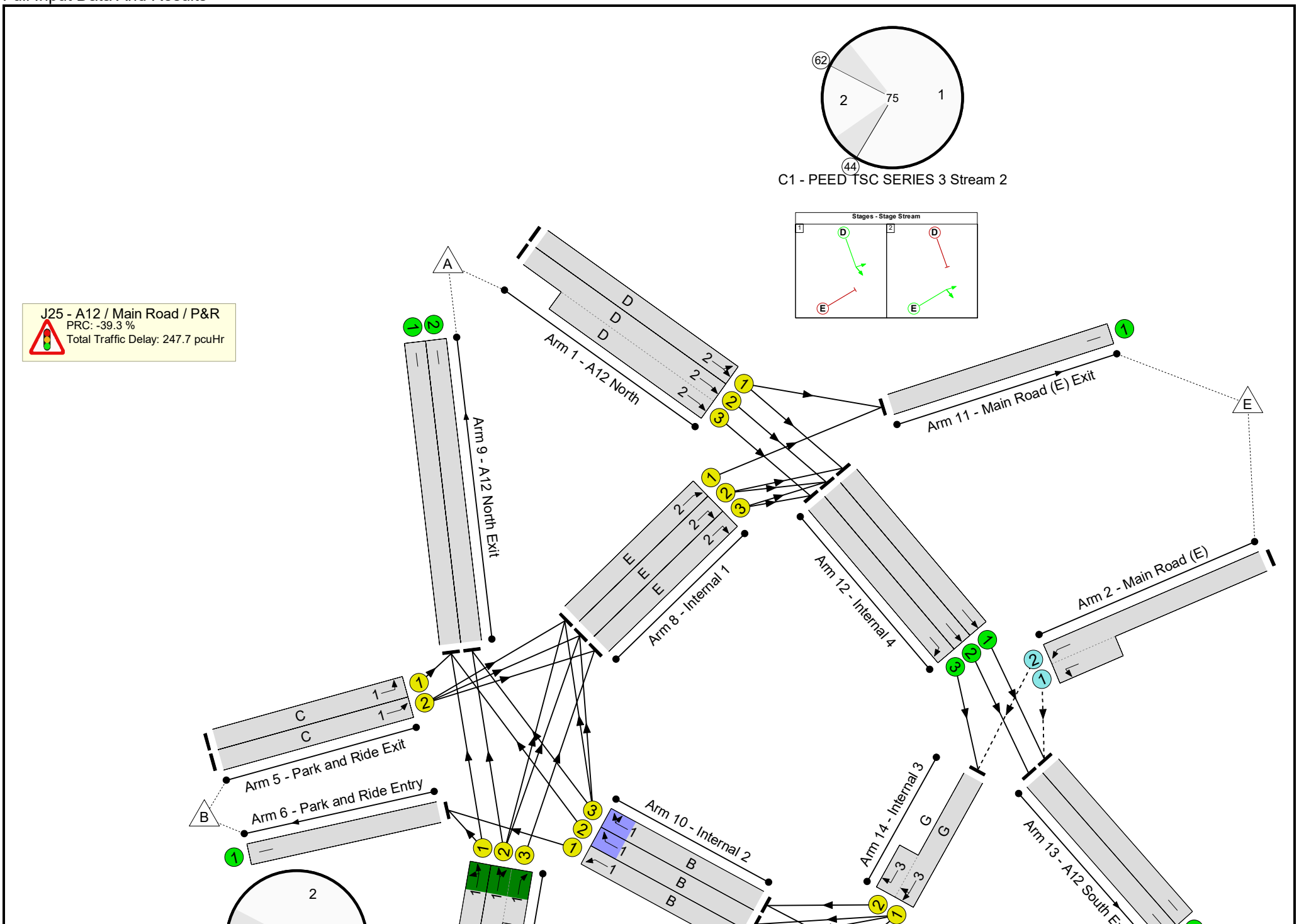
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**125.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	52	-	625	1964	1388	45.0%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	52	-	1109	2105:2115	1203+717	57.8 : 57.8%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	336	950:1845	273+176	74.8 : 74.8%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	21	-	1405	2070:1910	607+560	125.3 : 114.9%
3/3	A12 South Ahead	U	3	N/A	F		1	21	-	751	2084	611	122.9%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	388	2035	597	65.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	643	2175:2175	434+390	78.0 : 78.0%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	15	-	5	1995	426	1.2%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	15	-	13	2125	453	2.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1247	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	224	1993	372	53.3%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	262	2137	399	65.7%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	309	2127	397	77.8%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1162	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%

	N/A	B		1	34	-	4	1932	902	0.4%
	N/A	B		1	34	-	769	2066	964	63.8%
	N/A	B		1	34	-	755	2066	964	63.8%
	N/A	-		-	-	-	240	Inf	Inf	0.0%
	N/A	-		-	-	-	740	Inf	Inf	0.0%
	N/A	-		-	-	-	1134	Inf	Inf	0.0%
	N/A	-		-	-	-	415	Inf	Inf	0.0%
	N/A	-		-	-	-	872	Inf	Inf	0.0%
	N/A	-		-	-	-	1134	Inf	Inf	0.0%
	N/A	G		1	44	-	619	1800:1800	1080+7	56.9 : 56.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**672**	**0**	**0**	**42.8**	**204.9**	**0.0**	**247.7**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**672**	**0**	**0**	**42.8**	**204.9**	**0.0**	**247.7**	**-**	**-**	**-**	**-**
1/1	625	625	-	-	-	0.8	0.4	-	1.2	7.1	5.6	0.4	6.0
1/2+1/3	1109	1109	-	-	-	1.4	0.7	-	2.1	6.7	6.2	0.7	6.9
2/2+2/1	336	336	672	0	0	0.2	1.5	-	1.7	17.7	1.8	1.5	3.3
3/2+3/1	1405	1167	-	-	-	18.6	121.7	-	140.2	359.2	24.8	121.7	146.4
3/3	751	611	-	-	-	11.5	72.4	-	83.9	402.3	19.8	72.4	92.2
4/1	388	388	-	-	-	2.5	0.9	-	3.4	31.7	7.0	0.9	7.9
4/2+4/3	643	643	-	-	-	4.0	1.7	-	5.7	32.2	8.3	1.7	10.0
5/1	5	5	-	-	-	0.0	0.0	-	0.0	27.9	0.1	0.0	0.1
5/2	13	13	-	-	-	0.1	0.0	-	0.1	27.7	0.2	0.0	0.2
6/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1164	1164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	198	198	-	-	-	1.6	0.6	-	2.1	38.6	3.9	0.6	4.5
8/2	262	262	-	-	-	0.4	0.9	-	1.4	19.1	4.9	0.9	5.9
8/3	309	309	-	-	-	0.6	1.7	-	2.3	26.7	6.1	1.7	7.8
9/1	1008	1008	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	4	4	-	-	-	0.0	0.0	-	0.0	12.1	0.0	0.0	0.0
10/2	615	615	-	-	-	0.0	0.9	-	0.9	5.4	0.1	0.9	1.0
10/3	615	615	-	-	-	0.0	0.9	-	0.9	5.3	0.1	0.9	0.9
11/1	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	740	740	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1134	1134	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1134	1134	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	619	619	-	-	-	1.1	0.7	-	1.7	9.9	7.6	0.7	8.3

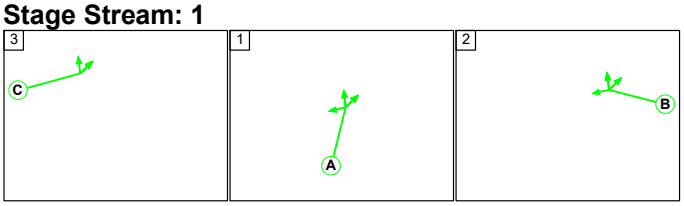
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	15.4	Total Delay for Signalled Lanes (pcuHr):	11.13	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	15.6	Total Delay for Signalled Lanes (pcuHr):	9.11	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-39.3	Total Delay for Signalled Lanes (pcuHr):	225.84	Cycle Time (s): 75
	PRC Over All Lanes (%):	-39.3	Total Delay Over All Lanes(pcuHr):	247.74	

Full Input Data And Results

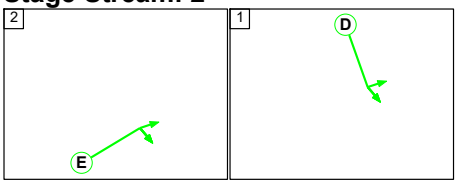
Scenario 20: '2028 Reference Case 5-6PM' (FG25: '28RC_5-6PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

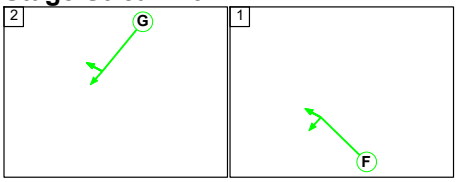
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	9	7	40
Change Point	24	42	54

Stage Stream: 2

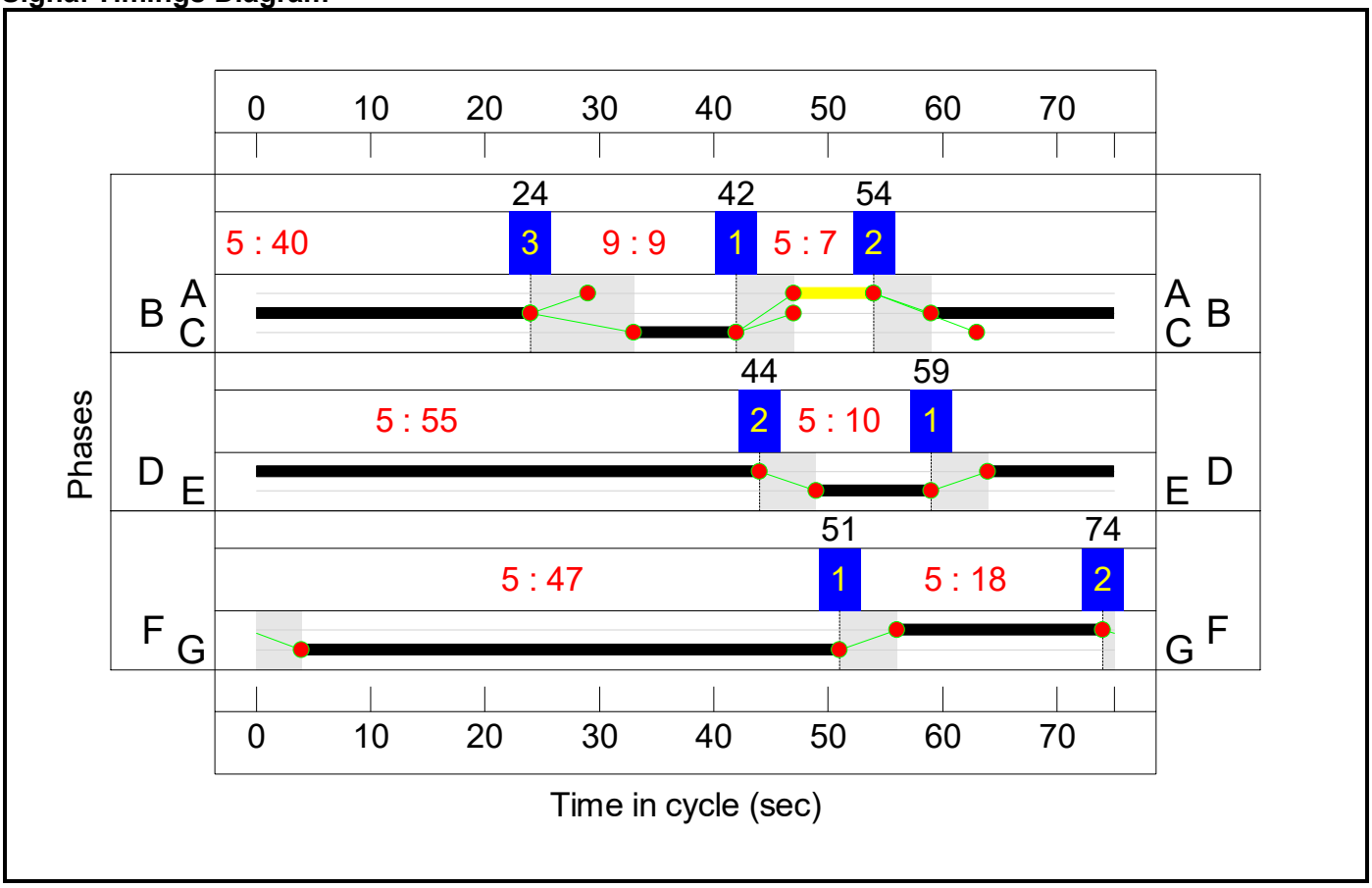
Stage	2	1
Duration	10	55
Change Point	44	59

Stage Stream: 3

Stage	2	1
Duration	47	18
Change Point	74	51

Full Input Data And Results

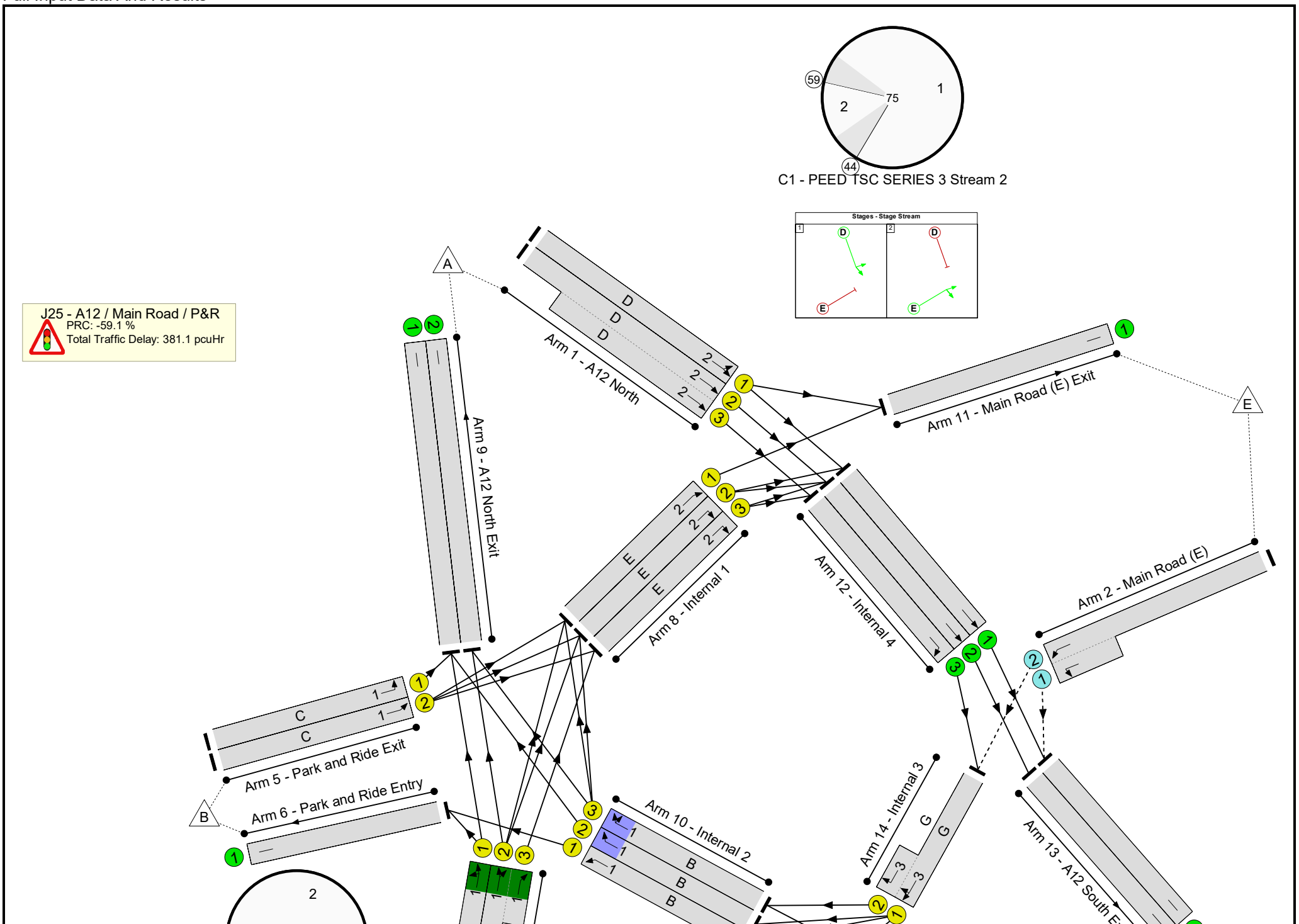
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**143.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**143.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	55	-	597	1964	1466	40.7%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	55	-	1040	2105:2115	1262+727	52.3 : 52.3%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	465	950:1845	295+143	106.0 : 106.0%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	18	-	1388	2070:1910	524+484	143.2 : 131.6%
3/3	A12 South Ahead	U	3	N/A	F		1	18	-	742	2084	528	140.5%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	314	2034	597	52.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	565	2175:2175	431+398	68.2 : 68.2%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	9	-	22	1995	266	8.3%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	9	-	25	2125	283	8.8%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1316	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	10	-	270	1993	292	77.2%
8/2	Internal 1 Right	U	2	N/A	E		1	10	-	186	2137	313	59.2%
8/3	Internal 1 Right	U	2	N/A	E		1	10	-	283	2127	312	90.7%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1090	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	595	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	40	-	8	1932	1056	0.6%
10/2	Internal 2 Right	U	1	N/A	B		1	40	-	756	2066	1129	46.8%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	40	-	744	2066	1129	46.9%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1035	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1035	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	47	-	694	1800:1800	1152+3	58.5 : 56.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**894**	**0**	**0**	**51.1**	**330.0**	**0.0**	**381.1**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**894**	**0**	**0**	**51.1**	**330.0**	**0.0**	**381.1**	**-**	**-**	**-**	**-**
1/1	597	597	-	-	-	0.6	0.3	-	0.9	5.5	4.5	0.3	4.8
1/2+1/3	1040	1040	-	-	-	1.0	0.5	-	1.5	5.2	4.9	0.5	5.5
2/2+2/1	465	447	894	0	0	1.3	19.3	-	20.5	158.8	14.6	19.3	33.9
3/2+3/1	1388	1008	-	-	-	23.3	191.7	-	214.9	557.5	28.0	191.7	219.7
3/3	742	528	-	-	-	15.2	108.7	-	123.9	601.1	24.0	108.7	132.7
4/1	314	314	-	-	-	1.9	0.6	-	2.5	28.5	5.4	0.6	6.0
4/2+4/3	565	565	-	-	-	3.4	1.1	-	4.5	28.4	6.1	1.1	7.2
5/1	22	22	-	-	-	0.2	0.0	-	0.2	36.0	0.4	0.0	0.4
5/2	25	25	-	-	-	0.2	0.0	-	0.2	35.6	0.5	0.0	0.5
6/1	8	8	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1147	1147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	226	226	-	-	-	1.9	1.6	-	3.5	55.3	4.6	1.6	6.2
8/2	185	185	-	-	-	0.5	0.7	-	1.2	22.7	3.6	0.7	4.3
8/3	283	283	-	-	-	0.8	3.9	-	4.7	59.3	5.7	3.9	9.6
9/1	863	863	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	6	6	-	-	-	0.0	0.0	-	0.0	4.6	0.0	0.0	0.0
10/2	529	529	-	-	-	0.0	0.4	-	0.5	3.1	0.1	0.4	0.5
10/3	530	530	-	-	-	0.0	0.4	-	0.4	3.1	0.0	0.4	0.5
11/1	234	234	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	682	682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1035	1035	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1035	1035	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	676	676	-	-	-	1.0	0.7	-	1.7	9.3	7.1	0.7	7.8

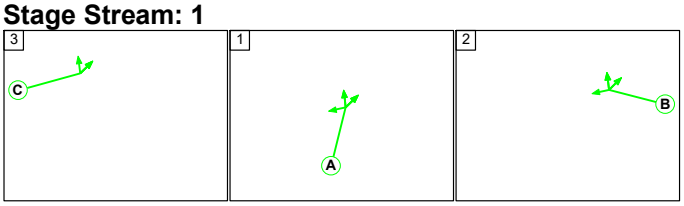
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	32.0	Total Delay for Signalled Lanes (pcuHr):	8.32	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	11.71	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-59.1	Total Delay for Signalled Lanes (pcuHr):	340.57	Cycle Time (s): 75
	PRC Over All Lanes (%):	-59.1	Total Delay Over All Lanes(pcuHr):	381.12	

Full Input Data And Results

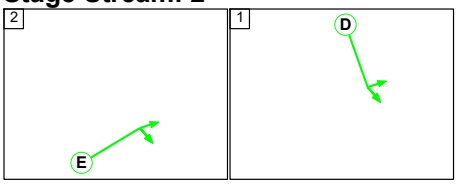
Scenario 21: '2028 Peak Construction 6-7AM' (FG16: '28PC_6-7AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

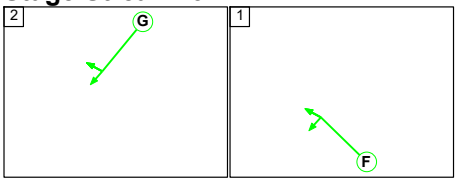
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	21	7	13
Change Point	56	26	38

Stage Stream: 2

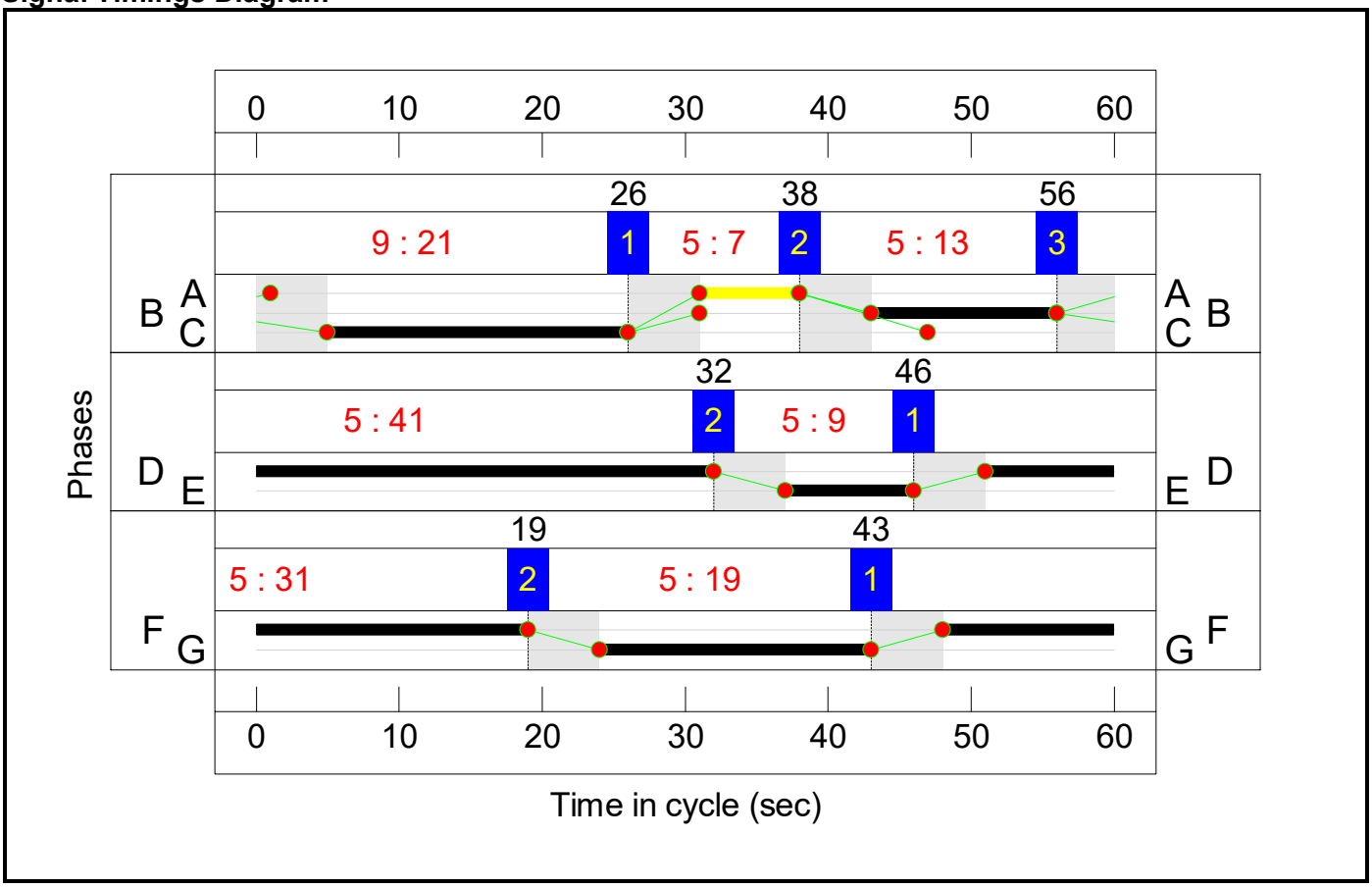
Stage	2	1
Duration	9	41
Change Point	32	46

Stage Stream: 3

Stage	2	1
Duration	19	31
Change Point	19	43

Full Input Data And Results

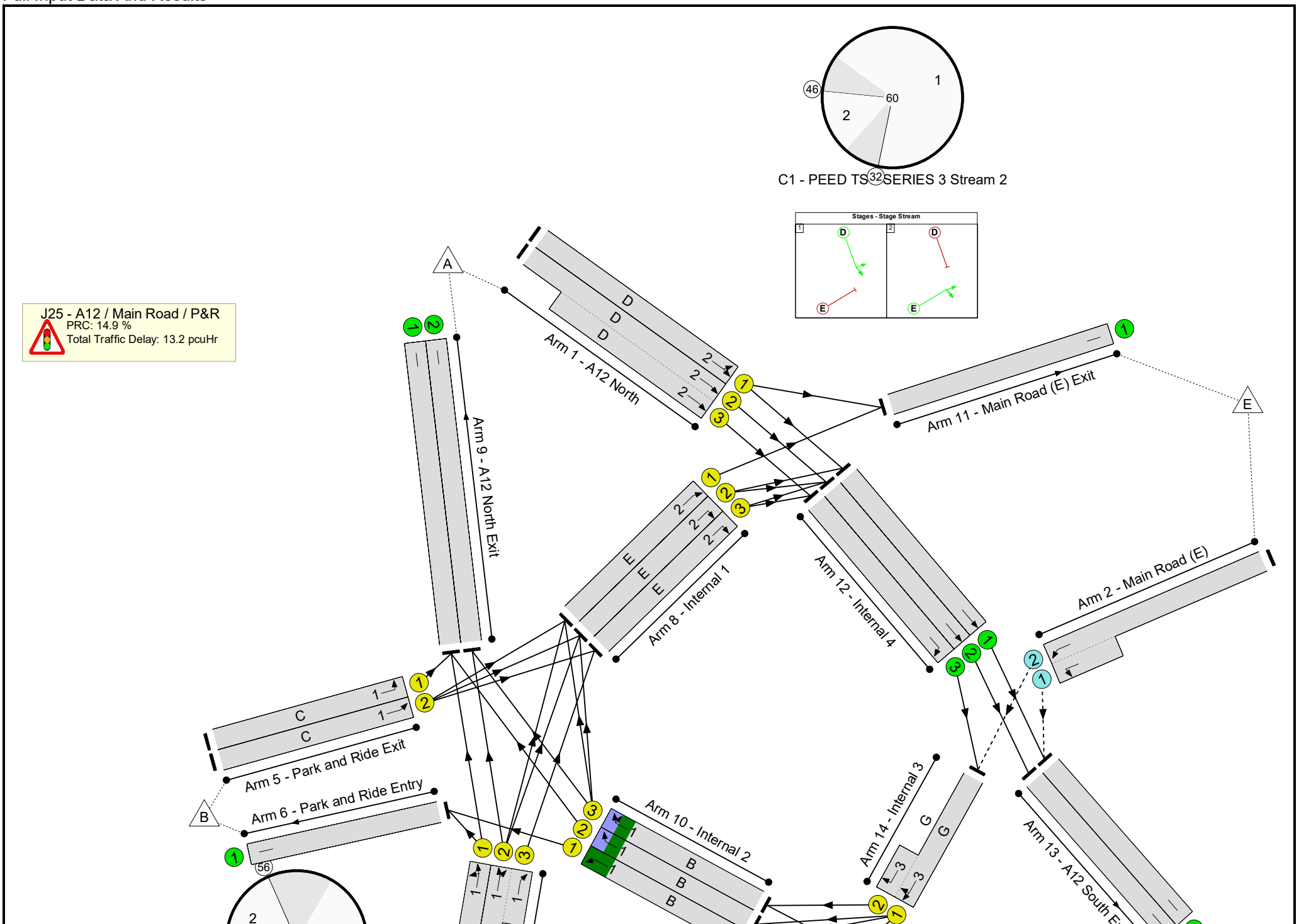
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**78.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**78.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	41	-	309	1963	1374	22.5%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	41	-	596	2105:2115	1319+484	33.1 : 33.1%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	46	950:1845	178+640	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	31	-	531	2070:1909	1066+412	35.9 : 35.9%
3/3	A12 South Ahead	U	3	N/A	F		1	31	-	337	2084	1111	30.3%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	172	2034	271	63.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	358	2175:2175	282+175	78.3 : 78.3%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	21	-	1	1995	732	0.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	21	-	2	2125	779	0.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	9	-	52	1993	332	15.7%
8/2	Internal 1 Right	U	2	N/A	E		1	9	-	91	2137	356	25.5%
8/3	Internal 1 Right	U	2	N/A	E		1	9	-	139	2127	354	39.2%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	8	1932	966	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	386	2066	1033	37.4%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	343	2066	1033	33.2%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	160	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	19	-	170	1800:1800	598+22	27.4 : 27.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**92**	**0**	**0**	**8.3**	**4.8**	**0.0**	**13.2**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**92**	**0**	**0**	**8.3**	**4.8**	**0.0**	**13.2**	**-**	**-**	**-**	**-**
1/1	309	309	-	-	-	0.3	0.1	-	0.4	4.9	1.8	0.1	1.9
1/2+1/3	596	596	-	-	-	0.5	0.2	-	0.8	4.8	2.7	0.2	2.9
2/2+2/1	46	46	92	0	0	0.0	0.0	-	0.0	2.4	0.0	0.0	0.0
3/2+3/1	531	531	-	-	-	1.1	0.3	-	1.4	9.7	3.6	0.3	3.9
3/3	337	337	-	-	-	0.7	0.2	-	0.9	10.1	3.1	0.2	3.3
4/1	172	172	-	-	-	1.2	0.9	-	2.0	42.5	2.7	0.9	3.5
4/2+4/3	358	358	-	-	-	2.5	1.7	-	4.2	42.3	3.5	1.7	5.2
5/1	1	1	-	-	-	0.0	0.0	-	0.0	14.8	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	14.7	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	52	52	-	-	-	0.2	0.1	-	0.3	18.6	0.3	0.1	0.4
8/2	91	91	-	-	-	0.0	0.2	-	0.2	8.7	0.2	0.2	0.3
8/3	139	139	-	-	-	0.1	0.3	-	0.4	9.7	0.7	0.3	1.0
9/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	7.5	0.0	0.0	0.0
10/2	386	386	-	-	-	0.6	0.3	-	0.9	8.0	1.4	0.3	1.7
10/3	343	343	-	-	-	0.5	0.2	-	0.7	7.8	1.3	0.2	1.5
11/1	64	64	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	170	170	-	-	-	0.7	0.2	-	0.8	17.9	2.1	0.2	2.3

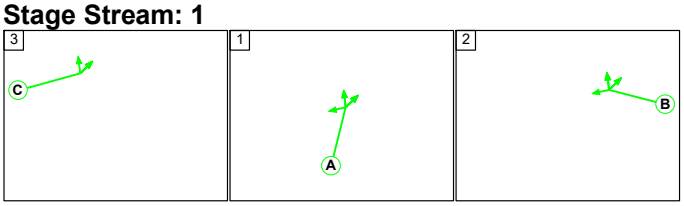
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	14.9	Total Delay for Signalled Lanes (pcuHr):	7.86	Cycle Time (s):	60		
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	129.5	Total Delay for Signalled Lanes (pcuHr):	2.08	Cycle Time (s):	60		
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	150.4	Total Delay for Signalled Lanes (pcuHr):	3.22	Cycle Time (s):	60		
	PRC Over All Lanes (%):	14.9	Total Delay Over All Lanes(pcuHr):	13.18				

Full Input Data And Results

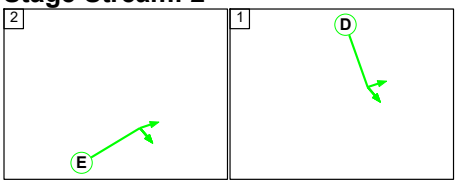
Scenario 22: '2028 Peak Construction 7-8AM' (FG17: '28PC_7-8AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

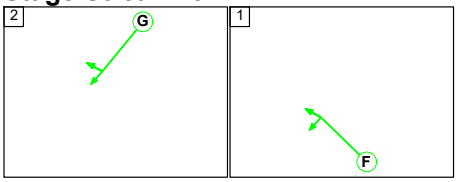
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	15	19
Change Point	10	26	46

Stage Stream: 2

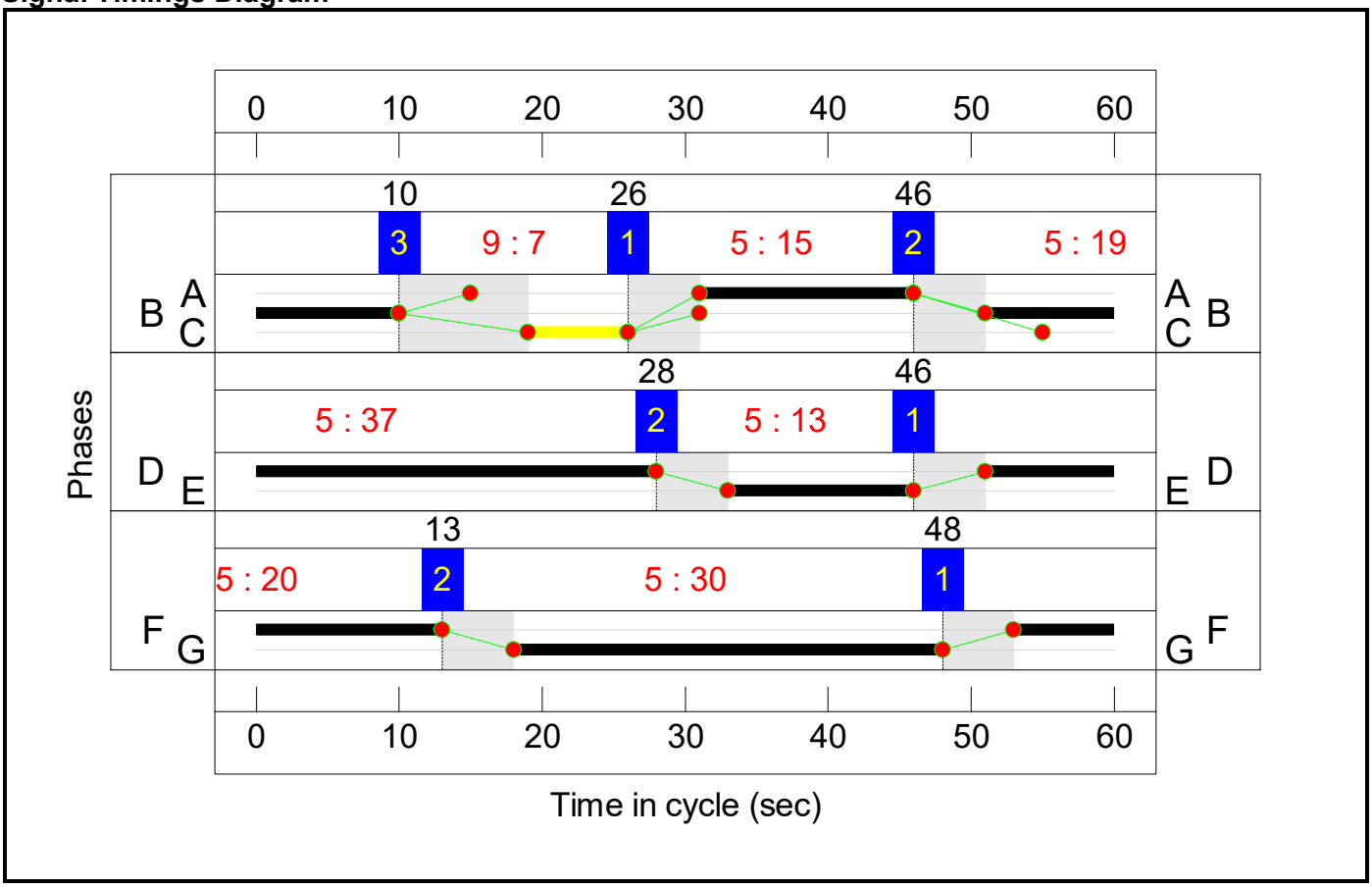
Stage	2	1
Duration	13	37
Change Point	28	46

Stage Stream: 3

Stage	2	1
Duration	30	20
Change Point	13	48

Full Input Data And Results

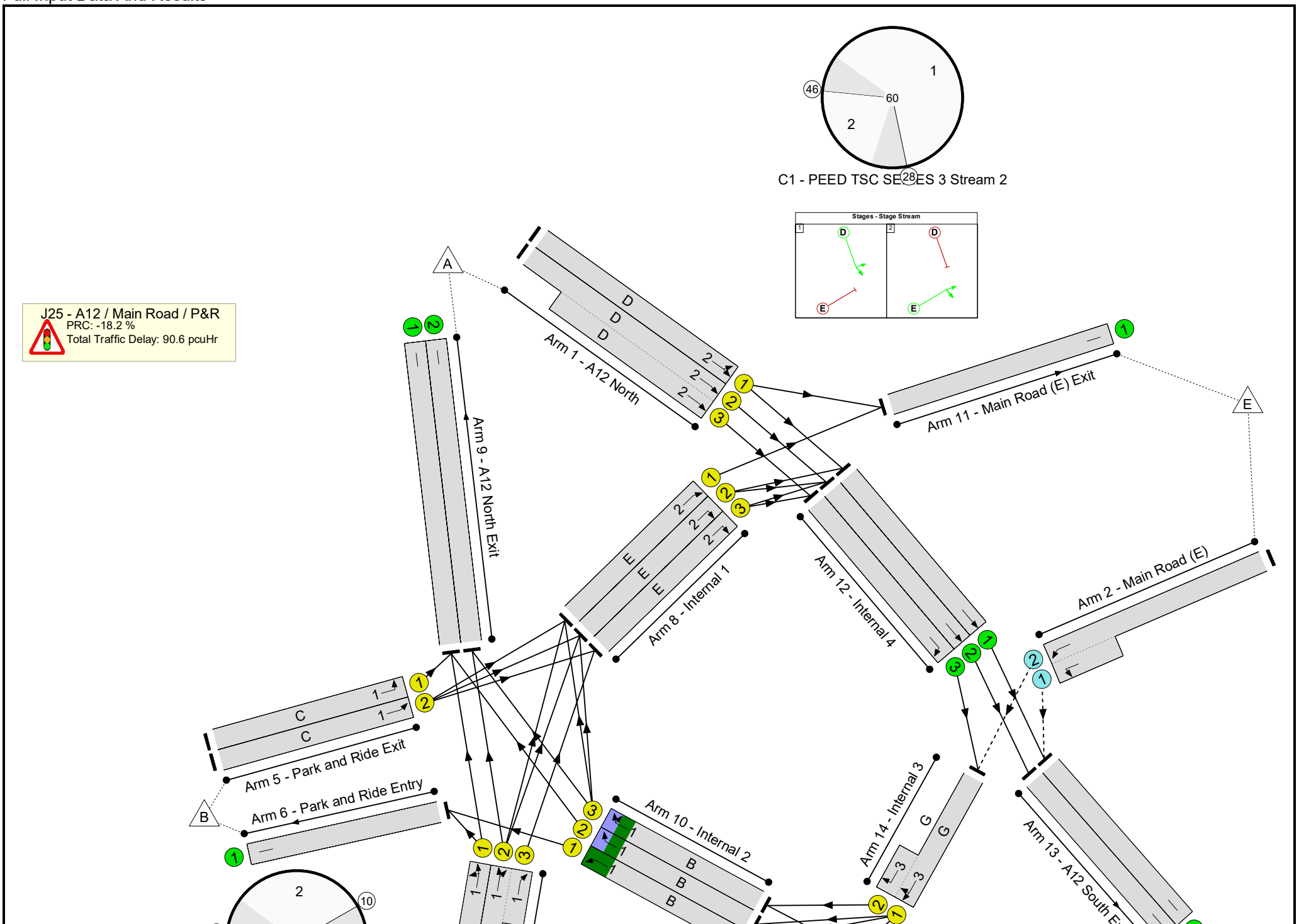
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.4%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.4%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	576	1960	1241	46.4%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	1066	2105:2115	1183+634	58.6 : 58.6%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	105	950:1845	152+573	14.5 : 14.5%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	20	-	1137	2070:1908	725+344	106.4 : 106.4%
3/3	A12 South Ahead	U	3	N/A	F		1	20	-	732	2084	729	100.4%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	15	-	456	2032	542	84.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	15	-	694	2175:2175	446+328	89.6 : 89.6%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	4	1995	266	1.5%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	3	2125	283	1.1%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	116	1993	465	24.9%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	273	2137	499	54.7%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	295	2127	496	59.4%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1222	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	757	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	19	-	46	1932	1095	4.2%
10/2	Internal 2 Right	U	1	N/A	B		1	19	-	776	2066	1171	62.3%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	19	-	744	2066	1171	63.3%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	184	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	644	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1126	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	727	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1126	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	30	-	394	1800:1800	920+29	41.5 : 41.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**210**	**0**	**0**	**23.9**	**66.6**	**0.0**	**90.6**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**210**	**0**	**0**	**23.9**	**66.6**	**0.0**	**90.6**	**-**	**-**	**-**	**-**
1/1	576	576	-	-	-	0.9	0.4	-	1.3	8.4	5.0	0.4	5.4
1/2+1/3	1066	1066	-	-	-	1.7	0.7	-	2.4	8.0	6.2	0.7	6.9
2/2+2/1	105	105	210	0	0	0.0	0.1	-	0.1	3.1	0.1	0.1	0.2
3/2+3/1	1137	1091	-	-	-	7.3	41.2	-	48.4	153.4	13.6	41.2	54.8
3/3	732	729	-	-	-	4.0	14.2	-	18.2	89.7	12.2	14.2	26.4
4/1	456	456	-	-	-	2.6	2.5	-	5.1	40.6	7.1	2.5	9.6
4/2+4/3	694	694	-	-	-	3.8	3.9	-	7.8	40.2	7.9	3.9	11.9
5/1	4	4	-	-	-	0.0	0.0	-	0.0	29.8	0.1	0.0	0.1
5/2	3	3	-	-	-	0.0	0.0	-	0.0	29.4	0.0	0.0	0.0
6/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	116	116	-	-	-	0.4	0.2	-	0.6	18.3	0.8	0.2	1.0
8/2	273	273	-	-	-	0.8	0.6	-	1.4	18.9	1.1	0.6	1.7
8/3	295	295	-	-	-	0.9	0.7	-	1.6	19.4	1.2	0.7	1.9
9/1	1176	1176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	754	754	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	46	46	-	-	-	0.0	0.0	-	0.0	2.8	0.0	0.0	0.1
10/2	730	730	-	-	-	0.0	0.8	-	0.9	4.2	0.1	0.8	0.9
10/3	741	741	-	-	-	0.1	0.9	-	0.9	4.4	0.2	0.9	1.0
11/1	184	184	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	727	727	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	394	394	-	-	-	1.3	0.4	-	1.7	15.5	5.4	0.4	5.7

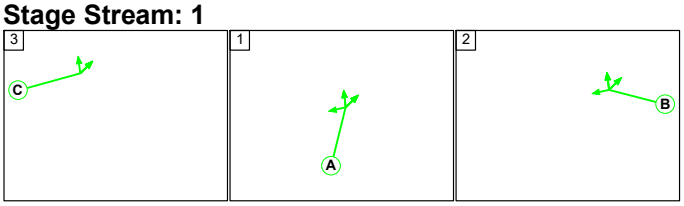
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	0.4	Total Delay for Signalled Lanes (pcuHr):	14.76	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	51.4	Total Delay for Signalled Lanes (pcuHr):	7.33	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-18.2	Total Delay for Signalled Lanes (pcuHr):	68.39	Cycle Time (s):	60
	PRC Over All Lanes (%):	-18.2	Total Delay Over All Lanes(pcuHr):	90.56		

Full Input Data And Results

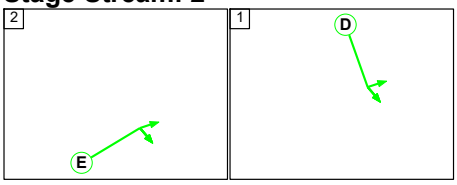
Scenario 23: '2028 Peak Construction 8-9AM' (FG18: '28PC_8-9AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

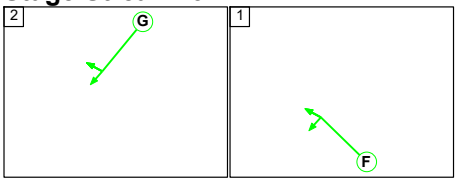
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	21	13
Change Point	39	55	21

Stage Stream: 2

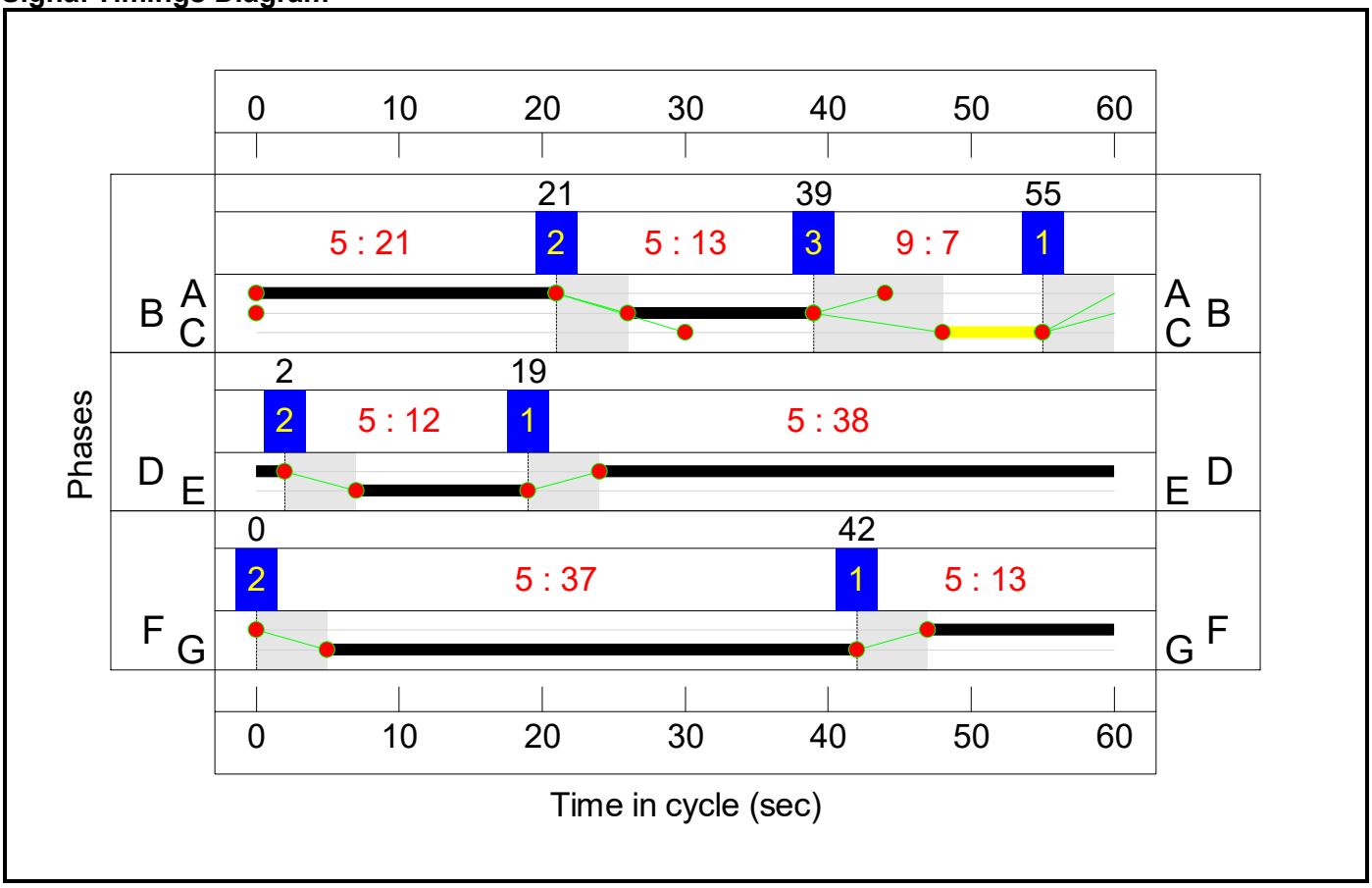
Stage	2	1
Duration	12	38
Change Point	2	19

Stage Stream: 3

Stage	2	1
Duration	37	13
Change Point	0	42

Full Input Data And Results

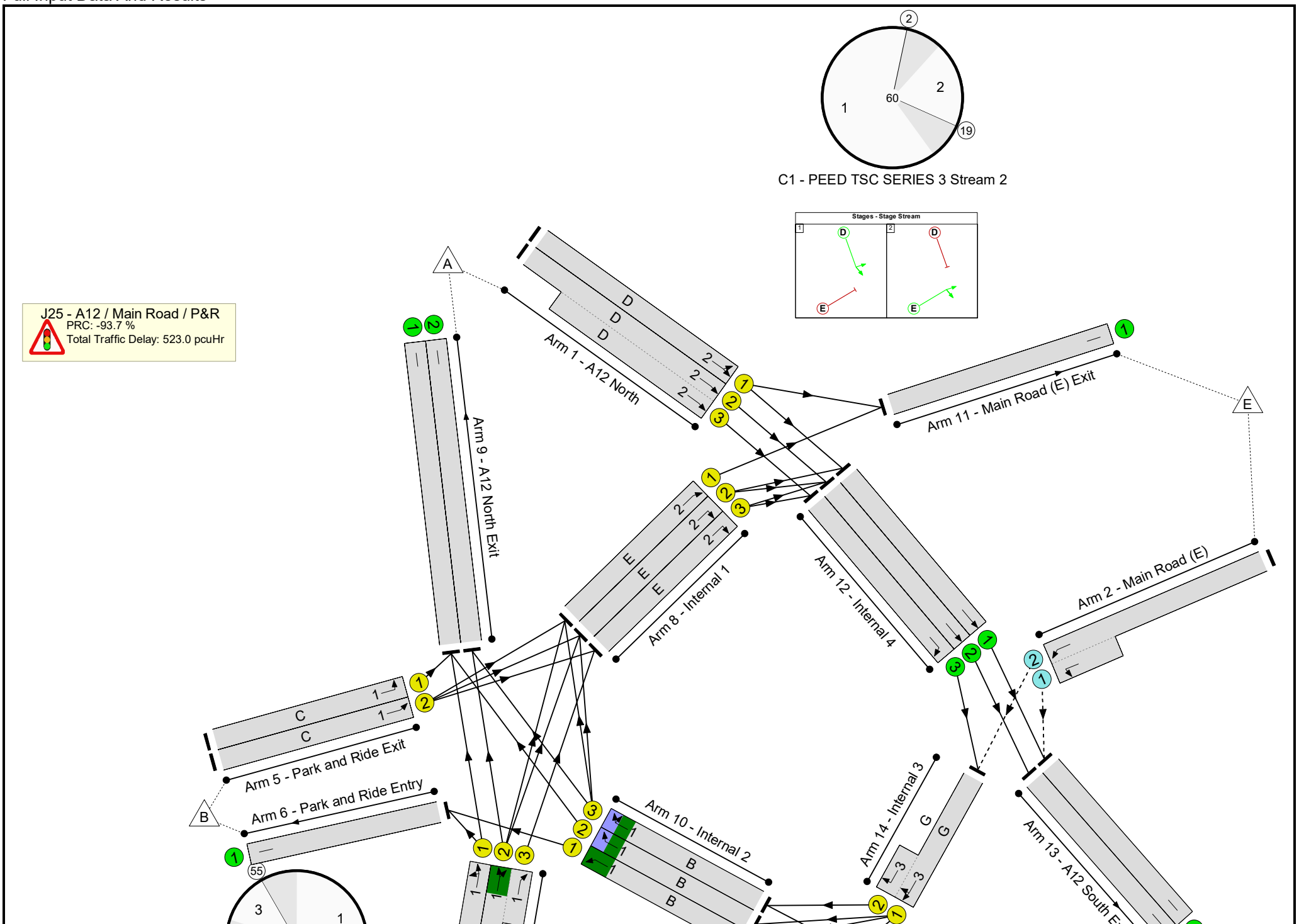
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**174.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**174.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	38	-	678	1964	1277	53.1%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	38	-	1232	2105:2115	1200+686	65.4 : 65.4%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	174	950:1845	204+529	22.0 : 24.4%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	13	-	1343	2070:1908	483+358	174.3 : 139.9%
3/3	A12 South Ahead	U	3	N/A	F		1	13	-	833	2084	486	171.3%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	21	-	449	2033	745	60.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	21	-	953	2175:2175	531+387	103.8 : 103.8%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	6	1995	266	2.3%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	14	2125	283	4.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	63	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	909	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	12	-	224	1993	432	45.4%
8/2	Internal 1 Right	U	2	N/A	E		1	12	-	397	2137	463	82.7%
8/3	Internal 1 Right	U	2	N/A	E		1	12	-	403	2127	461	84.8%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1304	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	792	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	56	1932	902	5.0%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	856	2066	964	51.5%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	849	2066	964	52.1%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	247	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	854	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1384	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	449	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	983	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1384	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	37	-	494	1800:1800	1122+38	42.6 : 42.6%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**348**	**0**	**0**	**60.5**	**462.5**	**0.0**	**523.0**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**348**	**0**	**0**	**60.5**	**462.5**	**0.0**	**523.0**	**-**	**-**	**-**	**-**
1/1	678	678	-	-	-	1.1	0.6	-	1.6	8.6	6.0	0.6	6.6
1/2+1/3	1232	1232	-	-	-	1.9	0.9	-	2.8	8.2	7.2	0.9	8.1
2/2+2/1	174	174	348	0	0	0.0	0.2	-	0.2	3.8	0.2	0.2	0.3
3/2+3/1	1343	877	-	-	-	19.9	252.3	-	272.2	729.6	27.4	252.3	279.6
3/3	833	486	-	-	-	17.3	174.6	-	191.9	829.2	24.7	174.6	199.3
4/1	449	449	-	-	-	1.9	0.8	-	2.7	21.5	6.0	0.8	6.7
4/2+4/3	953	921	-	-	-	5.6	26.5	-	32.1	121.1	14.4	26.5	40.9
5/1	6	6	-	-	-	0.0	0.0	-	0.0	29.9	0.1	0.0	0.1
5/2	14	14	-	-	-	0.1	0.0	-	0.1	29.6	0.2	0.0	0.2
6/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	196	196	-	-	-	0.8	0.4	-	1.2	22.5	1.9	0.4	2.4
8/2	383	383	-	-	-	1.4	2.3	-	3.7	34.7	5.4	2.3	7.6
8/3	391	391	-	-	-	1.8	2.6	-	4.4	40.8	5.5	2.6	8.1
9/1	945	945	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	45	45	-	-	-	0.3	0.0	-	0.3	23.3	0.6	0.0	0.6
10/2	497	497	-	-	-	3.7	0.5	-	4.3	30.9	7.2	0.5	7.7
10/3	502	502	-	-	-	3.8	0.5	-	4.3	31.0	7.3	0.5	7.8
11/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	847	847	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1365	1365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	976	976	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1365	1365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	494	494	-	-	-	0.8	0.4	-	1.2	8.5	5.0	0.4	5.3

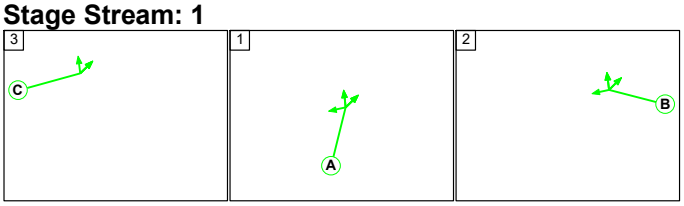
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-15.3	Total Delay for Signalled Lanes (pcuHr):	43.80	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	6.2	Total Delay for Signalled Lanes (pcuHr):	13.77	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-93.7	Total Delay for Signalled Lanes (pcuHr):	465.21	Cycle Time (s): 60
	PRC Over All Lanes (%):	-93.7	Total Delay Over All Lanes(pcuHr):	522.97	

Full Input Data And Results

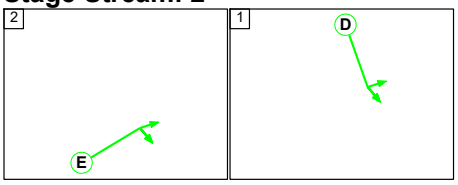
Scenario 24: '2028 Peak Construction 3-4PM' (FG19: '28PC_3-4PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

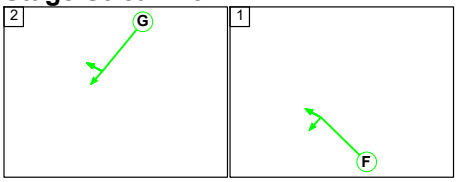
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	15	7	34
Change Point	21	45	57

Stage Stream: 2

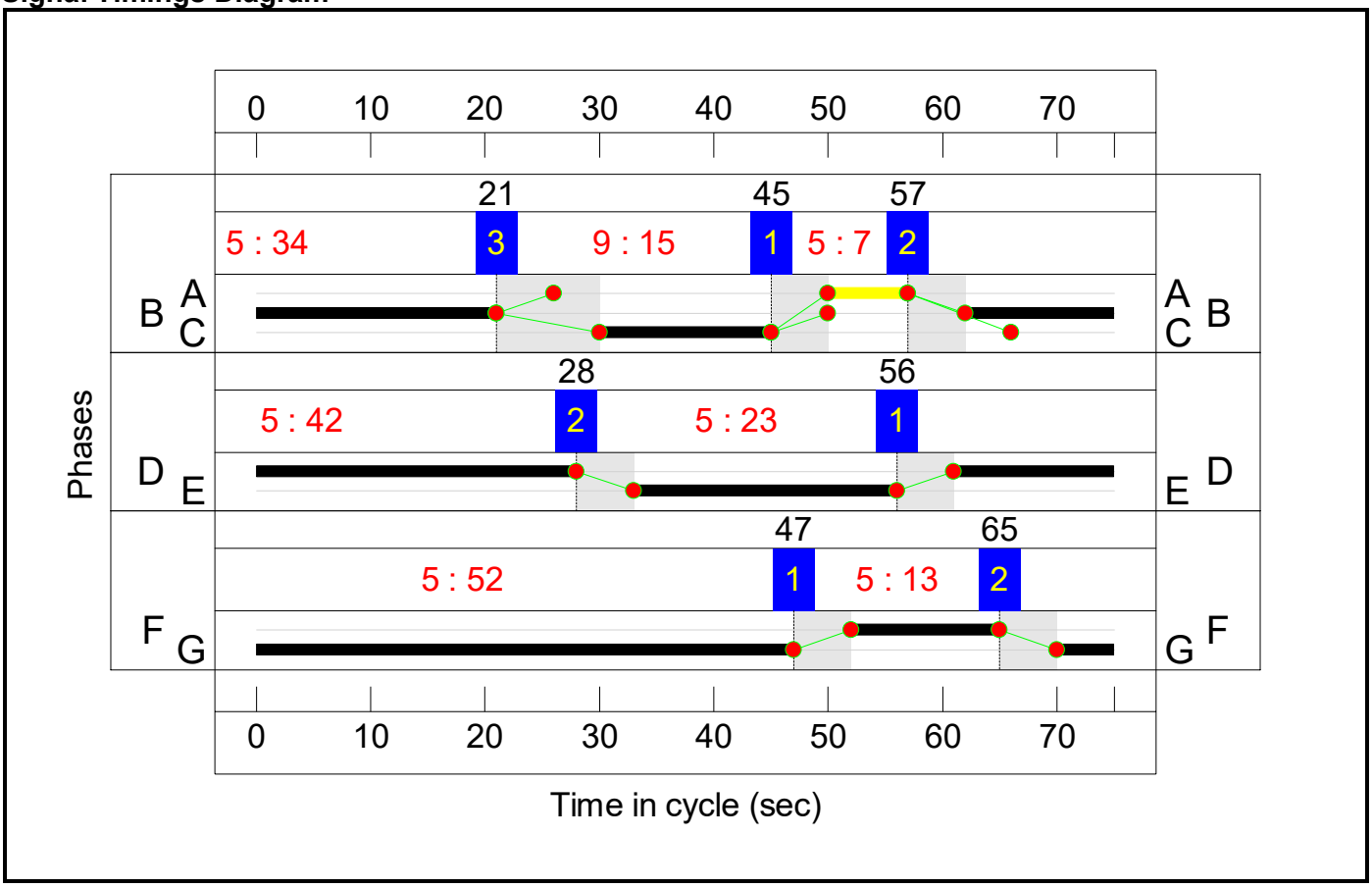
Stage	2	1
Duration	23	42
Change Point	28	56

Stage Stream: 3

Stage	2	1
Duration	52	13
Change Point	65	47

Full Input Data And Results

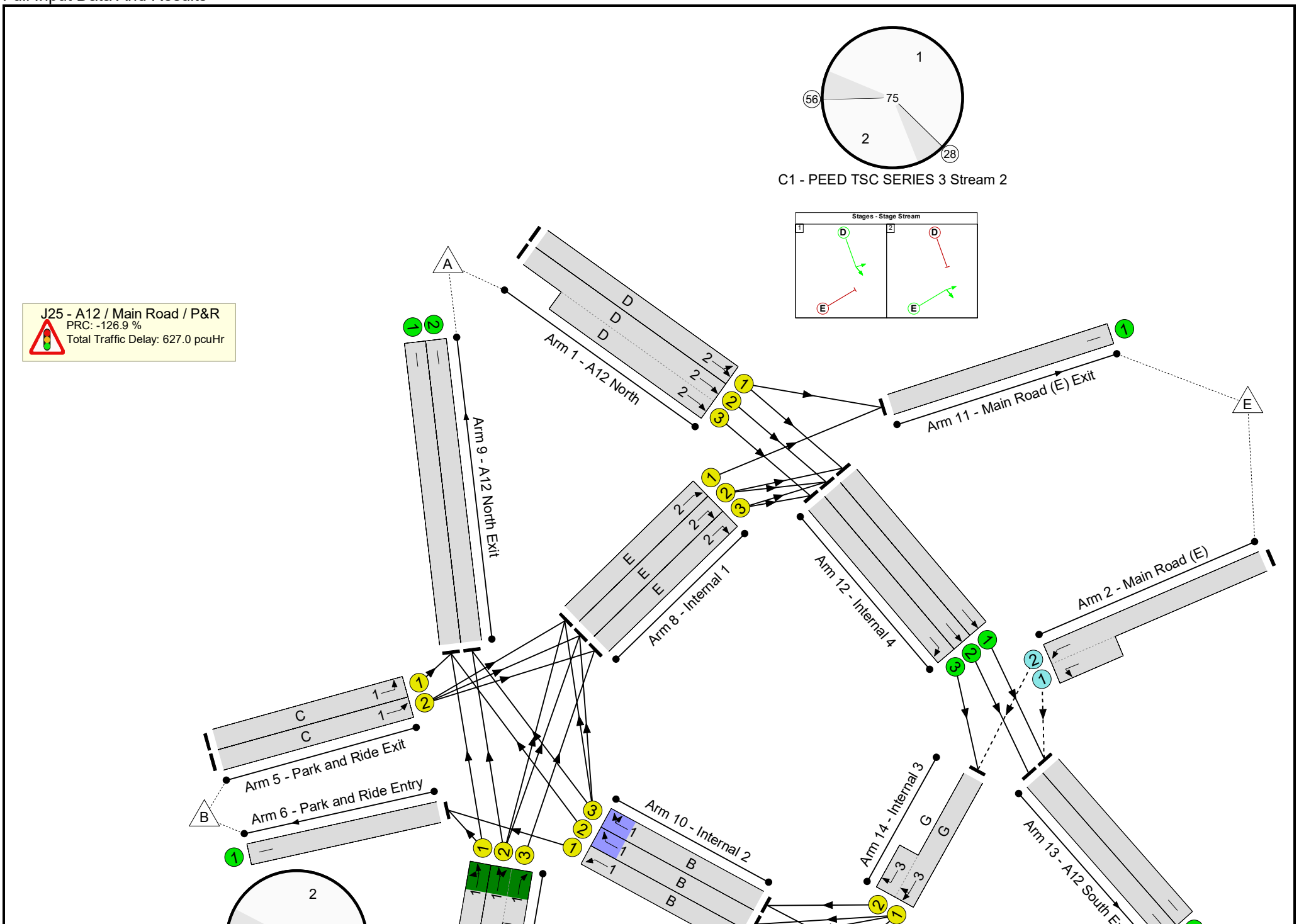
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**204.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**204.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	42	-	676	1965	1127	60.0%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	42	-	1182	2105:2115	1024+627	71.6 : 71.6%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	347	950:1845	272+163	79.8 : 79.8%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	13	-	1422	2070:1910	386+357	204.2 : 177.5%
3/3	A12 South Ahead	U	3	N/A	F		1	13	-	792	2084	389	203.6%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	410	2035	597	68.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	652	2175:2175	437+384	79.4 : 79.4%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	15	-	5	1995	426	1.2%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	15	-	13	2125	453	2.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1279	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	23	-	285	1993	638	30.4%
8/2	Internal 1 Right	U	2	N/A	E		1	23	-	256	2137	684	37.4%
8/3	Internal 1 Right	U	2	N/A	E		1	23	-	308	2127	681	45.3%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1213	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	34	-	4	1932	902	0.3%
10/2	Internal 2 Right	U	1	N/A	B		1	34	-	798	2066	964	41.0%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	34	-	800	2066	964	41.2%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1168	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	926	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1168	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	52	-	667	1800:1800	1268+15	52.0 : 52.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**694**	**0**	**0**	**74.9**	**552.1**	**0.0**	**627.0**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**694**	**0**	**0**	**74.9**	**552.1**	**0.0**	**627.0**	**-**	**-**	**-**	**-**
1/1	676	676	-	-	-	2.0	0.7	-	2.7	14.4	9.0	0.7	9.8
1/2+1/3	1182	1182	-	-	-	3.2	1.3	-	4.5	13.6	10.0	1.3	11.2
2/2+2/1	347	347	694	0	0	0.5	1.9	-	2.3	24.3	3.0	1.9	4.9
3/2+3/1	1422	743	-	-	-	35.2	340.6	-	375.8	951.4	42.1	340.6	382.7
3/3	792	389	-	-	-	23.6	202.5	-	226.1	1027.5	31.8	202.5	234.2
4/1	410	410	-	-	-	2.7	1.1	-	3.8	33.0	7.5	1.1	8.6
4/2+4/3	652	652	-	-	-	4.1	1.9	-	6.0	33.0	8.5	1.9	10.4
5/1	5	5	-	-	-	0.0	0.0	-	0.0	27.9	0.1	0.0	0.1
5/2	13	13	-	-	-	0.1	0.0	-	0.1	27.7	0.2	0.0	0.2
6/1	3	3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1003	1003	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	194	194	-	-	-	1.0	0.2	-	1.3	23.5	2.2	0.2	2.4
8/2	256	256	-	-	-	0.4	0.3	-	0.7	9.9	0.7	0.3	1.0
8/3	308	308	-	-	-	0.5	0.4	-	0.9	10.7	0.8	0.4	1.2
9/1	810	810	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	3	3	-	-	-	0.0	0.0	-	0.0	10.0	0.0	0.0	0.0
10/2	395	395	-	-	-	0.6	0.3	-	0.9	8.2	8.2	0.3	8.5
10/3	397	397	-	-	-	0.6	0.3	-	0.9	8.3	8.2	0.3	8.6
11/1	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1168	1168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	926	926	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1168	1168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	667	667	-	-	-	0.5	0.5	-	1.0	5.6	7.1	0.5	7.7

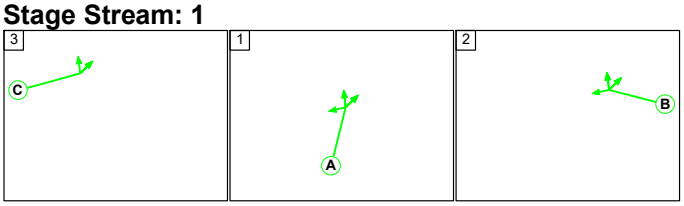
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	13.3	Total Delay for Signalled Lanes (pcuHr):	11.69	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	25.7	Total Delay for Signalled Lanes (pcuHr):	10.06	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-126.9	Total Delay for Signalled Lanes (pcuHr):	602.88	Cycle Time (s):	75
	PRC Over All Lanes (%):	-126.9	Total Delay Over All Lanes(pcuHr):	626.97		

Full Input Data And Results

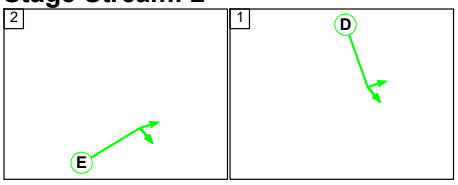
Scenario 25: '2028 Peak Construction 5-6PM' (FG20: '28PC_5-6PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

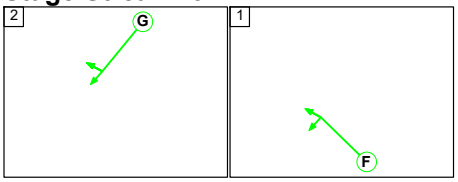
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	9	7	40
Change Point	24	42	54

Stage Stream: 2

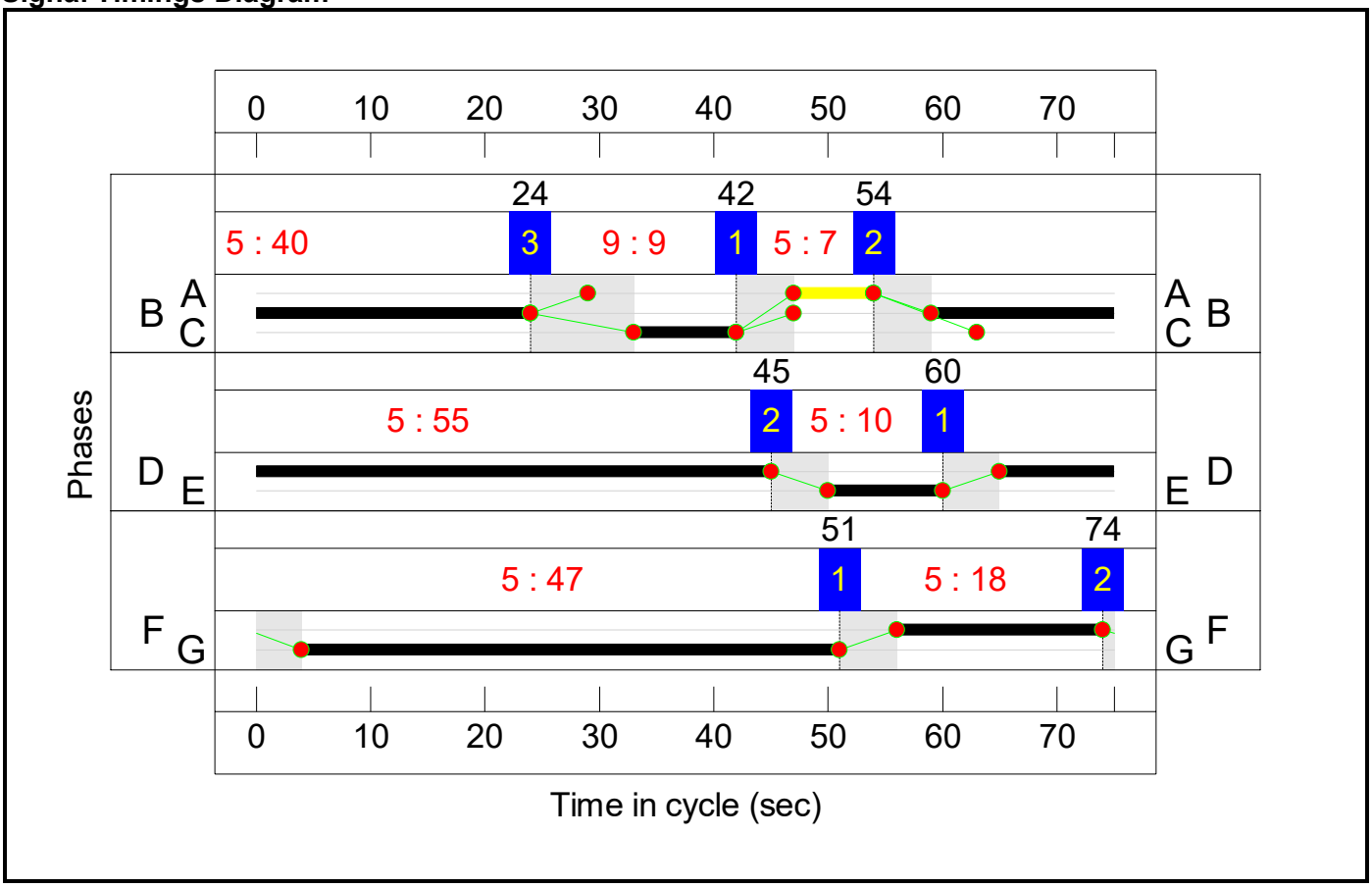
Stage	2	1
Duration	10	55
Change Point	45	60

Stage Stream: 3

Stage	2	1
Duration	47	18
Change Point	74	51

Full Input Data And Results

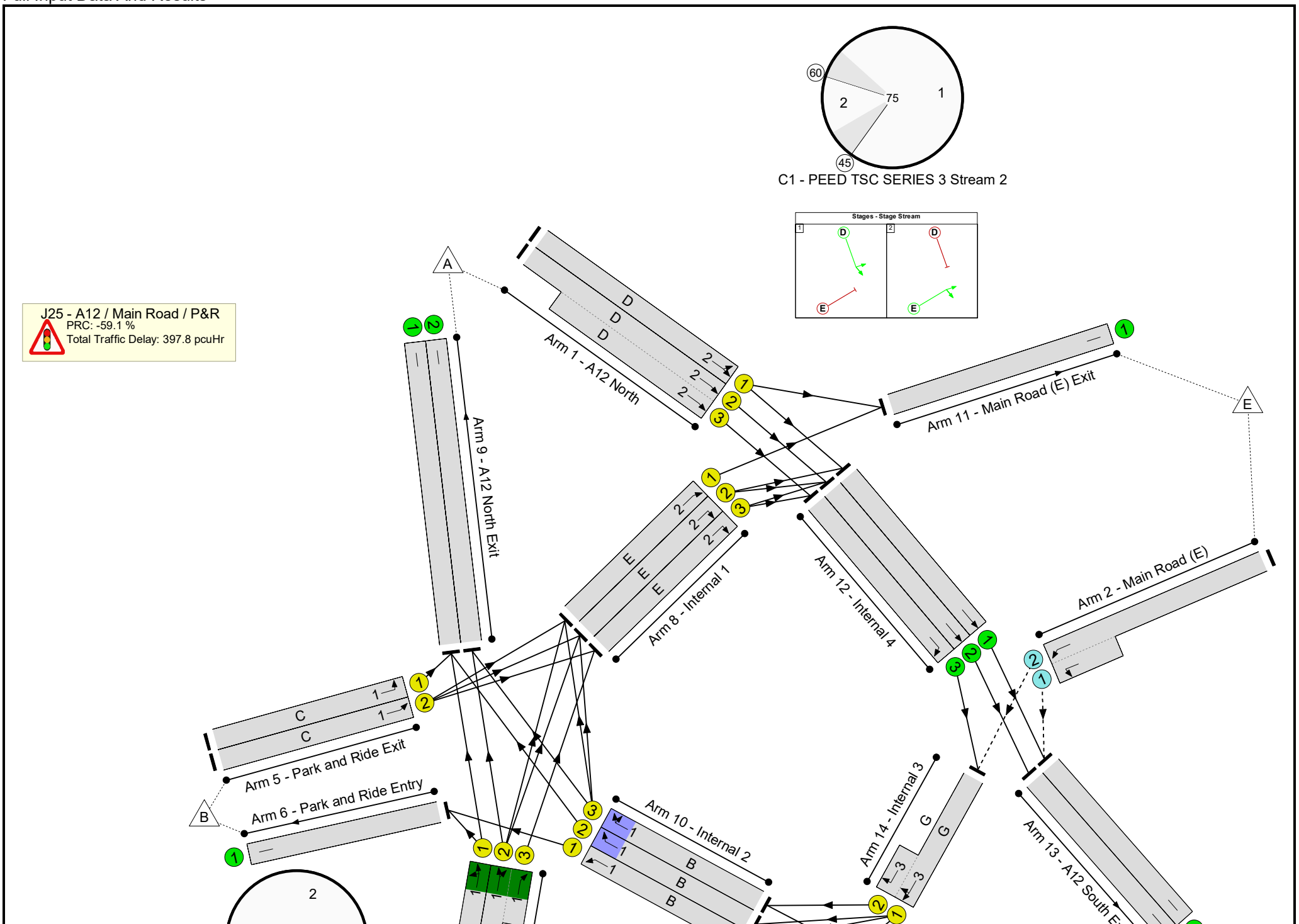
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**143.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**143.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	55	-	640	1964	1466	43.6%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	55	-	1092	2105:2115	1263+724	54.9 : 54.9%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	477	950:1845	283+132	114.9 : 114.9%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	18	-	1387	2070:1910	524+484	143.2 : 131.4%
3/3	A12 South Ahead	U	3	N/A	F		1	18	-	742	2084	528	140.5%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	309	2034	597	51.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	556	2175:2175	434+392	67.4 : 67.4%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	9	-	21	1995	266	7.9%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	9	-	26	2125	283	9.2%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1340	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	10	-	314	1993	292	88.1%
8/2	Internal 1 Right	U	2	N/A	E		1	10	-	168	2137	313	53.4%
8/3	Internal 1 Right	U	2	N/A	E		1	10	-	274	2127	312	87.8%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1084	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	40	-	8	1932	1056	0.6%
10/2	Internal 2 Right	U	1	N/A	B		1	40	-	756	2066	1129	46.8%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	40	-	749	2066	1129	47.3%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	323	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1051	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	867	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1051	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	47	-	724	1800:1800	1152+11	58.7 : 54.2%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**870**	**0**	**0**	**52.4**	**345.3**	**0.0**	**397.8**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**870**	**0**	**0**	**52.4**	**345.3**	**0.0**	**397.8**	**-**	**-**	**-**	**-**
1/1	640	640	-	-	-	0.6	0.4	-	1.0	5.7	5.0	0.4	5.4
1/2+1/3	1092	1092	-	-	-	1.0	0.6	-	1.6	5.4	5.4	0.6	6.0
2/2+2/1	477	435	870	0	0	2.1	34.4	-	36.4	274.9	15.1	34.4	49.4
3/2+3/1	1387	1008	-	-	-	23.2	191.2	-	214.4	556.4	28.0	191.2	219.2
3/3	742	528	-	-	-	15.2	108.7	-	123.9	601.1	24.0	108.7	132.7
4/1	309	309	-	-	-	1.9	0.5	-	2.4	28.3	5.3	0.5	5.9
4/2+4/3	556	556	-	-	-	3.3	1.0	-	4.4	28.2	6.0	1.0	7.1
5/1	21	21	-	-	-	0.2	0.0	-	0.2	35.9	0.4	0.0	0.4
5/2	26	26	-	-	-	0.2	0.1	-	0.3	35.6	0.5	0.1	0.5
6/1	8	8	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1149	1149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	258	258	-	-	-	2.4	3.1	-	5.5	77.3	5.3	3.1	8.5
8/2	167	167	-	-	-	0.4	0.6	-	1.0	21.3	3.2	0.6	3.8
8/3	274	274	-	-	-	0.8	3.1	-	3.9	51.2	5.6	3.1	8.7
9/1	857	857	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	6	6	-	-	-	0.0	0.0	-	0.0	4.4	0.0	0.0	0.0
10/2	529	529	-	-	-	0.0	0.4	-	0.5	3.1	0.0	0.4	0.5
10/3	534	534	-	-	-	0.0	0.4	-	0.5	3.1	0.1	0.4	0.5
11/1	267	267	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1051	1051	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	867	867	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1051	1051	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	682	682	-	-	-	1.1	0.7	-	1.8	9.5	7.2	0.7	7.9

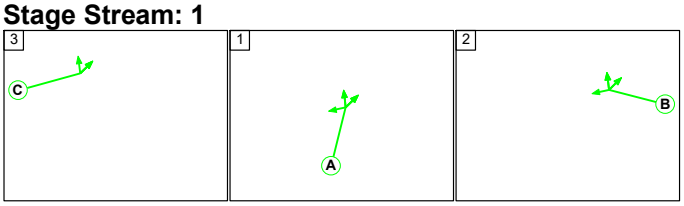
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	33.6	Total Delay for Signalled Lanes (pcuHr):	8.18	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	2.1	Total Delay for Signalled Lanes (pcuHr):	13.07	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-59.1	Total Delay for Signalled Lanes (pcuHr):	340.09	Cycle Time (s):	75
	PRC Over All Lanes (%):	-59.1	Total Delay Over All Lanes(pcuHr):	397.77		

Full Input Data And Results

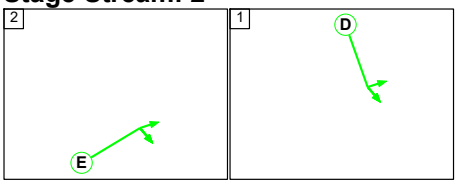
Scenario 26: '2034 Reference Case 6-7AM' (FG31: '34RC_6-7AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

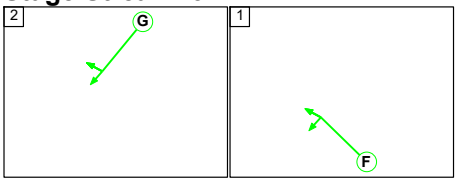
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	21	7	13
Change Point	56	26	38

Stage Stream: 2

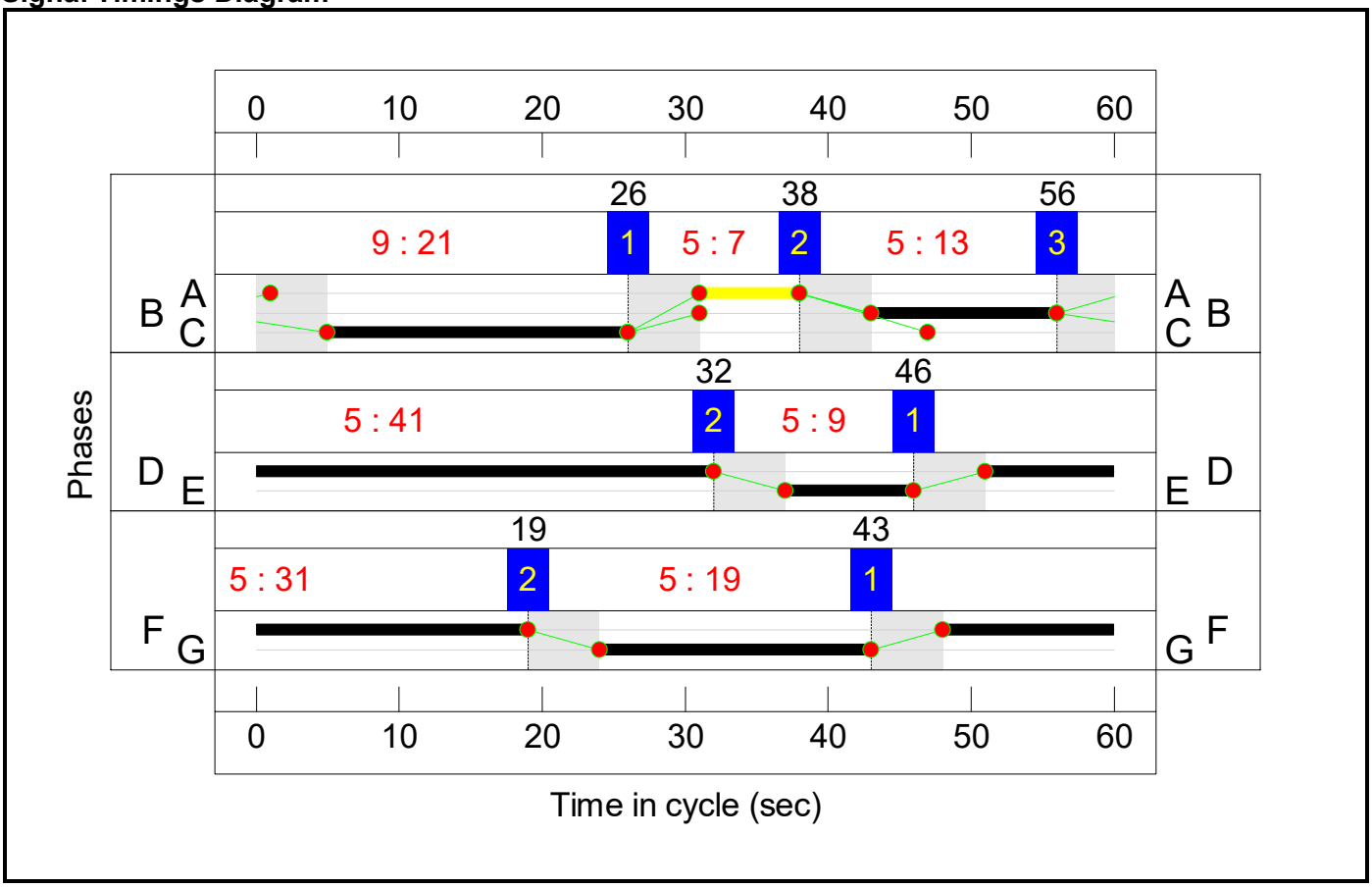
Stage	2	1
Duration	9	41
Change Point	32	46

Stage Stream: 3

Stage	2	1
Duration	19	31
Change Point	19	43

Full Input Data And Results

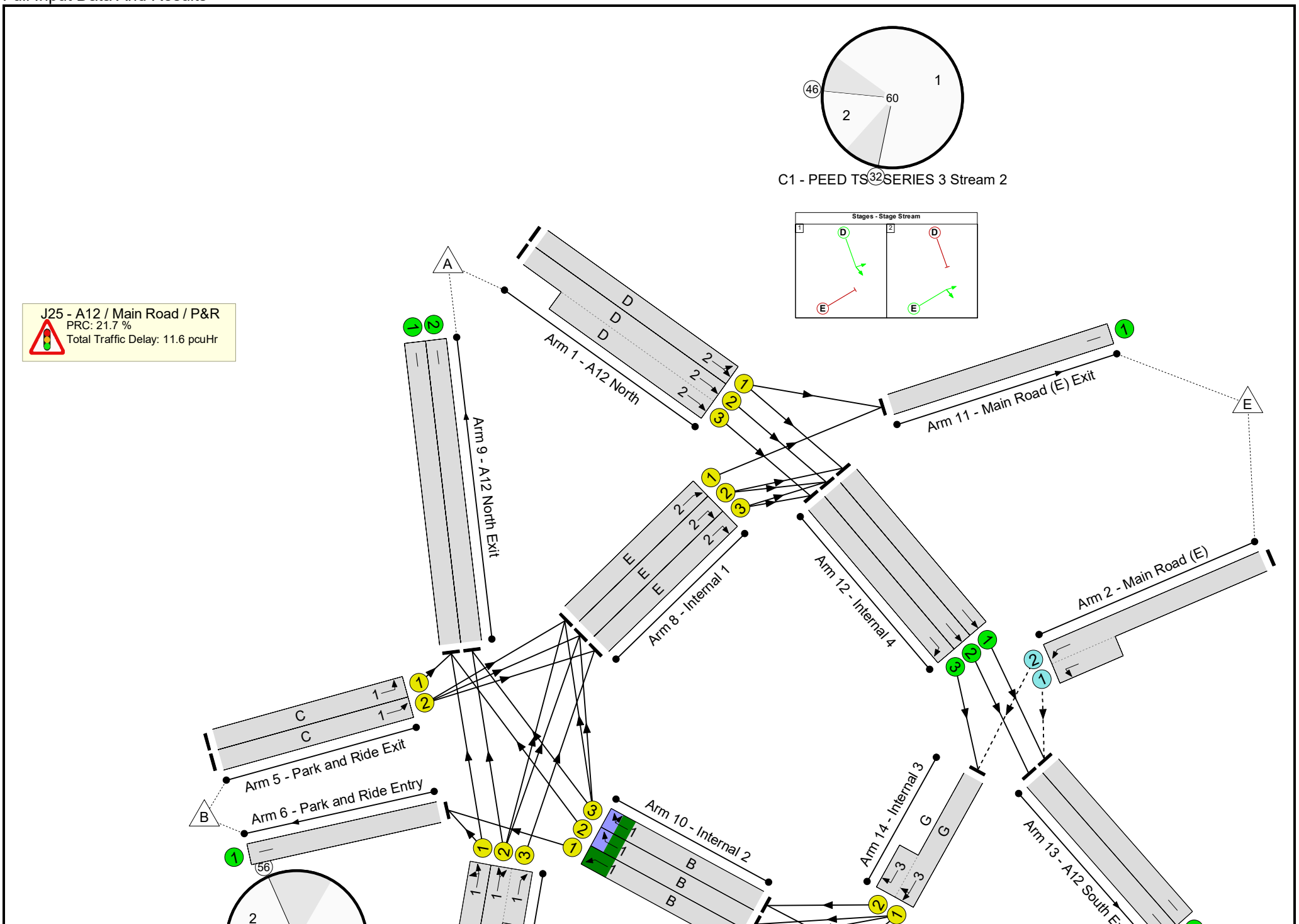
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.9%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.9%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	41	-	344	1965	1375	25.0%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	41	-	630	2105:2115	1324+466	35.2 : 35.2%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	40	950:1845	70+626	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	31	-	510	2070:1910	1053+620	30.5 : 30.5%
3/3	A12 South Ahead	U	3	N/A	F		1	31	-	254	2084	1111	22.9%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	148	2034	271	54.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	352	2175:2175	280+196	73.9 : 73.9%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	21	-	1	1995	732	0.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	21	-	2	2125	779	0.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	9	-	10	1993	332	3.0%
8/2	Internal 1 Right	U	2	N/A	E		1	9	-	119	2137	356	33.4%
8/3	Internal 1 Right	U	2	N/A	E		1	9	-	145	2127	354	40.9%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	472	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	8	1932	966	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	324	2066	1033	31.4%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	255	2066	1033	24.7%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	671	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	164	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	671	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	19	-	168	1800:1800	600+4	27.8 : 27.8%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**80**	**0**	**0**	**7.6**	**4.0**	**0.0**	**11.6**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**80**	**0**	**0**	**7.6**	**4.0**	**0.0**	**11.6**	**-**	**-**	**-**	**-**
1/1	344	344	-	-	-	0.3	0.2	-	0.5	5.0	2.0	0.2	2.2
1/2+1/3	630	630	-	-	-	0.6	0.3	-	0.9	4.9	3.0	0.3	3.2
2/2+2/1	40	40	80	0	0	0.0	0.0	-	0.0	2.8	0.0	0.0	0.0
3/2+3/1	510	510	-	-	-	1.1	0.2	-	1.3	9.1	2.9	0.2	3.2
3/3	254	254	-	-	-	0.5	0.1	-	0.7	9.5	2.2	0.1	2.3
4/1	148	148	-	-	-	1.0	0.6	-	1.6	38.8	2.3	0.6	2.9
4/2+4/3	352	352	-	-	-	2.4	1.4	-	3.8	38.8	3.3	1.4	4.7
5/1	1	1	-	-	-	0.0	0.0	-	0.0	14.8	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	14.7	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	10	10	-	-	-	0.1	0.0	-	0.1	40.8	0.2	0.0	0.2
8/2	119	119	-	-	-	0.1	0.3	-	0.3	9.7	0.2	0.3	0.5
8/3	145	145	-	-	-	0.0	0.3	-	0.4	9.6	0.6	0.3	1.0
9/1	472	472	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	7.5	0.0	0.0	0.0
10/2	324	324	-	-	-	0.5	0.2	-	0.7	7.7	1.2	0.2	1.4
10/3	255	255	-	-	-	0.4	0.2	-	0.5	7.4	0.9	0.2	1.1
11/1	10	10	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	671	671	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	671	671	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	168	168	-	-	-	0.6	0.2	-	0.8	18.0	2.2	0.2	2.4

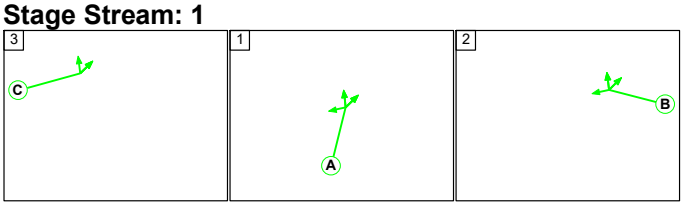
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	21.7	Total Delay for Signalled Lanes (pcuHr):	6.63	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	120.0	Total Delay for Signalled Lanes (pcuHr):	2.16	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	195.4	Total Delay for Signalled Lanes (pcuHr):	2.80	Cycle Time (s):	60
	PRC Over All Lanes (%):	21.7	Total Delay Over All Lanes(pcuHr):	11.62		

Full Input Data And Results

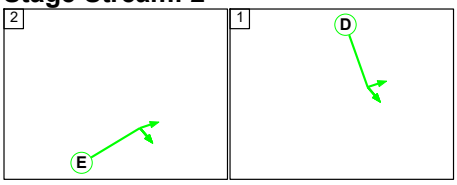
Scenario 27: '2034 Reference Case 7-8AM' (FG32: '34RC_7-8AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

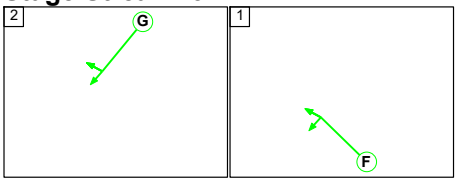
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	15	19
Change Point	10	26	46

Stage Stream: 2

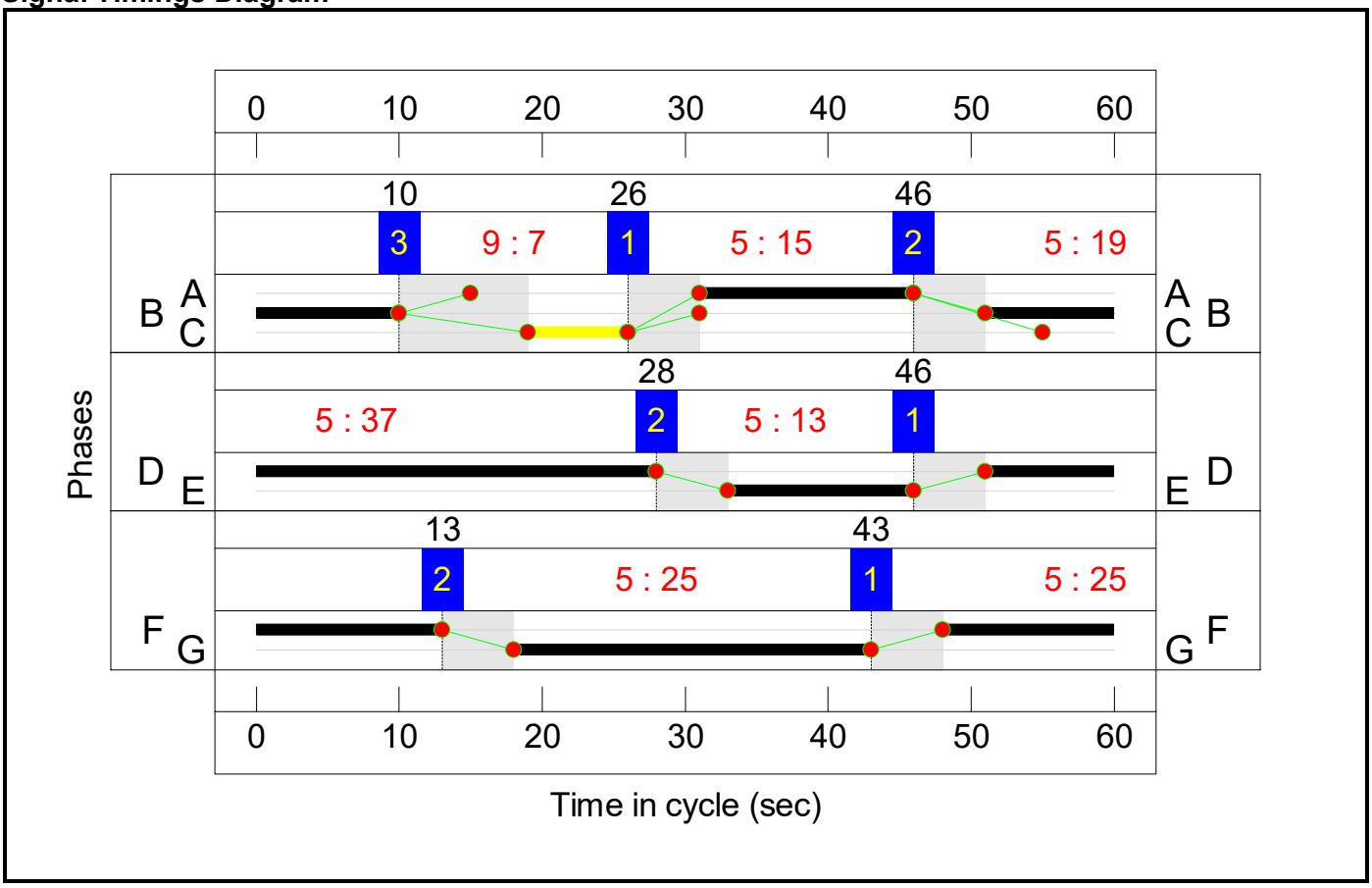
Stage	2	1
Duration	13	37
Change Point	28	46

Stage Stream: 3

Stage	2	1
Duration	25	25
Change Point	13	43

Full Input Data And Results

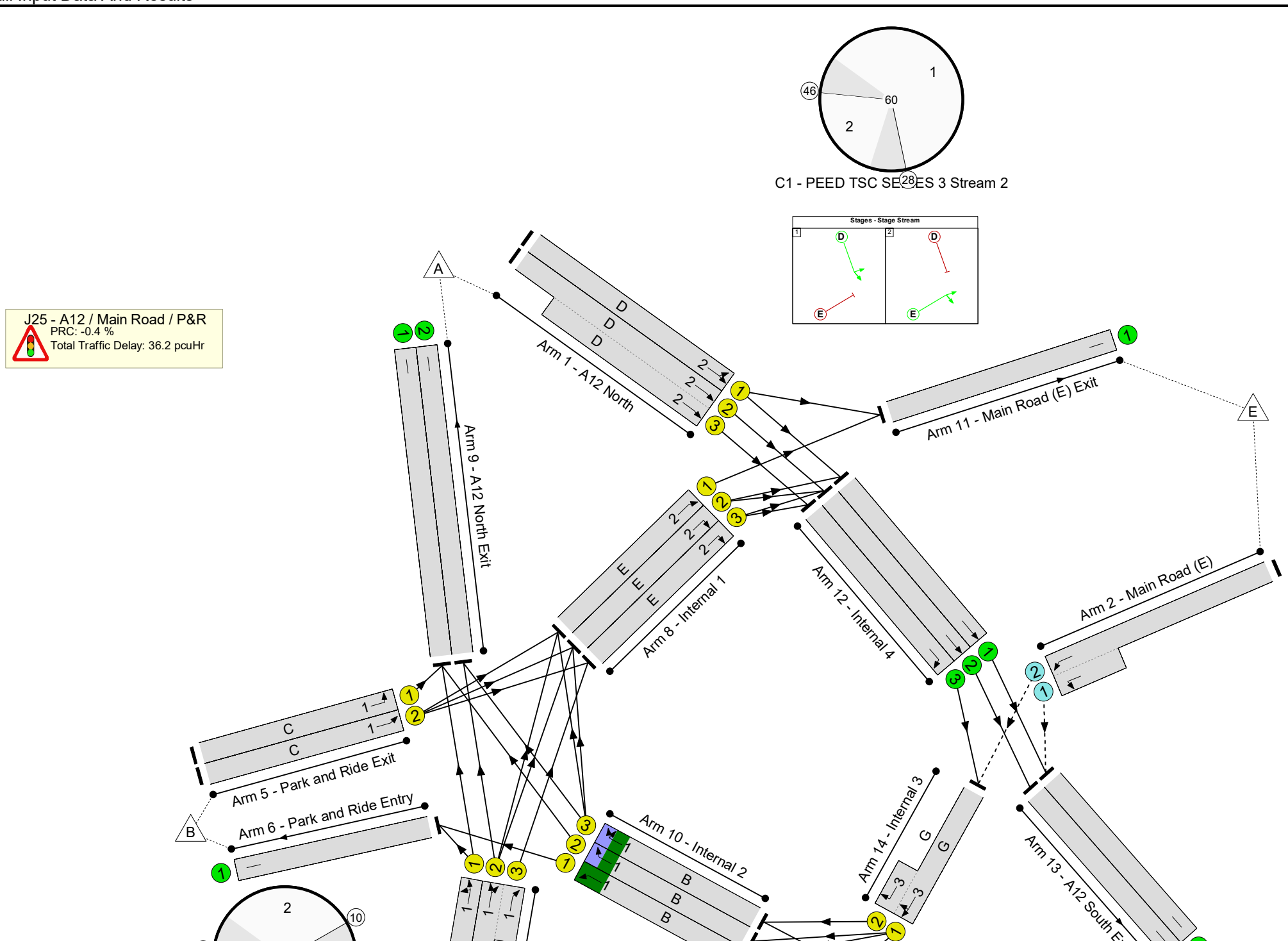
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.4%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.4%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	636	1965	1244	51.1%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	1114	2105:2115	1190+592	62.5 : 62.5%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	88	950:1845	32+538	15.4 : 15.4%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	1220	2070:1908	897+615	80.7 : 80.7%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	658	2084	903	72.9%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	15	-	457	2032	542	84.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	15	-	733	2175:2175	429+382	90.4 : 90.4%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	4	1995	266	1.5%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	4	2125	283	1.4%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	808	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	24	1993	465	5.2%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	341	2137	499	68.4%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	345	2127	496	69.5%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1173	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	694	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	19	-	51	1932	1095	4.7%
10/2	Internal 2 Right	U	1	N/A	B		1	19	-	727	2066	1171	62.1%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	19	-	667	2066	1171	57.0%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	806	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1260	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	889	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1260	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	25	-	375	1800:1800	778+19	47.0 : 47.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**176**	**0**	**0**	**20.4**	**15.8**	**0.0**	**36.2**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**176**	**0**	**0**	**20.4**	**15.8**	**0.0**	**36.2**	**-**	**-**	**-**	**-**
1/1	636	636	-	-	-	1.1	0.5	-	1.6	8.9	5.7	0.5	6.2
1/2+1/3	1114	1114	-	-	-	1.8	0.8	-	2.6	8.5	7.0	0.8	7.9
2/2+2/1	88	88	176	0	0	0.0	0.1	-	0.1	3.8	0.0	0.1	0.1
3/2+3/1	1220	1220	-	-	-	4.8	2.1	-	6.8	20.2	10.5	2.1	12.5
3/3	658	658	-	-	-	2.6	1.3	-	3.9	21.3	9.0	1.3	10.3
4/1	457	457	-	-	-	2.6	2.5	-	5.2	40.8	7.1	2.5	9.6
4/2+4/3	733	733	-	-	-	4.0	4.2	-	8.3	40.7	7.9	4.2	12.2
5/1	4	4	-	-	-	0.0	0.0	-	0.0	29.8	0.1	0.0	0.1
5/2	4	4	-	-	-	0.0	0.0	-	0.0	29.4	0.1	0.0	0.1
6/1	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	24	24	-	-	-	0.1	0.0	-	0.2	26.2	0.4	0.0	0.4
8/2	341	341	-	-	-	1.0	1.1	-	2.1	21.9	1.4	1.1	2.5
8/3	345	345	-	-	-	1.0	1.1	-	2.1	22.1	1.4	1.1	2.5
9/1	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	694	694	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	51	51	-	-	-	0.0	0.0	-	0.0	2.7	0.0	0.0	0.1
10/2	727	727	-	-	-	0.0	0.8	-	0.8	4.1	0.0	0.8	0.9
10/3	667	667	-	-	-	0.0	0.7	-	0.7	3.7	0.1	0.7	0.8
11/1	24	24	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1260	1260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	889	889	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1260	1260	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	375	375	-	-	-	1.3	0.4	-	1.7	16.6	5.1	0.4	5.6

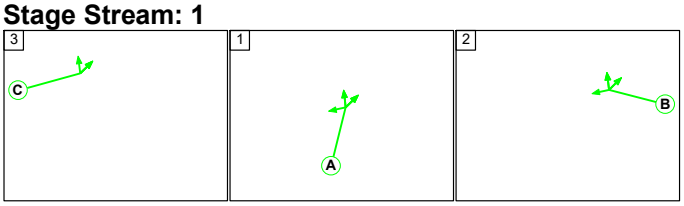
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-0.4	Total Delay for Signalled Lanes (pcuHr):	15.09	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	29.5	Total Delay for Signalled Lanes (pcuHr):	8.57	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	11.5	Total Delay for Signalled Lanes (pcuHr):	12.47	Cycle Time (s):	60
	PRC Over All Lanes (%):	-0.4	Total Delay Over All Lanes(pcuHr):	36.22		

Full Input Data And Results

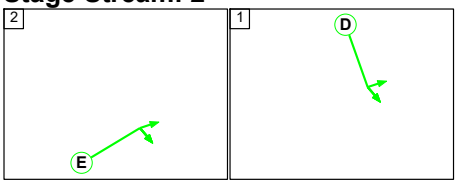
Scenario 28: '2034 Reference Case 8-9AM' (FG33: '34RC_8-9AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

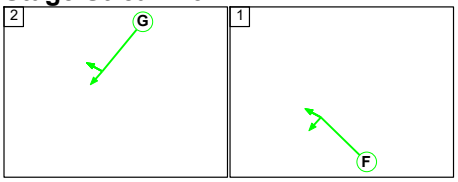
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	21	13
Change Point	39	55	21

Stage Stream: 2

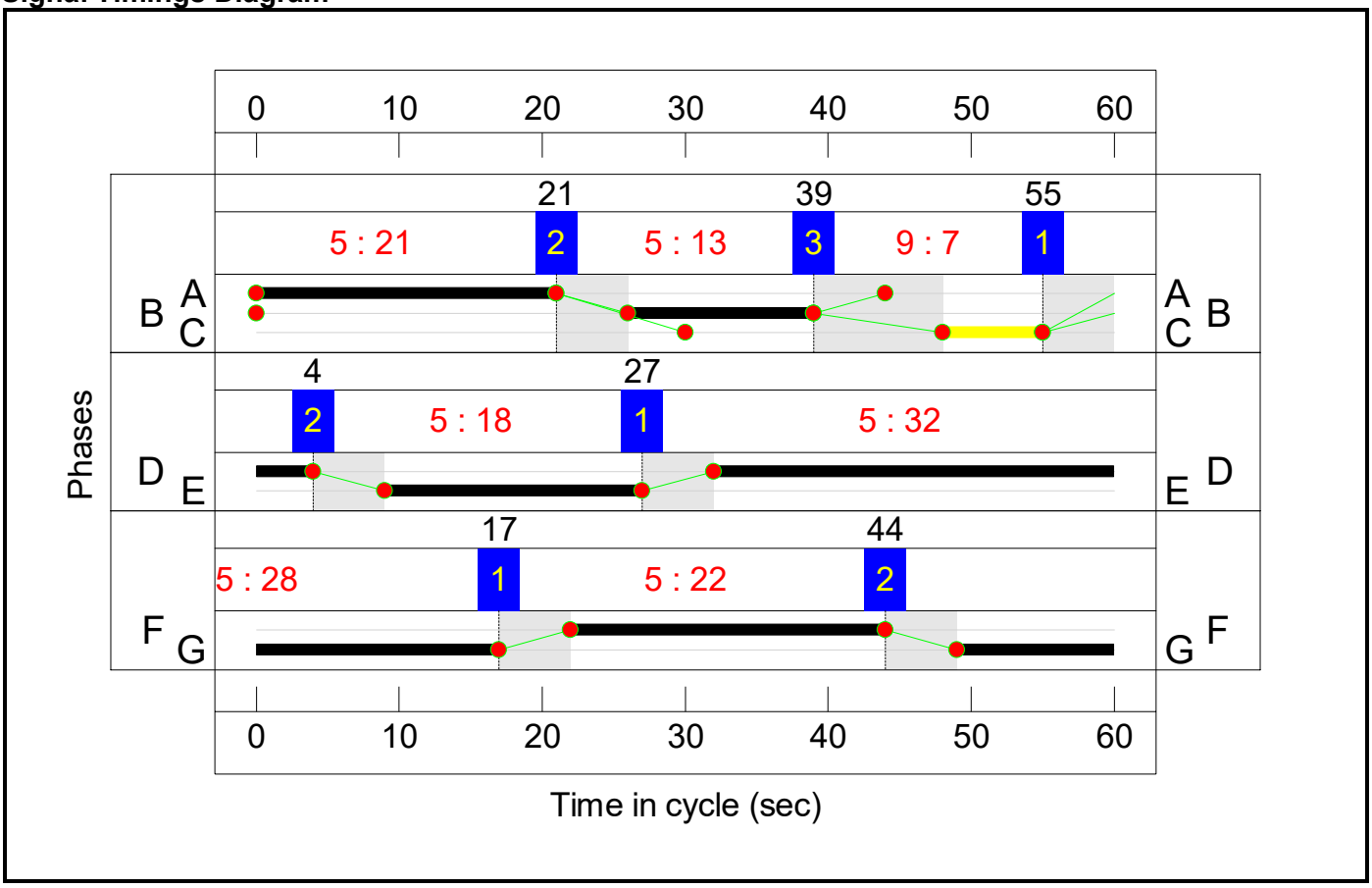
Stage	2	1
Duration	18	32
Change Point	4	27

Stage Stream: 3

Stage	2	1
Duration	28	22
Change Point	44	17

Full Input Data And Results

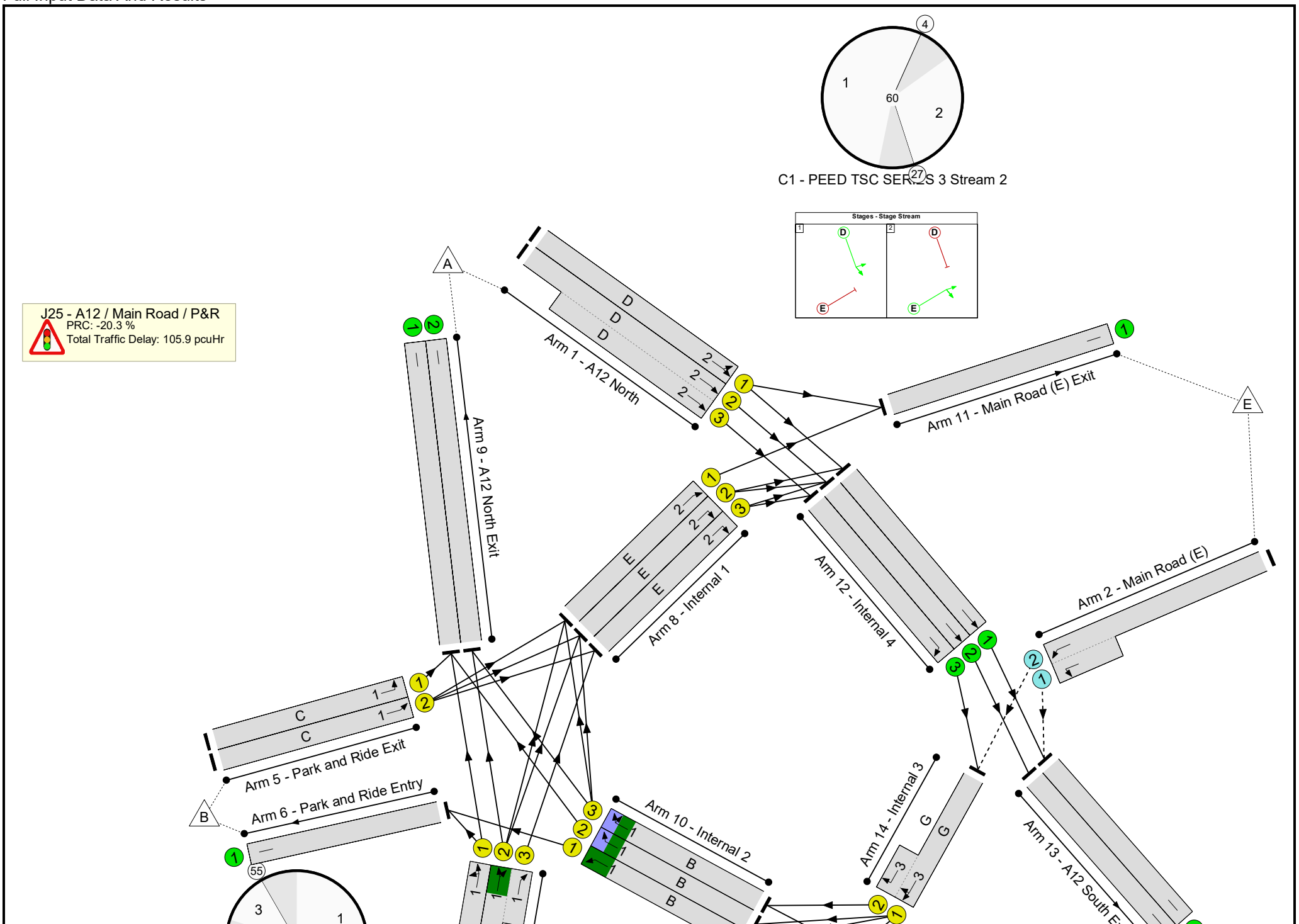
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	32	-	690	1965	1081	63.8%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	32	-	1244	2105:2115	1066+604	74.5 : 74.5%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	149	950:1845	71+519	25.3 : 25.3%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	22	-	1444	2070:1909	794+723	100.7 : 89.2%
3/3	A12 South Ahead	U	3	N/A	F		1	22	-	791	2084	799	99.0%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	21	-	522	2033	745	70.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	21	-	1002	2175:2175	526+400	108.3 : 108.3%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	7	1995	266	2.6%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	15	2125	283	5.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1024	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	18	-	198	1993	631	29.6%
8/2	Internal 1 Right	U	2	N/A	E		1	18	-	435	2137	677	59.5%
8/3	Internal 1 Right	U	2	N/A	E		1	18	-	435	2127	674	59.7%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1335	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	749	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	66	1932	902	7.3%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	815	2066	964	84.0%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	800	2066	964	83.0%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	908	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1444	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	1039	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1444	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	28	-	470	1800:1800	869+17	53.0 : 53.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**298**	**0**	**0**	**28.0**	**77.9**	**0.0**	**105.9**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**298**	**0**	**0**	**28.0**	**77.9**	**0.0**	**105.9**	**-**	**-**	**-**	**-**
1/1	690	690	-	-	-	1.8	0.9	-	2.7	14.0	7.9	0.9	8.7
1/2+1/3	1244	1244	-	-	-	3.1	1.5	-	4.6	13.2	9.5	1.5	10.9
2/2+2/1	149	149	298	0	0	0.0	0.2	-	0.2	4.4	0.1	0.2	0.3
3/2+3/1	1444	1439	-	-	-	7.3	10.9	-	18.2	45.4	13.4	10.9	24.3
3/3	791	791	-	-	-	4.0	12.2	-	16.3	74.1	13.0	12.2	25.2
4/1	522	522	-	-	-	2.3	1.2	-	3.5	24.2	7.4	1.2	8.6
4/2+4/3	1002	926	-	-	-	7.1	43.9	-	51.0	183.4	16.1	43.9	60.1
5/1	7	7	-	-	-	0.0	0.0	-	0.1	29.9	0.1	0.0	0.1
5/2	15	15	-	-	-	0.1	0.0	-	0.1	29.7	0.2	0.0	0.2
6/1	75	75	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1024	1024	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	187	187	-	-	-	0.4	0.2	-	0.6	11.8	1.7	0.2	1.9
8/2	403	403	-	-	-	0.3	0.7	-	1.0	8.8	3.7	0.7	4.5
8/3	402	402	-	-	-	0.3	0.7	-	1.1	9.5	3.2	0.7	3.9
9/1	1330	1330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	66	66	-	-	-	0.1	0.0	-	0.1	5.2	0.1	0.0	0.2
10/2	810	810	-	-	-	0.1	2.5	-	2.6	11.8	0.3	2.5	2.8
10/3	800	800	-	-	-	0.1	2.4	-	2.4	11.0	0.2	2.4	2.5
11/1	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	892	892	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1395	1395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	1023	1023	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1395	1395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	470	470	-	-	-	0.9	0.6	-	1.4	10.9	6.1	0.6	6.6

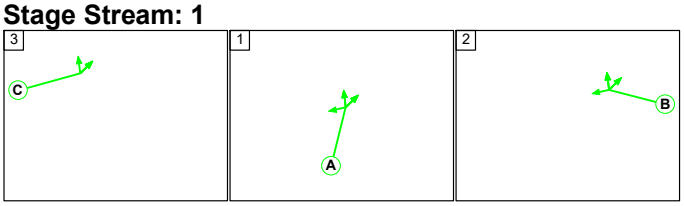
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-20.3	Total Delay for Signalled Lanes (pcuHr):	59.92	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	20.8	Total Delay for Signalled Lanes (pcuHr):	9.91	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-11.9	Total Delay for Signalled Lanes (pcuHr):	35.89	Cycle Time (s): 60
	PRC Over All Lanes (%):	-20.3	Total Delay Over All Lanes(pcuHr):	105.90	

Full Input Data And Results

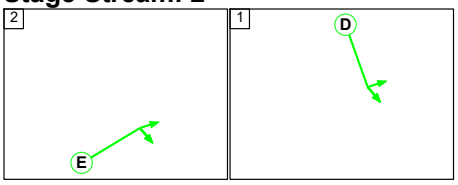
Scenario 29: '2034 Reference Case 3-4PM' (FG34: '34RC_3-4PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

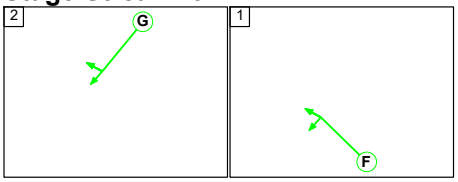
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	16	7	33
Change Point	20	45	57

Stage Stream: 2

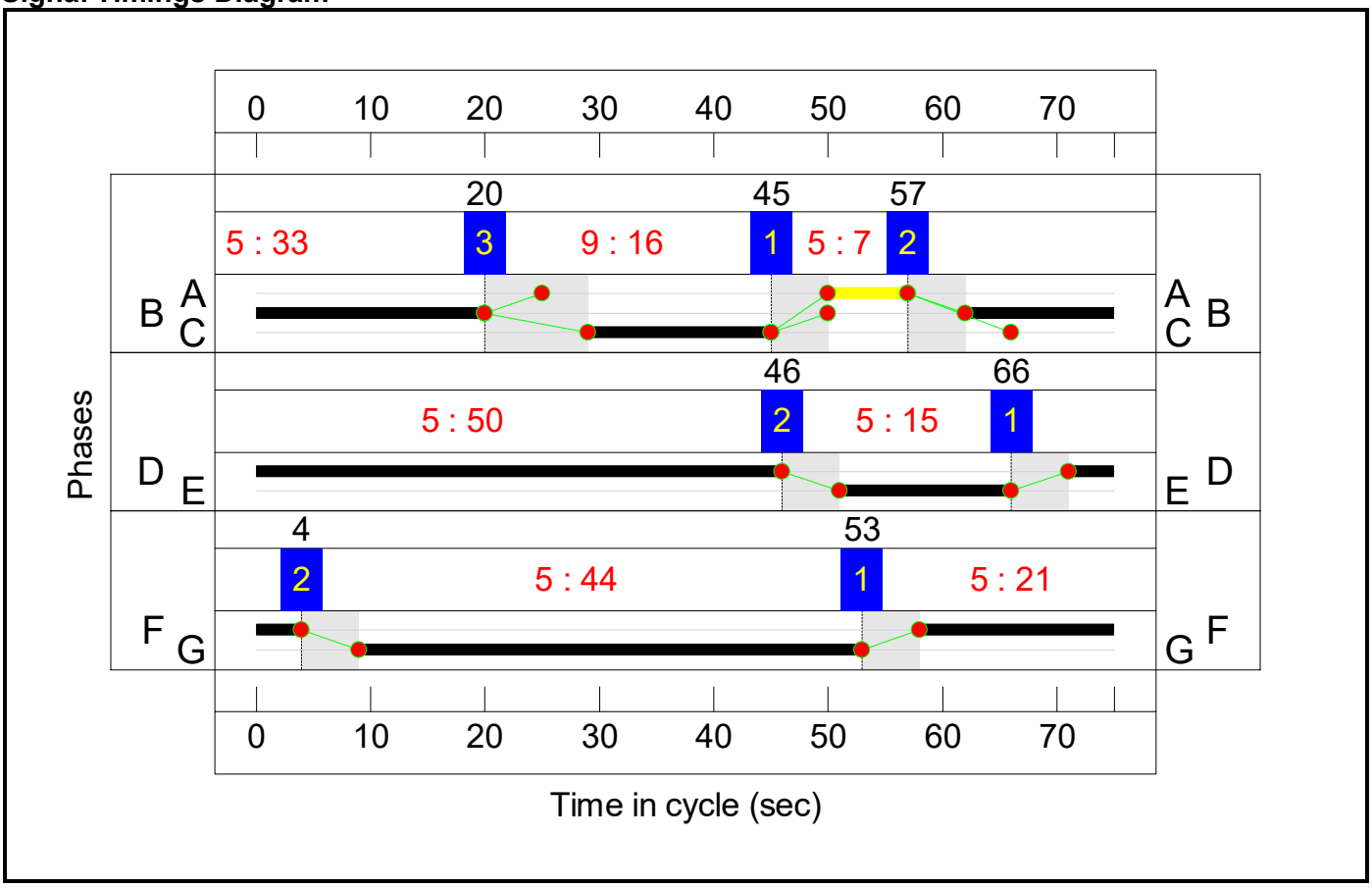
Stage	2	1
Duration	15	50
Change Point	46	66

Stage Stream: 3

Stage	2	1
Duration	44	21
Change Point	4	53

Full Input Data And Results

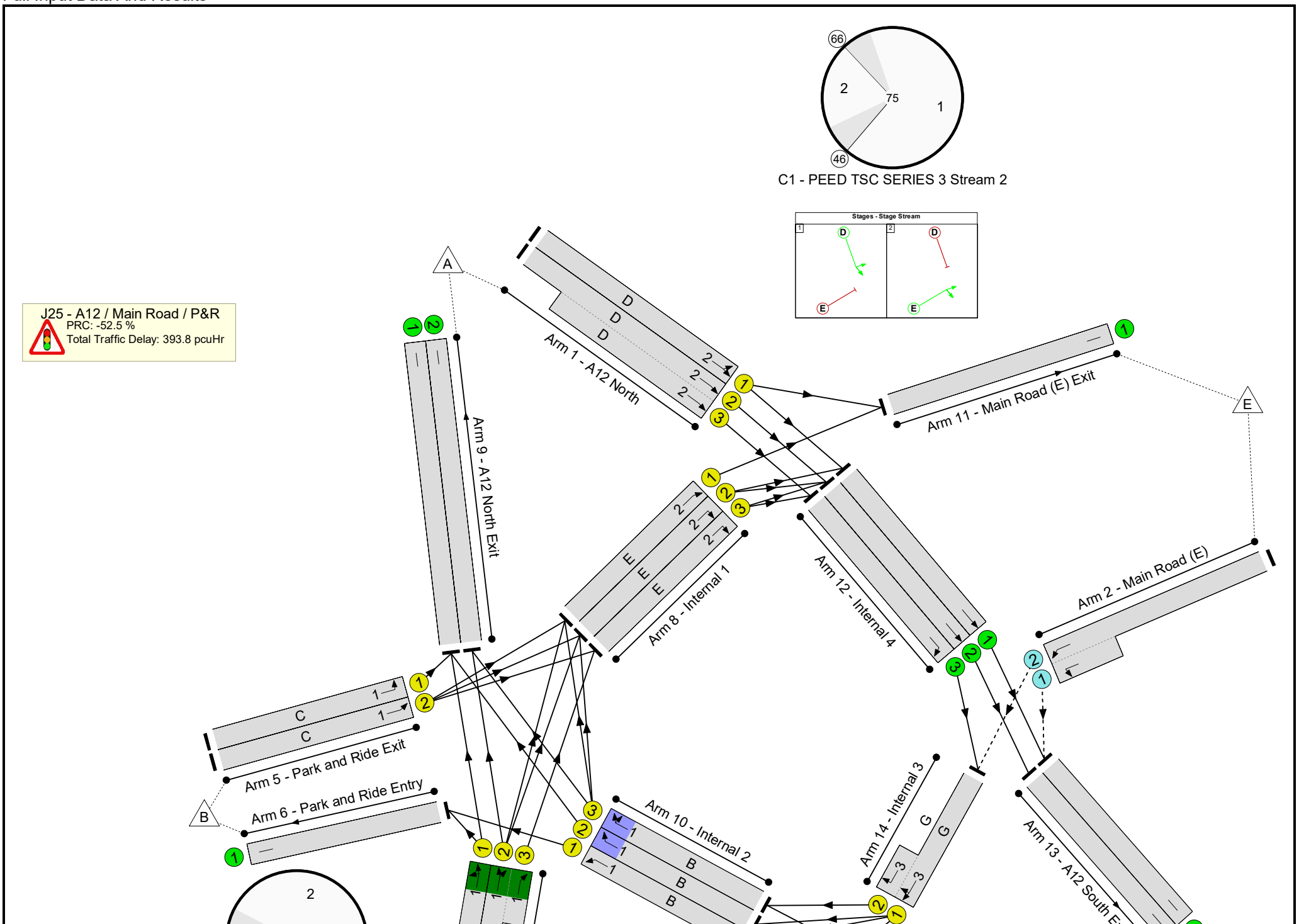
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.2%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.2%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	50	-	717	1965	1336	53.7%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	50	-	1175	2105:2115	1183+641	64.4 : 64.4%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	438	950:1845	223+159	114.6 : 114.6%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	21	-	1515	2070:1910	607+560	135.4 : 123.7%
3/3	A12 South Ahead	U	3	N/A	F		1	21	-	839	2084	611	137.2%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	413	2035	597	69.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	754	2175:2175	427+409	90.3 : 90.3%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	16	-	4	1995	452	0.9%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	16	-	17	2125	482	3.5%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1347	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	15	-	223	1993	425	39.9%
8/2	Internal 1 Right	U	2	N/A	E		1	15	-	366	2137	456	80.3%
8/3	Internal 1 Right	U	2	N/A	E		1	15	-	379	2127	454	83.5%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1250	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	643	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	33	-	5	1932	876	0.5%
10/2	Internal 2 Right	U	1	N/A	B		1	33	-	833	2066	937	65.9%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	33	-	840	2066	937	65.4%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	1082	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	44	-	671	1800:1800	1080+2	59.0 : 54.1%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**811**	**0**	**0**	**56.7**	**337.0**	**0.0**	**393.8**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**811**	**0**	**0**	**56.7**	**337.0**	**0.0**	**393.8**	**-**	**-**	**-**	**-**
1/1	717	717	-	-	-	1.2	0.6	-	1.8	8.9	7.4	0.6	7.9
1/2+1/3	1175	1175	-	-	-	1.8	0.9	-	2.7	8.3	7.8	0.9	8.7
2/2+2/1	438	405	811	0	0	1.8	31.4	-	33.1	272.4	11.7	31.4	43.1
3/2+3/1	1515	1167	-	-	-	23.6	175.9	-	199.5	474.1	29.4	175.9	205.3
3/3	839	611	-	-	-	15.9	115.7	-	131.6	564.7	25.3	115.7	141.0
4/1	413	413	-	-	-	2.7	1.1	-	3.8	33.2	7.6	1.1	8.7
4/2+4/3	754	754	-	-	-	4.9	4.2	-	9.1	43.6	10.9	4.2	15.1
5/1	4	4	-	-	-	0.0	0.0	-	0.0	26.8	0.1	0.0	0.1
5/2	17	17	-	-	-	0.1	0.0	-	0.1	26.7	0.3	0.0	0.3
6/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1184	1184	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	170	170	-	-	-	2.0	0.3	-	2.3	48.6	3.4	0.3	3.8
8/2	366	366	-	-	-	0.7	2.0	-	2.7	26.3	7.4	2.0	9.4
8/3	379	379	-	-	-	0.8	2.4	-	3.2	30.3	7.8	2.4	10.2
9/1	1034	1034	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	4	4	-	-	-	0.0	0.0	-	0.0	10.0	0.0	0.0	0.0
10/2	617	617	-	-	-	0.0	1.0	-	1.0	5.8	0.1	1.0	1.1
10/3	612	612	-	-	-	0.0	0.9	-	0.9	5.6	0.1	0.9	1.0
11/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	900	900	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	1082	1082	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	638	638	-	-	-	1.1	0.7	-	1.8	10.1	7.2	0.7	7.9

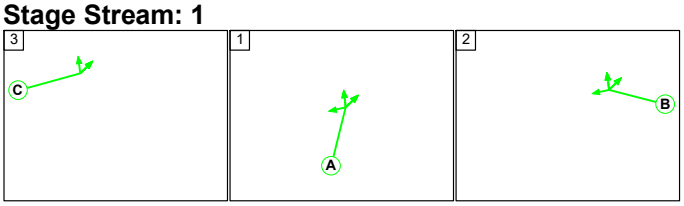
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-0.3	Total Delay for Signalled Lanes (pcuHr):	15.05	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	12.67	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-52.5	Total Delay for Signalled Lanes (pcuHr):	332.90	Cycle Time (s): 75
	PRC Over All Lanes (%):	-52.5	Total Delay Over All Lanes(pcuHr):	393.76	

Full Input Data And Results

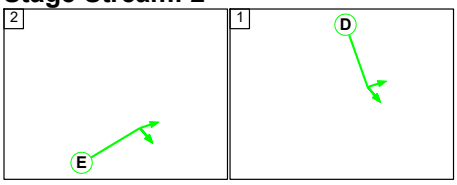
Scenario 30: '2034 Reference Case 5-6PM' (FG35: '34RC_5-6PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

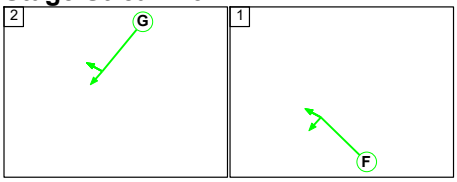
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	9	7	40
Change Point	24	42	54

Stage Stream: 2

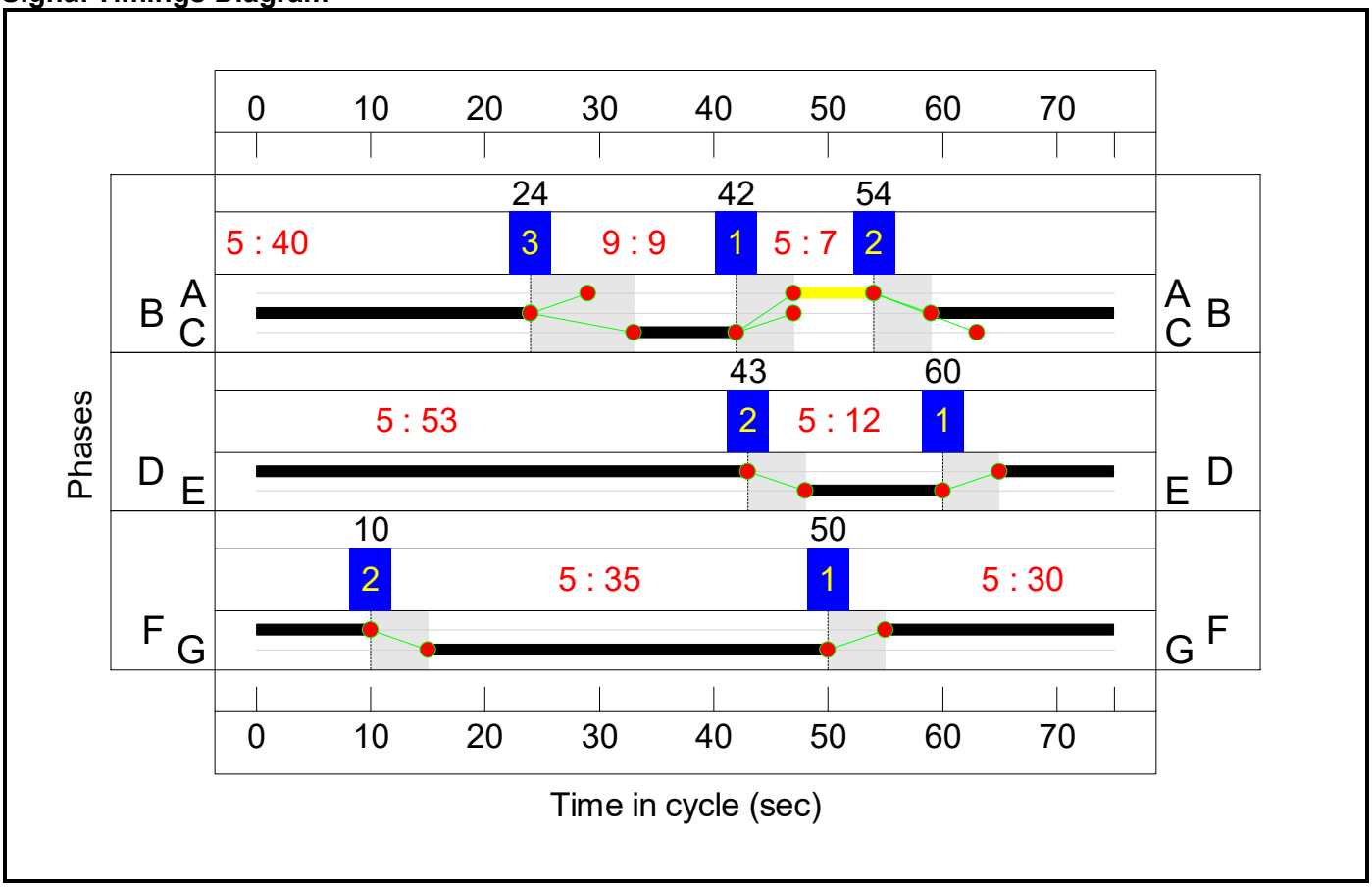
Stage	2	1
Duration	12	53
Change Point	43	60

Stage Stream: 3

Stage	2	1
Duration	35	30
Change Point	10	50

Full Input Data And Results

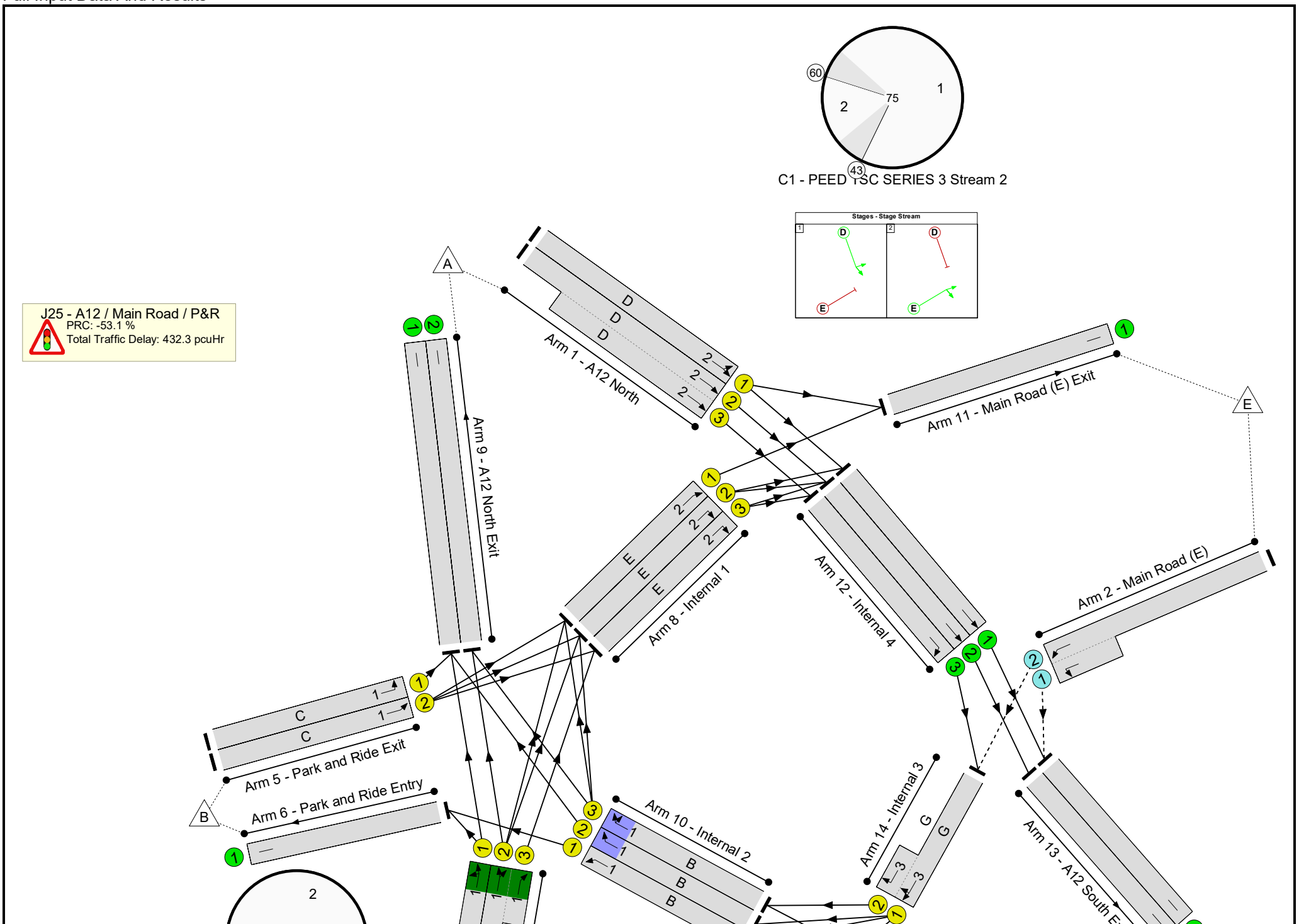
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.8%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.8%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	53	-	670	1965	1415	47.4%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	53	-	1211	2105:2115	1198+806	60.4 : 60.4%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	161	950:1845	32+540	28.1 : 28.1%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	30	-	1445	2070:1910	264+789	137.2 : 137.2%
3/3	A12 South Ahead	U	3	N/A	F		1	30	-	1187	2084	861	137.8%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	385	2034	597	64.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	641	2175:2175	432+395	77.5 : 77.5%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	9	-	24	1995	266	9.0%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	9	-	28	2125	283	9.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	13	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1564	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	12	-	245	1993	345	59.5%
8/2	Internal 1 Right	U	2	N/A	E		1	12	-	250	2137	370	67.3%
8/3	Internal 1 Right	U	2	N/A	E		1	12	-	321	2127	369	87.1%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	1041	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	40	-	10	1932	1056	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	40	-	368	2066	1129	23.9%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	40	-	1188	2066	1129	76.4%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	245	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	795	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1168	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	947	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1168	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	35	-	498	1800:1800	864+2	57.5 : 57.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**322**	**0**	**0**	**58.8**	**373.5**	**0.0**	**432.3**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**322**	**0**	**0**	**58.8**	**373.5**	**0.0**	**432.3**	**-**	**-**	**-**	**-**
1/1	670	670	-	-	-	0.8	0.4	-	1.3	6.9	5.8	0.4	6.2
1/2+1/3	1211	1211	-	-	-	1.4	0.8	-	2.2	6.5	6.4	0.8	7.2
2/2+2/1	161	161	322	0	0	0.0	0.2	-	0.2	4.4	0.0	0.2	0.2
3/2+3/1	1445	1053	-	-	-	24.3	197.7	-	221.9	552.9	38.1	197.7	235.7
3/3	1187	861	-	-	-	21.1	164.6	-	185.7	563.2	34.0	164.6	198.6
4/1	385	385	-	-	-	2.5	0.9	-	3.4	31.5	7.0	0.9	7.9
4/2+4/3	641	641	-	-	-	4.0	1.7	-	5.7	31.8	8.0	1.7	9.7
5/1	24	24	-	-	-	0.2	0.0	-	0.2	36.0	0.4	0.0	0.5
5/2	28	28	-	-	-	0.2	0.1	-	0.3	35.6	0.5	0.1	0.6
6/1	11	11	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1272	1272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	205	205	-	-	-	1.5	0.7	-	2.2	38.8	4.1	0.7	4.8
8/2	249	249	-	-	-	0.5	1.0	-	1.5	22.1	4.9	1.0	5.9
8/3	321	321	-	-	-	0.8	3.0	-	3.8	42.2	6.5	3.0	9.5
9/1	676	676	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	755	755	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	7.8	0.0	0.0	0.0
10/2	270	270	-	-	-	0.0	0.2	-	0.2	2.4	0.1	0.2	0.2
10/3	862	862	-	-	-	0.0	1.6	-	1.6	6.7	0.1	1.6	1.7
11/1	205	205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	795	795	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1168	1168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	947	947	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1168	1168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	498	498	-	-	-	1.4	0.7	-	2.1	15.2	7.3	0.7	8.0

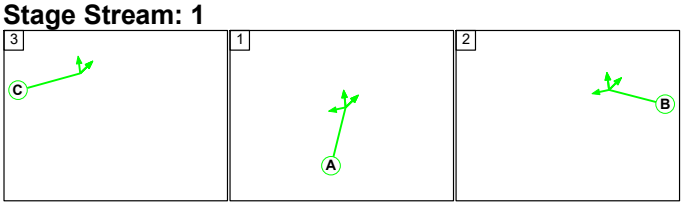
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	16.2	Total Delay for Signalled Lanes (pcuHr):	11.38	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	3.4	Total Delay for Signalled Lanes (pcuHr):	10.97	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-53.1	Total Delay for Signalled Lanes (pcuHr):	409.76	Cycle Time (s): 75
	PRC Over All Lanes (%):	-53.1	Total Delay Over All Lanes(pcuHr):	432.30	

Full Input Data And Results

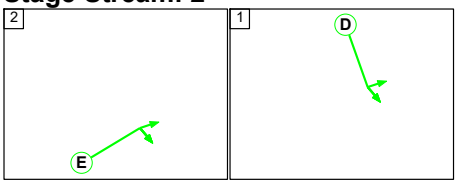
Scenario 31: '2034 Operational Forecast 6-7AM' (FG26: '34OP_6-7AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

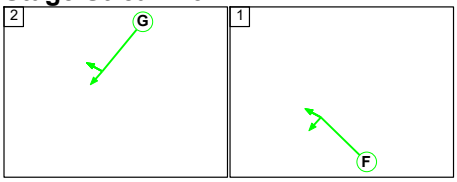
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	21	7	13
Change Point	56	26	38

Stage Stream: 2

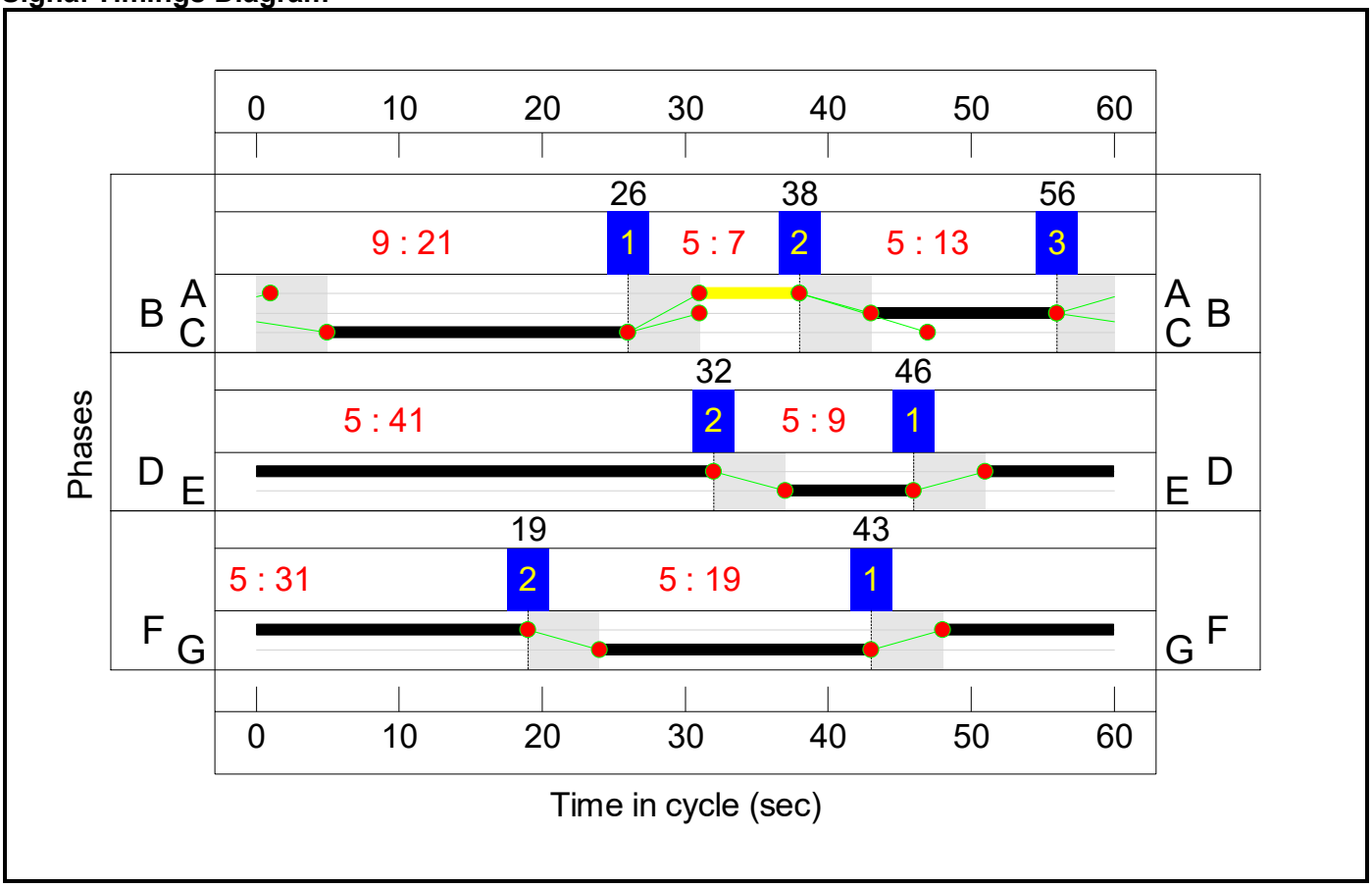
Stage	2	1
Duration	9	41
Change Point	32	46

Stage Stream: 3

Stage	2	1
Duration	19	31
Change Point	19	43

Full Input Data And Results

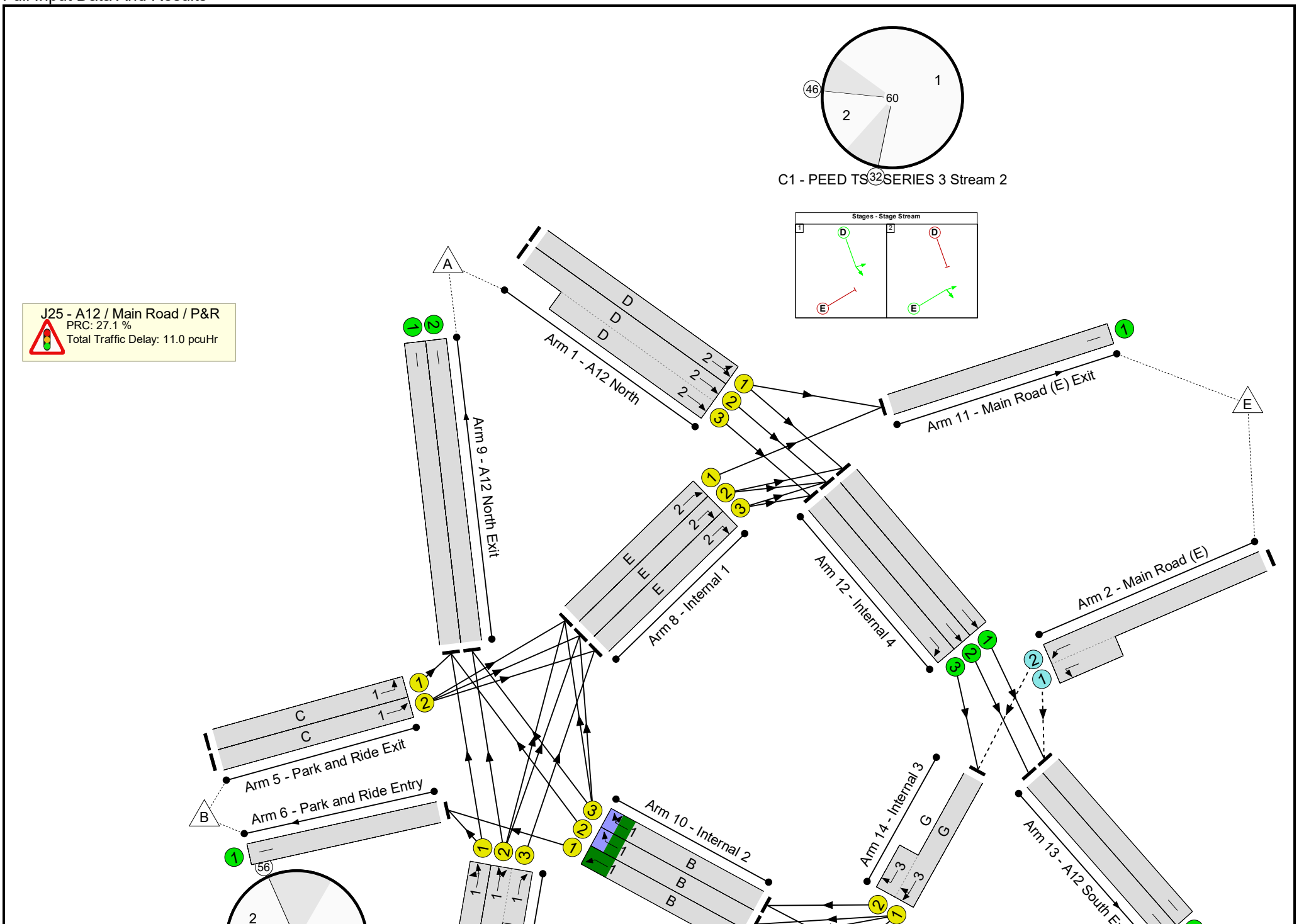
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.8%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.8%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	41	-	329	1962	1373	24.0%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	41	-	622	2105:2115	1321+477	34.6 : 34.6%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	40	950:1845	71+637	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	31	-	511	2070:1910	1054+618	30.6 : 30.6%
3/3	A12 South Ahead	U	3	N/A	F		1	31	-	254	2084	1111	22.9%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	138	2034	271	50.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	330	2175:2175	281+185	70.8 : 70.8%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	21	-	1	1995	732	0.1%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	21	-	2	2125	779	0.3%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	9	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	9	-	10	1993	332	3.0%
8/2	Internal 1 Right	U	2	N/A	E		1	9	-	99	2137	356	27.8%
8/3	Internal 1 Right	U	2	N/A	E		1	9	-	133	2127	354	37.5%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	8	1932	966	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	325	2066	1033	31.5%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	255	2066	1033	24.7%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	32	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	640	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	640	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	19	-	169	1800:1800	600+4	28.0 : 28.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**80**	**0**	**0**	**7.3**	**3.6**	**0.0**	**11.0**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**80**	**0**	**0**	**7.3**	**3.6**	**0.0**	**11.0**	**-**	**-**	**-**	**-**
1/1	329	329	-	-	-	0.3	0.2	-	0.5	5.0	1.9	0.2	2.1
1/2+1/3	622	622	-	-	-	0.6	0.3	-	0.8	4.8	2.8	0.3	3.1
2/2+2/1	40	40	80	0	0	0.0	0.0	-	0.0	2.7	0.0	0.0	0.0
3/2+3/1	511	511	-	-	-	1.1	0.2	-	1.3	9.1	3.0	0.2	3.2
3/3	254	254	-	-	-	0.5	0.1	-	0.7	9.5	2.2	0.1	2.3
4/1	138	138	-	-	-	0.9	0.5	-	1.4	37.6	2.1	0.5	2.6
4/2+4/3	330	330	-	-	-	2.2	1.2	-	3.4	37.5	3.2	1.2	4.3
5/1	1	1	-	-	-	0.0	0.0	-	0.0	14.8	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	14.7	0.0	0.0	0.0
6/1	9	9	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	10	10	-	-	-	0.1	0.0	-	0.1	40.8	0.2	0.0	0.2
8/2	99	99	-	-	-	0.0	0.2	-	0.2	8.7	0.2	0.2	0.4
8/3	133	133	-	-	-	0.1	0.3	-	0.4	9.5	0.7	0.3	1.0
9/1	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.0	7.5	0.0	0.0	0.0
10/2	325	325	-	-	-	0.5	0.2	-	0.7	7.7	1.2	0.2	1.4
10/3	255	255	-	-	-	0.4	0.2	-	0.5	7.4	0.9	0.2	1.1
11/1	32	32	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	169	169	-	-	-	0.7	0.2	-	0.8	18.0	2.2	0.2	2.4

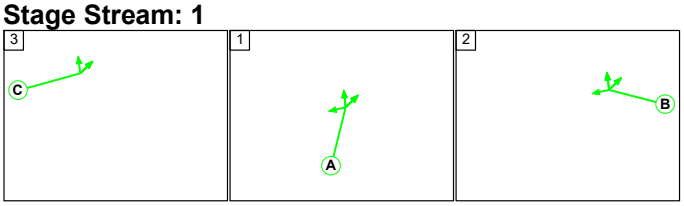
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	27.1	Total Delay for Signalled Lanes (pcuHr):	6.13	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	139.9	Total Delay for Signalled Lanes (pcuHr):	2.00	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	194.5	Total Delay for Signalled Lanes (pcuHr):	2.81	Cycle Time (s):	60
	PRC Over All Lanes (%):	27.1	Total Delay Over All Lanes(pcuHr):	10.96		

Full Input Data And Results

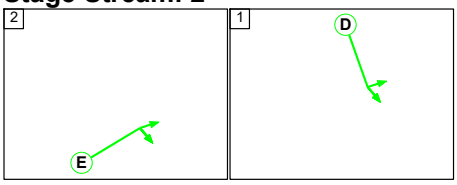
Scenario 32: '2034 Operational Forecast 7-8AM' (FG27: '34OP_7-8AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

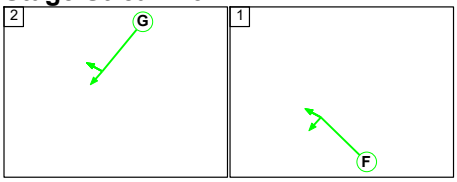
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	15	19
Change Point	10	26	46

Stage Stream: 2

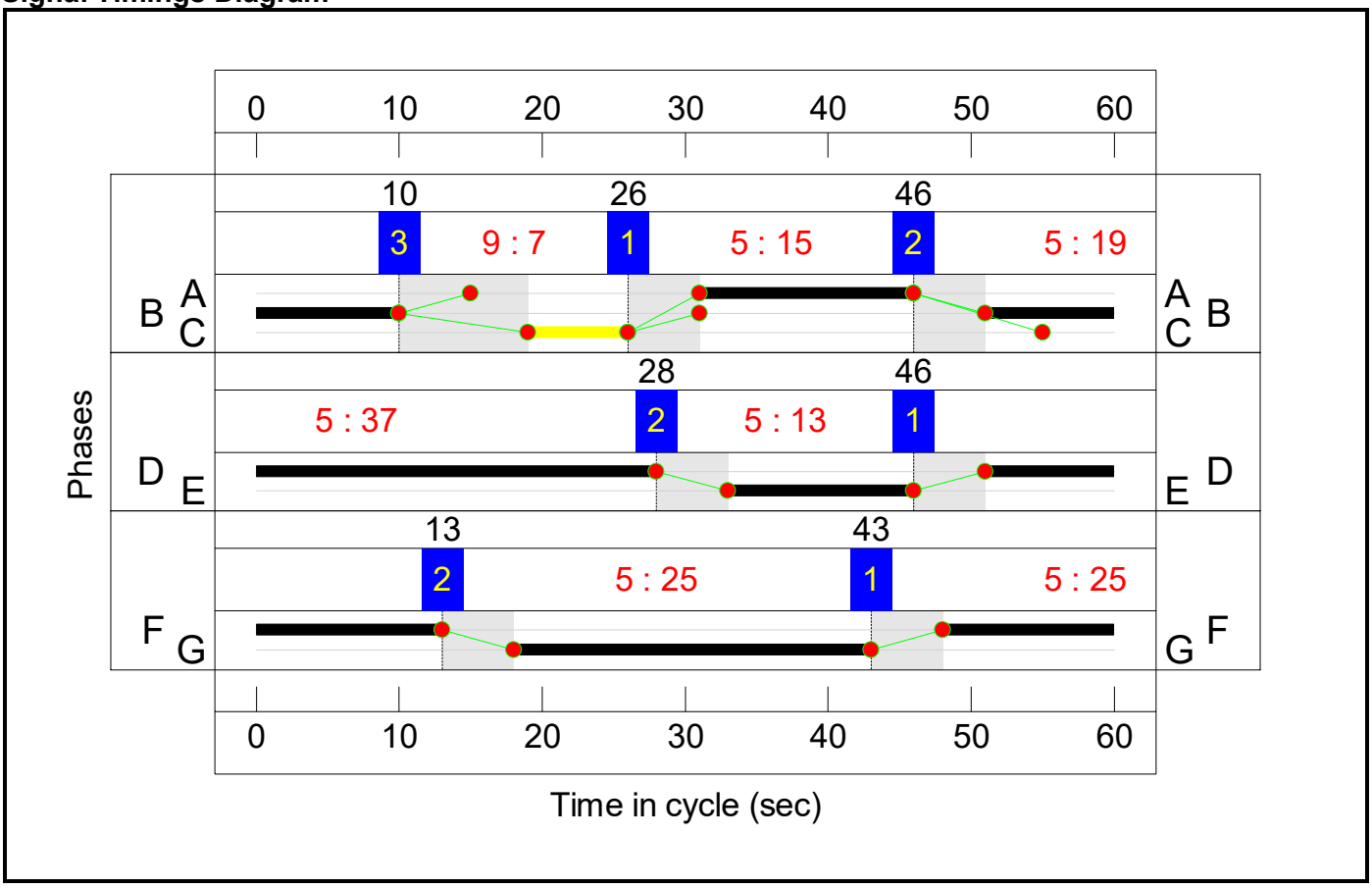
Stage	2	1
Duration	13	37
Change Point	28	46

Stage Stream: 3

Stage	2	1
Duration	25	25
Change Point	13	43

Full Input Data And Results

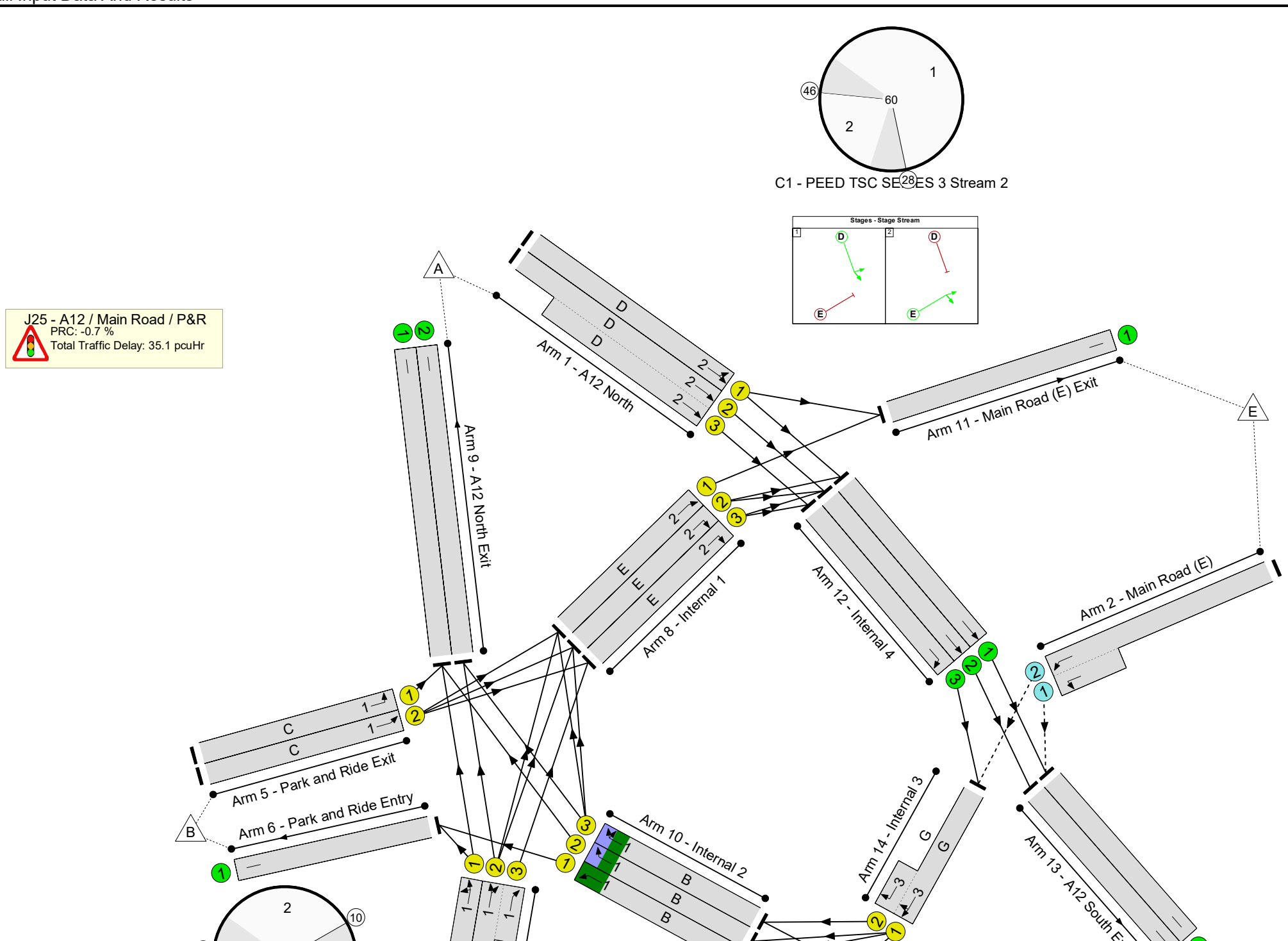
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.6%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.6%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	37	-	581	1963	1243	46.7%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	37	-	1068	2105:2115	1184+628	58.9 : 58.9%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	112	950:1845	196+562	14.8 : 14.8%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	25	-	1130	2070:1908	897+509	80.4 : 80.4%
3/3	A12 South Ahead	U	3	N/A	F		1	25	-	666	2084	903	73.7%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	15	-	464	2032	542	85.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	15	-	704	2175:2175	445+332	90.6 : 90.6%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	4	1995	266	1.5%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	3	2125	283	1.1%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	747	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	97	1993	465	20.9%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	281	2137	499	56.4%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	302	2127	496	60.9%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1177	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	19	-	49	1932	1095	4.5%
10/2	Internal 2 Right	U	1	N/A	B		1	19	-	724	2066	1171	61.8%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	19	-	675	2066	1171	57.7%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	694	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1141	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1141	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	25	-	399	1800:1800	779+18	50.1 : 50.1%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**224**	**0**	**0**	**19.8**	**15.3**	**0.0**	**35.1**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**224**	**0**	**0**	**19.8**	**15.3**	**0.0**	**35.1**	**-**	**-**	**-**	**-**
1/1	581	581	-	-	-	0.9	0.4	-	1.4	8.4	5.0	0.4	5.4
1/2+1/3	1068	1068	-	-	-	1.7	0.7	-	2.4	8.1	6.2	0.7	6.9
2/2+2/1	112	112	224	0	0	0.0	0.1	-	0.1	3.1	0.1	0.1	0.2
3/2+3/1	1130	1130	-	-	-	4.4	2.0	-	6.4	20.3	10.4	2.0	12.4
3/3	666	666	-	-	-	2.6	1.4	-	4.0	21.7	9.1	1.4	10.5
4/1	464	464	-	-	-	2.7	2.8	-	5.5	42.5	7.3	2.8	10.1
4/2+4/3	704	704	-	-	-	3.9	4.3	-	8.2	41.9	8.2	4.3	12.5
5/1	4	4	-	-	-	0.0	0.0	-	0.0	29.8	0.1	0.0	0.1
5/2	3	3	-	-	-	0.0	0.0	-	0.0	29.4	0.0	0.0	0.0
6/1	64	64	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	97	97	-	-	-	0.4	0.1	-	0.5	18.8	0.7	0.1	0.8
8/2	281	281	-	-	-	0.9	0.6	-	1.5	19.5	1.2	0.6	1.9
8/3	302	302	-	-	-	0.9	0.8	-	1.7	20.0	1.3	0.8	2.0
9/1	1177	1177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	49	49	-	-	-	0.0	0.0	-	0.0	3.1	0.1	0.0	0.1
10/2	724	724	-	-	-	0.0	0.8	-	0.8	4.1	0.0	0.8	0.9
10/3	675	675	-	-	-	0.0	0.7	-	0.7	3.8	0.1	0.7	0.8
11/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	694	694	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1141	1141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1141	1141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	399	399	-	-	-	1.4	0.5	-	1.9	17.1	5.5	0.5	6.0

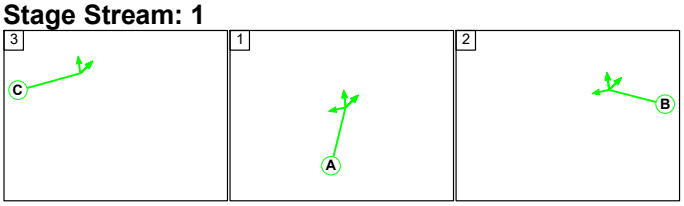
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-0.7	Total Delay for Signalled Lanes (pcuHr):	15.30	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	47.9	Total Delay for Signalled Lanes (pcuHr):	7.46	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	12.0	Total Delay for Signalled Lanes (pcuHr):	12.27	Cycle Time (s):	60
	PRC Over All Lanes (%):	-0.7	Total Delay Over All Lanes(pcuHr):	35.13		

Full Input Data And Results

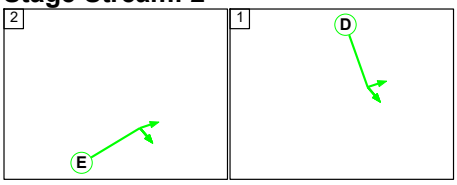
Scenario 33: '2034 Operational Forecast 8-9AM' (FG28: '34OP_8-9AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

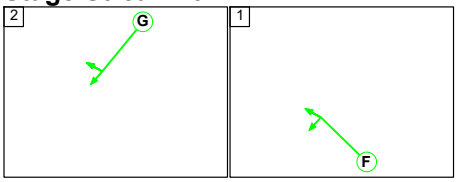
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	7	21	13
Change Point	39	55	21

Stage Stream: 2

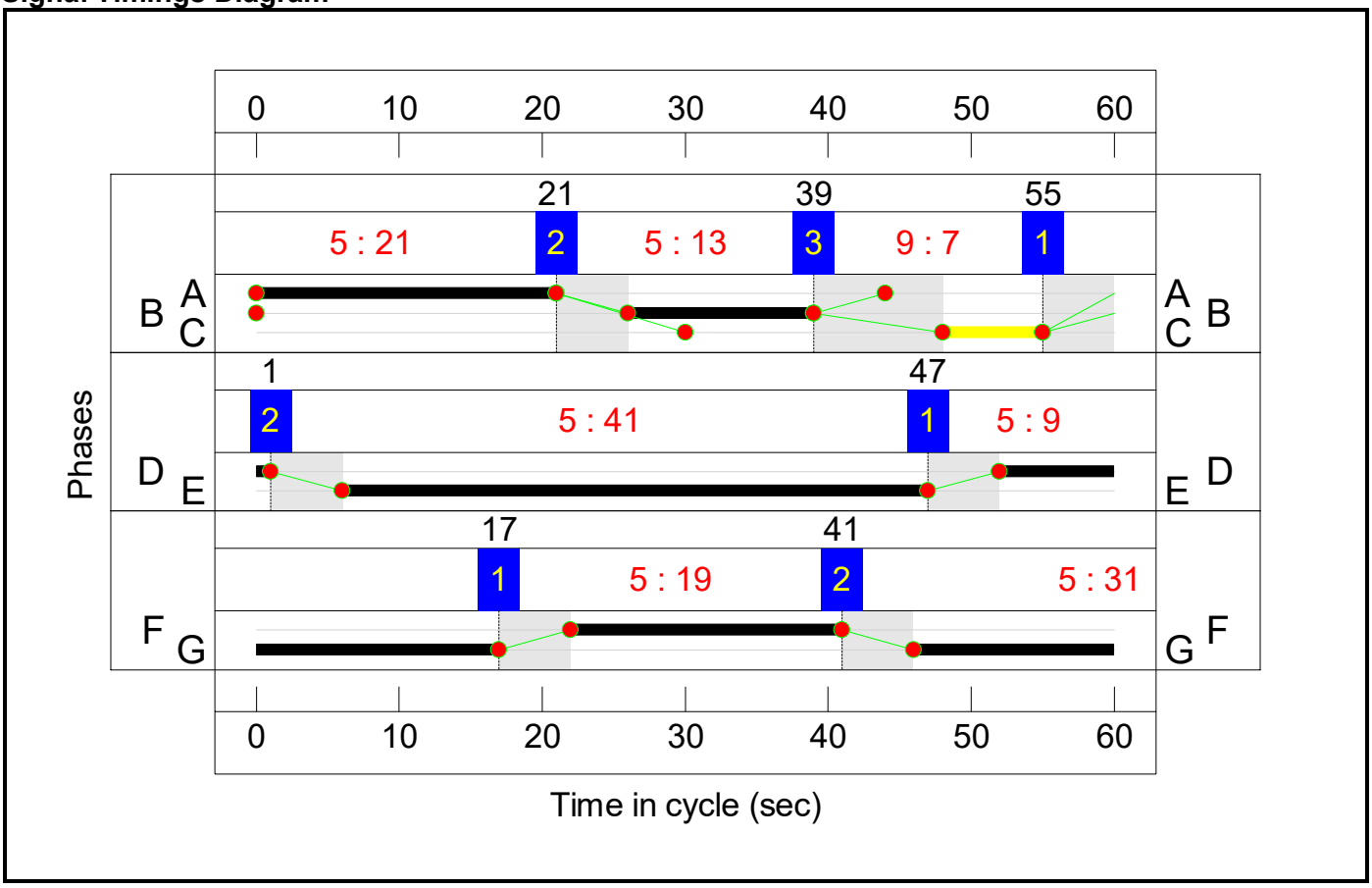
Stage	2	1
Duration	41	9
Change Point	1	47

Stage Stream: 3

Stage	2	1
Duration	31	19
Change Point	41	17

Full Input Data And Results

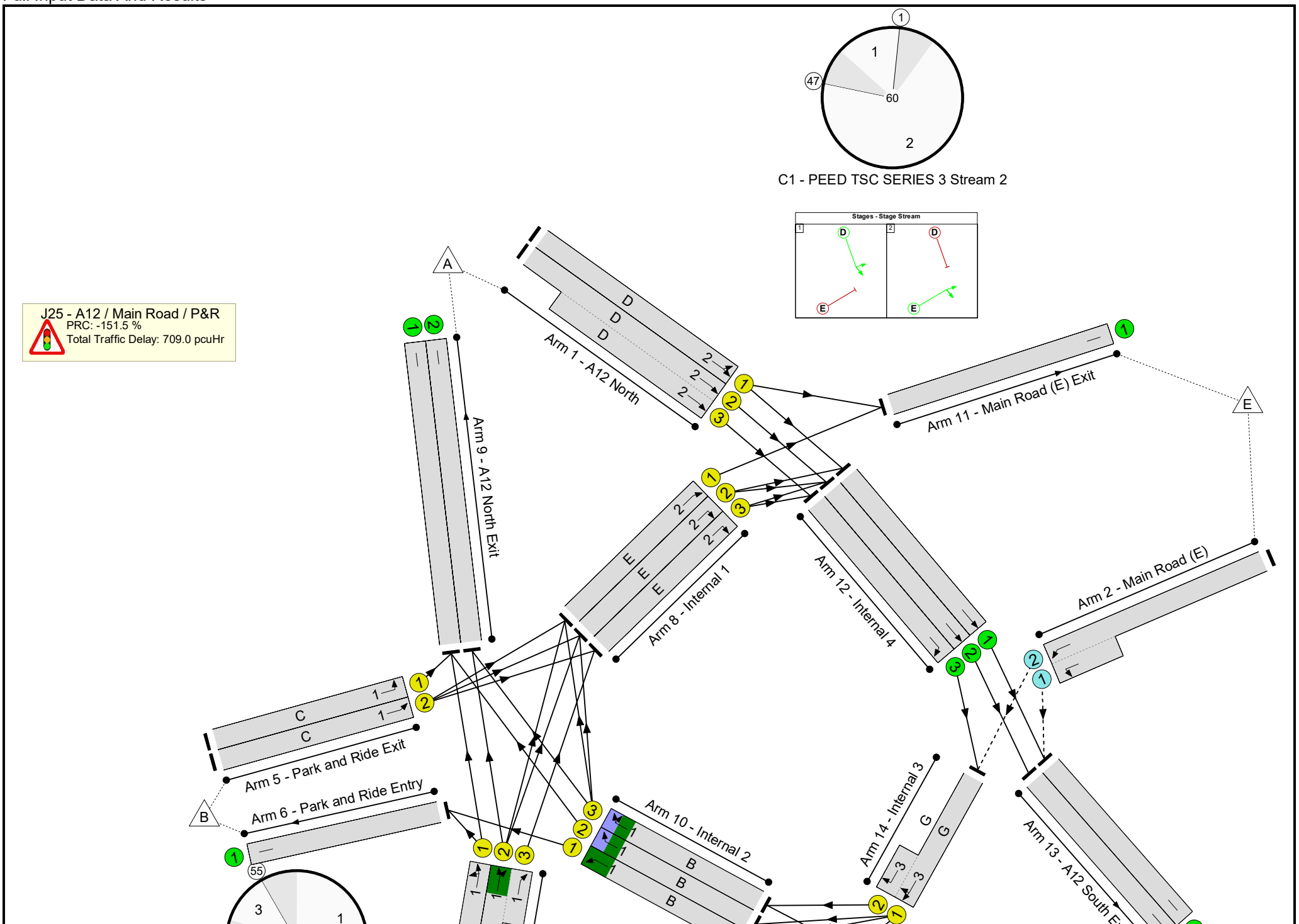
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**226.3%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**226.3%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	9	-	689	1963	327	210.6%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	9	-	1247	2105:2115	351+353	226.3 : 128.5%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	149	950:1845	83+604	21.7 : 21.7%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	19	-	1448	2070:1909	690+636	116.4 : 101.4%
3/3	A12 South Ahead	U	3	N/A	F		1	19	-	796	2084	695	114.6%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	21	-	497	2033	745	66.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	21	-	1025	2175:2175	532+384	111.8 : 111.8%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	7	-	7	1995	266	2.6%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	7	-	16	2125	283	5.6%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1027	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	41	-	224	1993	1395	14.3%
8/2	Internal 1 Right	U	2	N/A	E		1	41	-	436	2137	1496	26.2%
8/3	Internal 1 Right	U	2	N/A	E		1	41	-	432	2127	1489	26.0%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1314	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	754	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	13	-	66	1932	902	7.0%
10/2	Internal 2 Right	U	1	N/A	B		1	13	-	819	2066	964	73.1%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	13	-	805	2066	964	72.9%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	260	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	871	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1442	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1442	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	31	-	473	1800:1800	958+19	38.0 : 44.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**298**	**0**	**0**	**70.3**	**638.7**	**0.0**	**709.0**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**298**	**0**	**0**	**70.3**	**638.7**	**0.0**	**709.0**	**-**	**-**	**-**	**-**
1/1	689	327	-	-	-	17.0	181.9	-	198.9	1039.0	22.8	181.9	204.6
1/2+1/3	1247	703	-	-	-	24.6	273.0	-	297.6	859.0	31.5	273.0	304.5
2/2+2/1	149	149	298	0	0	0.0	0.1	-	0.1	3.5	0.1	0.1	0.2
3/2+3/1	1448	1326	-	-	-	11.0	66.3	-	77.3	192.1	19.8	66.3	86.1
3/3	796	695	-	-	-	6.9	54.3	-	61.2	276.7	15.0	54.3	69.3
4/1	497	497	-	-	-	2.2	1.0	-	3.2	23.1	6.9	1.0	7.9
4/2+4/3	1025	916	-	-	-	8.2	58.7	-	66.9	234.9	17.2	58.7	75.9
5/1	7	7	-	-	-	0.0	0.0	-	0.1	29.9	0.1	0.0	0.1
5/2	16	16	-	-	-	0.1	0.0	-	0.1	29.7	0.2	0.0	0.3
6/1	72	72	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	922	922	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	199	199	-	-	-	0.1	0.1	-	0.1	2.5	0.3	0.1	0.4
8/2	391	391	-	-	-	0.1	0.2	-	0.2	2.1	0.6	0.2	0.8
8/3	386	386	-	-	-	0.0	0.2	-	0.2	1.7	0.6	0.2	0.8
9/1	1200	1200	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	63	63	-	-	-	0.0	0.0	-	0.1	3.8	0.1	0.0	0.2
10/2	705	705	-	-	-	0.1	1.3	-	1.4	7.1	0.2	1.3	1.5
10/3	703	703	-	-	-	0.0	1.3	-	1.4	7.0	0.1	1.3	1.4
11/1	216	216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	931	931	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	931	931	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	373	373	-	-	-	0.1	0.3	-	0.4	3.6	7.9	0.3	8.2

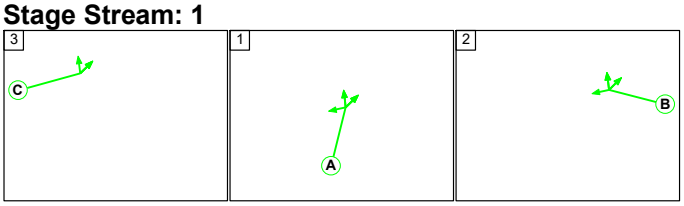
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-24.3	Total Delay for Signalled Lanes (pcuHr):	73.09	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	-151.5	Total Delay for Signalled Lanes (pcuHr):	496.98	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-29.3	Total Delay for Signalled Lanes (pcuHr):	138.82	Cycle Time (s): 60
	PRC Over All Lanes (%):	-151.5	Total Delay Over All Lanes(pcuHr):	709.03	

Full Input Data And Results

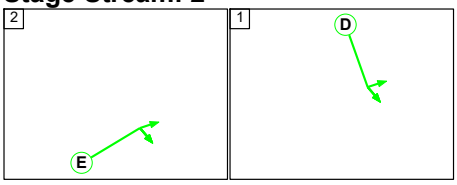
Scenario 34: '2034 Operational Forecast 3-4PM' (FG29: '34OP_3-4PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

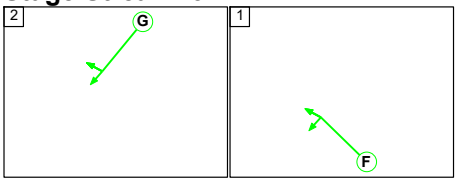
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	15	7	34
Change Point	21	45	57

Stage Stream: 2

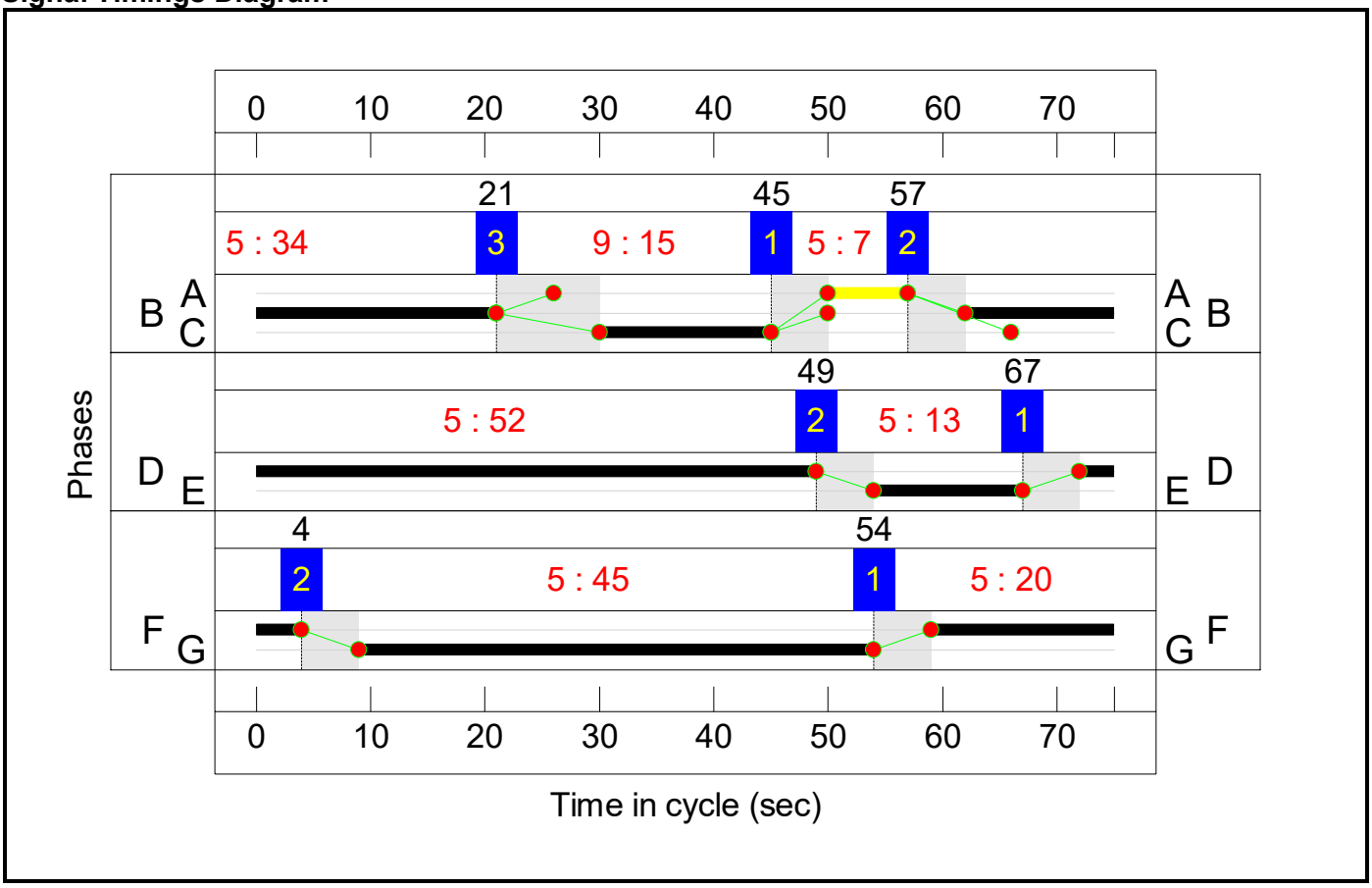
Stage	2	1
Duration	13	52
Change Point	49	67

Stage Stream: 3

Stage	2	1
Duration	45	20
Change Point	4	54

Full Input Data And Results

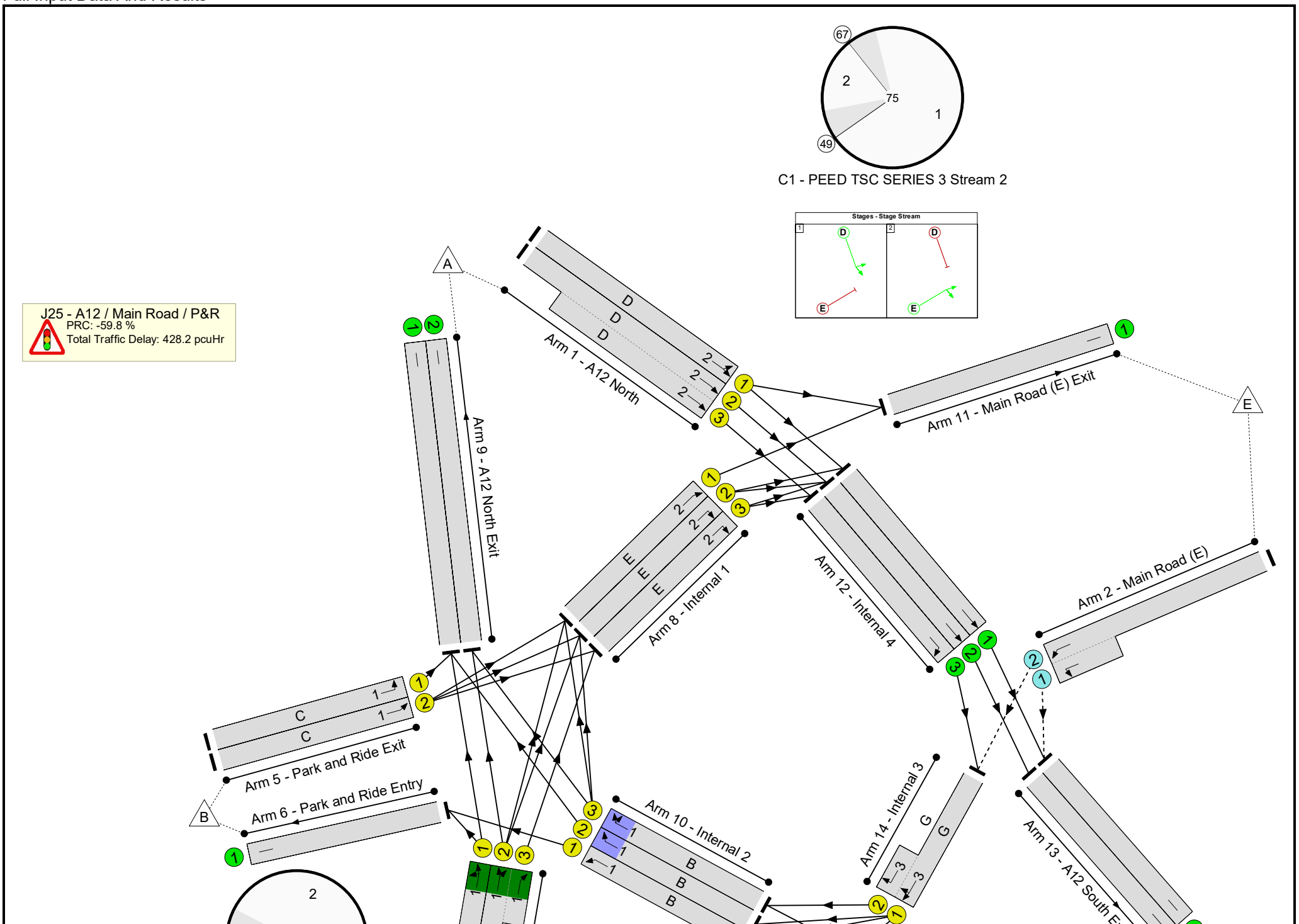
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**143.8%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**143.8%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	52	-	706	1965	1389	50.8%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	52	-	1167	2105:2115	1218+667	61.9 : 61.9%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	477	950:1845	239+206	107.0 : 107.0%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	20	-	1515	2070:1910	580+535	141.8 : 129.6%
3/3	A12 South Ahead	U	3	N/A	F		1	20	-	839	2084	584	143.8%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	411	2035	597	68.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	751	2175:2175	445+364	92.8 : 92.8%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	15	-	4	1995	426	0.9%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	15	-	17	2125	453	3.8%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1347	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	13	-	335	1993	372	74.4%
8/2	Internal 1 Right	U	2	N/A	E		1	13	-	281	2137	399	70.4%
8/3	Internal 1 Right	U	2	N/A	E		1	13	-	343	2127	397	86.4%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	1248	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	649	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	34	-	5	1932	902	0.5%
10/2	Internal 2 Right	U	1	N/A	B		1	34	-	833	2066	964	61.2%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	34	-	840	2066	964	60.6%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	343	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	838	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1236	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	1059	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1236	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	45	-	671	1800:1800	1104+2	59.2 : 56.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**920**	**0**	**0**	**59.8**	**368.4**	**0.0**	**428.2**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**920**	**0**	**0**	**59.8**	**368.4**	**0.0**	**428.2**	**-**	**-**	**-**	**-**
1/1	706	706	-	-	-	1.0	0.5	-	1.5	7.7	6.7	0.5	7.2
1/2+1/3	1167	1167	-	-	-	1.5	0.8	-	2.3	7.2	7.1	0.8	7.9
2/2+2/1	477	460	920	0	0	1.2	21.3	-	22.5	169.5	11.5	21.3	32.8
3/2+3/1	1515	1114	-	-	-	26.0	202.2	-	228.2	542.2	31.5	202.2	233.6
3/3	839	584	-	-	-	17.2	129.4	-	146.6	629.0	26.5	129.4	155.9
4/1	411	411	-	-	-	2.7	1.1	-	3.8	33.0	7.5	1.1	8.6
4/2+4/3	751	751	-	-	-	5.0	5.4	-	10.4	50.0	11.6	5.4	17.1
5/1	4	4	-	-	-	0.0	0.0	-	0.0	27.9	0.1	0.0	0.1
5/2	17	17	-	-	-	0.1	0.0	-	0.1	27.7	0.3	0.0	0.3
6/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	277	277	-	-	-	2.3	1.4	-	3.7	48.1	5.7	1.4	7.1
8/2	281	281	-	-	-	0.6	1.2	-	1.8	23.3	5.7	1.2	6.8
8/3	343	343	-	-	-	0.9	2.9	-	3.8	39.6	7.1	2.9	10.0
9/1	1005	1005	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	4	4	-	-	-	0.0	0.0	-	0.0	9.6	0.0	0.0	0.0
10/2	590	590	-	-	-	0.0	0.8	-	0.8	5.0	0.1	0.8	0.9
10/3	584	584	-	-	-	0.0	0.8	-	0.8	4.8	0.1	0.8	0.8
11/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1236	1236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	1059	1059	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	1236	1236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	654	654	-	-	-	1.1	0.7	-	1.9	10.3	7.3	0.7	8.0

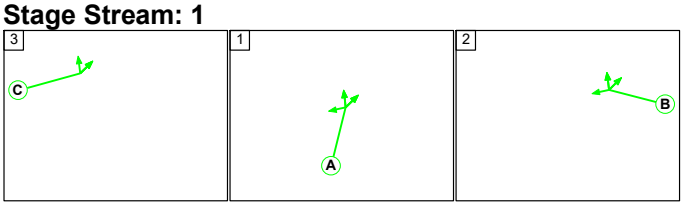
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-3.1	Total Delay for Signalled Lanes (pcuHr):	15.97	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	13.12	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-59.8	Total Delay for Signalled Lanes (pcuHr):	376.63	Cycle Time (s): 75
	PRC Over All Lanes (%):	-59.8	Total Delay Over All Lanes(pcuHr):	428.17	

Full Input Data And Results

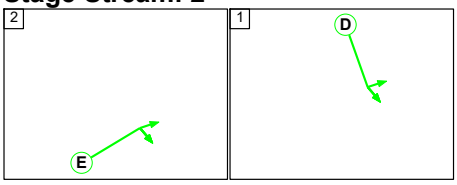
Scenario 35: '2034 Operational Forecast 5-6PM' (FG30: '34OP_5-6PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

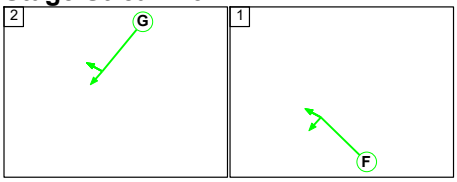
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	3	1	2
Duration	9	7	40
Change Point	24	42	54

Stage Stream: 2

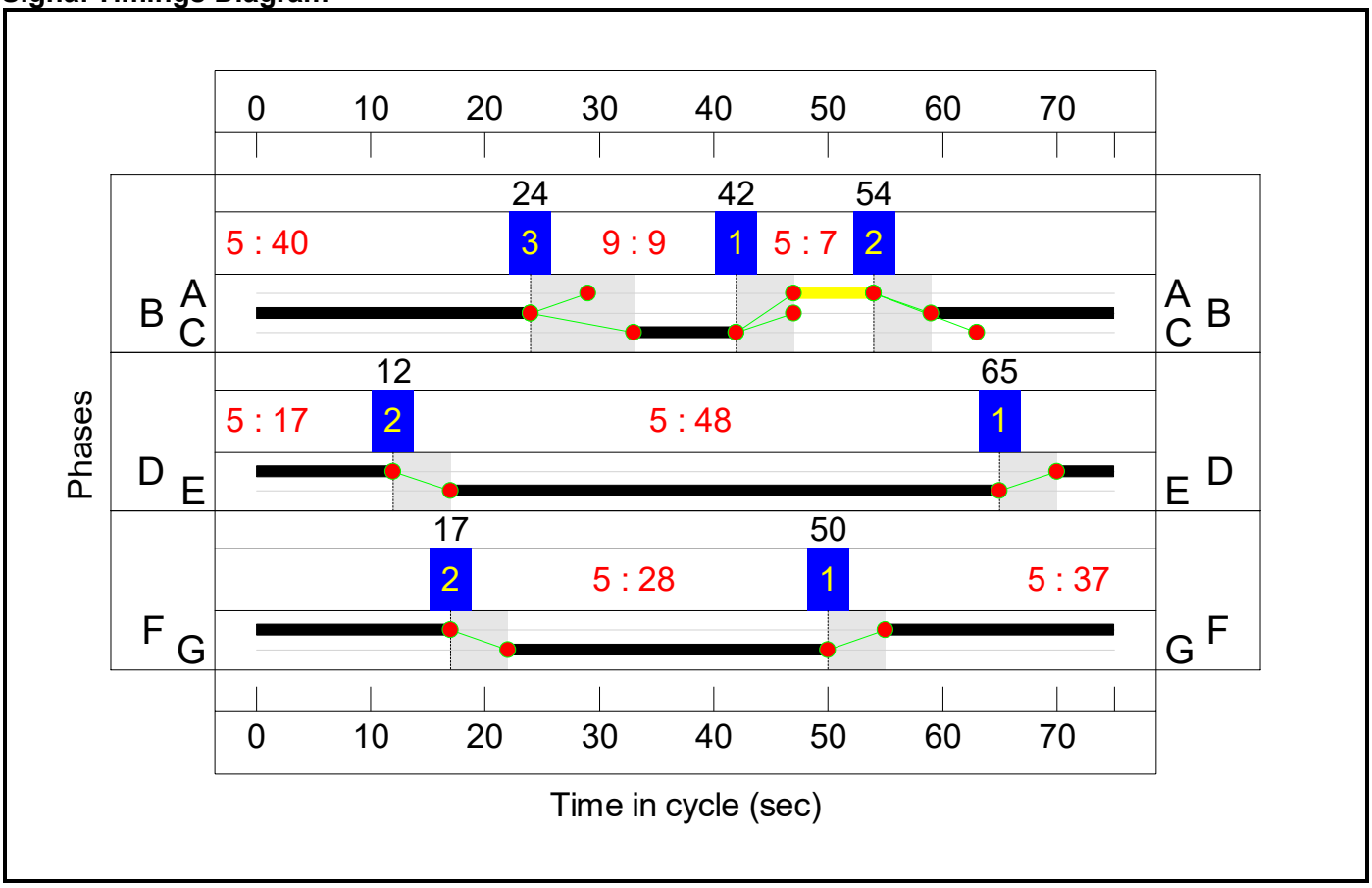
Stage	2	1
Duration	48	17
Change Point	12	65

Stage Stream: 3

Stage	2	1
Duration	28	37
Change Point	17	50

Full Input Data And Results

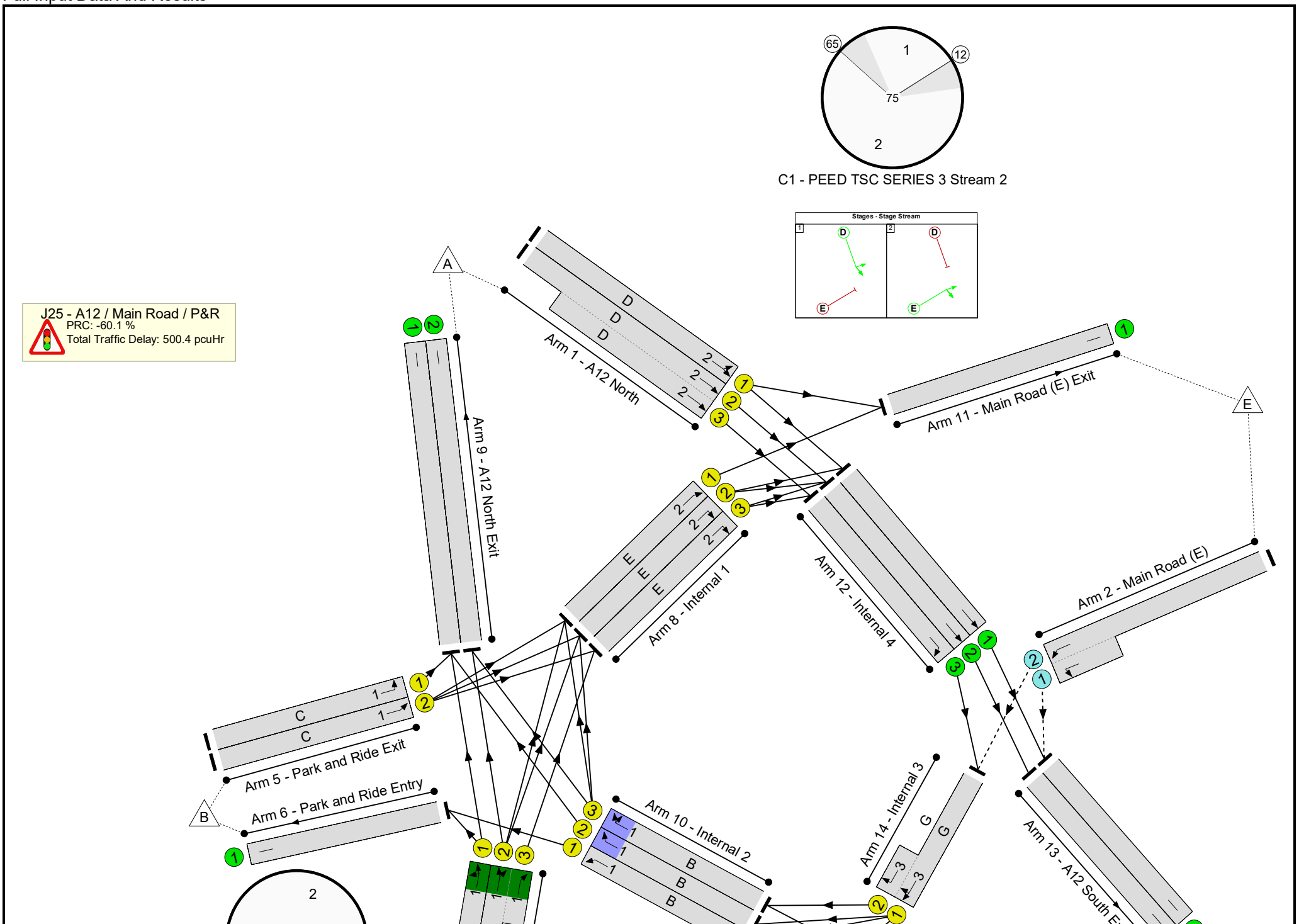
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**144.1%**
J25 - A12 / Main Road / P&&R	-	-	**N/A**	-	-		-	-	-	-	-	-	**144.1%**
1/1	A12 North Left Ahead	U	2	N/A	D		1	17	-	675	1964	471	143.2%
1/2+1/3	A12 North Ahead	U	2	N/A	D		1	17	-	1213	2105:2115	505+337	144.1 : 144.1%
2/2+2/1	Main Road (E) Left Ahead	O	N/A	N/A	-		-	-	-	163	950:1845	43+588	25.9 : 25.9%
3/2+3/1	A12 South Left Ahead	U	3	N/A	F		1	37	-	1533	2070:1910	404+920	115.8 : 115.8%
3/3	A12 South Ahead	U	3	N/A	F		1	37	-	1085	2084	1056	102.8%
4/1	A1214 Main Road (W) Left Ahead	U	1	N/A	A		1	7	-	385	2034	597	64.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	U	1	N/A	A		1	7	-	643	2175:2175	429+404	77.2 : 77.2%
5/1	Park and Ride Exit Left	U	1	N/A	C		1	9	-	24	1995	266	9.0%
5/2	Park and Ride Exit Ahead	U	1	N/A	C		1	9	-	28	2125	283	9.9%
6/1	Park and Ride Entry	U	N/A	N/A	-		-	-	-	13	Inf	Inf	0.0%
7/1	A1214 Main Road Exit	U	N/A	N/A	-		-	-	-	1546	Inf	Inf	0.0%
8/1	Internal 1 Ahead	U	2	N/A	E		1	48	-	253	1993	1302	19.1%
8/2	Internal 1 Right	U	2	N/A	E		1	48	-	236	2137	1396	16.9%
8/3	Internal 1 Right	U	2	N/A	E		1	48	-	329	2127	1390	23.7%
9/1	A12 North Exit	U	N/A	N/A	-		-	-	-	880	Inf	Inf	0.0%
9/2	A12 North Exit	U	N/A	N/A	-		-	-	-	939	Inf	Inf	0.0%

Full Input Data And Results

10/1	Internal 2 Ahead	U	1	N/A	B		1	40	-	10	1932	1056	0.8%
10/2	Internal 2 Right	U	1	N/A	B		1	40	-	474	2066	1129	36.3%
10/3	Internal 2 Right Right2	U	1	N/A	B		1	40	-	1086	2066	1129	93.6%
11/1	Main Road (E) Exit	U	N/A	N/A	-		-	-	-	270	Inf	Inf	0.0%
12/1	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
12/2	Internal 4 Ahead	U	N/A	N/A	-		-	-	-	1173	Inf	Inf	0.0%
12/3	Internal 4 Right	U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
13/1	A12 South Exit	U	N/A	N/A	-		-	-	-	928	Inf	Inf	0.0%
13/2	A12 South Exit	U	N/A	N/A	-		-	-	-	1173	Inf	Inf	0.0%
14/1+14/2	Internal 3 Ahead Right	U	3	N/A	G		1	28	-	498	1800:1800	696+1	50.3 : 71.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**326**	**0**	**0**	**66.1**	**434.2**	**0.0**	**500.4**	**-**	**-**	**-**	**-**
J25 - A12 / Main Road / P&&R	**-**	**-**	**326**	**0**	**0**	**66.1**	**434.2**	**0.0**	**500.4**	**-**	**-**	**-**	**-**
1/1	675	471	-	-	-	13.5	103.5	-	117.0	623.8	19.7	103.5	123.2
1/2+1/3	1213	843	-	-	-	21.1	187.2	-	208.3	618.3	26.6	187.2	213.8
2/2+2/1	163	163	326	0	0	0.0	0.2	-	0.2	4.0	0.1	0.2	0.2
3/2+3/1	1533	1324	-	-	-	15.4	108.0	-	123.4	289.9	35.1	108.0	143.2
3/3	1085	1056	-	-	-	6.8	25.3	-	32.1	106.4	23.2	25.3	48.5
4/1	385	385	-	-	-	2.5	0.9	-	3.4	31.5	7.0	0.9	7.9
4/2+4/3	643	643	-	-	-	4.0	1.7	-	5.7	31.7	7.9	1.7	9.6
5/1	24	24	-	-	-	0.2	0.0	-	0.2	36.0	0.4	0.0	0.5
5/2	28	28	-	-	-	0.2	0.1	-	0.3	35.6	0.5	0.1	0.6
6/1	12	12	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1255	1255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	249	249	-	-	-	0.4	0.1	-	0.5	6.9	2.1	0.1	2.2
8/2	236	236	-	-	-	0.0	0.1	-	0.1	1.7	0.0	0.1	0.1
8/3	329	329	-	-	-	0.0	0.2	-	0.2	1.7	0.0	0.2	0.2
9/1	816	816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	914	914	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	9	9	-	-	-	0.0	0.0	-	0.0	8.8	0.1	0.0	0.1
10/2	410	410	-	-	-	0.1	0.3	-	0.3	3.0	0.2	0.3	0.5
10/3	1057	1057	-	-	-	0.1	6.2	-	6.3	21.5	0.2	6.2	6.4
11/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	950	950	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	729	729	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

13/2	950	950	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1+14/2	351	351	-	-	-	1.9	0.5	-	2.4	24.8	7.2	0.5	7.7

C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%):	-4.0	Total Delay for Signalled Lanes (pcuHr):	16.23	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%):	-60.1	Total Delay for Signalled Lanes (pcuHr):	326.06	Cycle Time (s): 75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%):	-28.6	Total Delay for Signalled Lanes (pcuHr):	157.92	Cycle Time (s): 75
	PRC Over All Lanes (%):	-60.1	Total Delay Over All Lanes(pcuHr):	500.39	

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 2020.07.24_J26_Model_v16_new flows.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J26\Model
Report generation date: 18/12/2020 10:38:45

»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base Year																								
A - A12 North	0.5	2.6	2.35	0.35	A	1.6	2.7	3.92	0.61	A	3.7	11.4	7.64	0.79	A	5.9	29.3	14.63	0.87	B	1.3	1.9	3.49	0.57	A
B - A12 West	0.4	1.5	2.07	0.28	A	2.0	3.9	4.50	0.66	A	2.3	5.0	5.14	0.70	A	7.2	36.7	15.89	0.89	C	2.0	4.0	4.41	0.67	A
C - B1438 East	0.1	0.5	3.55	0.10	A	0.5	1.9	5.89	0.32	A	1.0	3.8	9.54	0.50	A	2.6	14.0	20.46	0.74	C	1.2	2.8	8.17	0.54	A
	2023 Reference Case																								
A - A12 North	0.6	2.7	2.41	0.37	A	20.3	83.8	46.16	0.99	E	23.2	96.8	44.46	1.00	E	44.3	111.9	92.34	1.05	F	26.1	90.3	58.90	1.01	F
B - A12 West	0.4	1.6	2.12	0.30	A	25.2	96.0	50.16	1.00	F	21.2	92.8	41.24	0.99	E	57.3	129.6	102.87	1.06	F	34.2	106.4	65.10	1.03	F
C - B1438 East	0.1	0.5	3.76	0.12	A	4.2	18.4	51.81	0.85	F	5.2	25.5	48.71	0.88	E	15.5	50.2	104.32	1.02	F	12.6	48.0	77.22	0.99	F
	2023 Early Years																								
A - A12 North	0.6	2.7	2.43	0.38	A	94.2	165.2	228.78	1.13	F	81.5	153.9	142.05	1.10	F	62.4	129.8	127.78	1.08	F	39.0	105.8	81.76	1.04	F
B - A12 West	0.5	2.5	2.33	0.35	A	159.9	200.0	352.61	1.20	F	84.0	157.4	142.62	1.10	F	78.5	149.7	141.14	1.10	F	48.6	120.3	88.74	1.05	F
C - B1438 East	0.1	0.5	3.80	0.13	A	12.6	47.6	144.92	1.01	F	12.6	41.9	115.66	1.00	F	19.7	55.6	133.76	1.04	F	16.8	53.9	100.89	1.02	F
	2028 Reference Case																								
A - A12 North	0.6	2.7	2.47	0.39	A	57.2	124.8	117.31	1.07	F	95.4	168.1	164.35	1.11	F	70.4	138.6	139.00	1.09	F	50.6	119.3	102.77	1.06	F
B - A12 West	0.5	1.9	2.16	0.32	A	79.9	152.7	138.17	1.09	F	103.3	178.6	166.27	1.12	F	89.5	162.0	154.62	1.11	F	64.7	137.3	114.86	1.07	F
C - B1438 East	0.1	0.5	3.85	0.13	A	9.2	32.6	107.36	0.97	F	15.1	46.8	129.31	1.02	F	21.1	57.0	143.91	1.05	F	20.1	58.3	122.41	1.04	F
	2028 Peak Construction																								
A - A12 North	0.6	2.7	2.48	0.39	A	103.2	174.5	256.91	1.15	F	114.4	186.8	215.67	1.14	F	98.2	167.6	209.81	1.13	F	50.6	119.6	100.94	1.06	F
B - A12 West	0.7	2.6	2.52	0.41	A	183.1	200.0	409.37	1.23	F	123.5	197.7	223.80	1.14	F	117.8	189.5	235.71	1.15	F	58.2	129.9	106.64	1.07	F
C - B1438 East	0.2	0.5	3.88	0.14	A	13.4	48.7	152.36	1.02	F	17.2	50.0	143.60	1.03	F	23.1	58.2	171.68	1.07	F	19.0	56.4	119.01	1.04	F
	2034 Reference Case																								
A - A12 North	0.7	2.4	2.55	0.42	A	109.4	180.0	281.48	1.16	F	155.6	200.0	362.96	1.20	F	76.0	143.9	158.51	1.09	F	41.5	112.8	79.43	1.04	F
B - A12 West	0.5	2.3	2.24	0.34	A	188.5	200.0	433.24	1.24	F	196.5	200.0	429.95	1.24	F	119.1	193.8	212.24	1.14	F	54.5	131.8	87.79	1.05	F
C - B1438 East	0.1	0.5	3.71	0.09	A	15.7	51.6	168.57	1.04	F	23.9	62.2	210.74	1.08	F	38.4	80.0	198.51	1.12	F	19.6	59.7	107.42	1.03	F
	2034 Operational Led																								
A - A12 North	0.7	2.4	2.55	0.42	A	104.0	173.2	271.81	1.16	F	157.5	200.0	378.78	1.21	F	76.4	144.3	160.12	1.09	F	42.7	114.0	81.51	1.04	F
B - A12 West	0.5	2.3	2.25	0.34	A	191.1	200.0	436.85	1.24	F	194.2	200.0	429.85	1.24	F	120.9	195.7	216.07	1.14	F	56.4	133.7	90.37	1.05	F
C - B1438 East	0.1	0.5	3.71	0.09	A	15.5	50.7	166.20	1.03	F	23.8	62.1	212.07	1.08	F	38.6	80.1	199.10	1.12	F	19.7	59.6	108.79	1.03	F

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

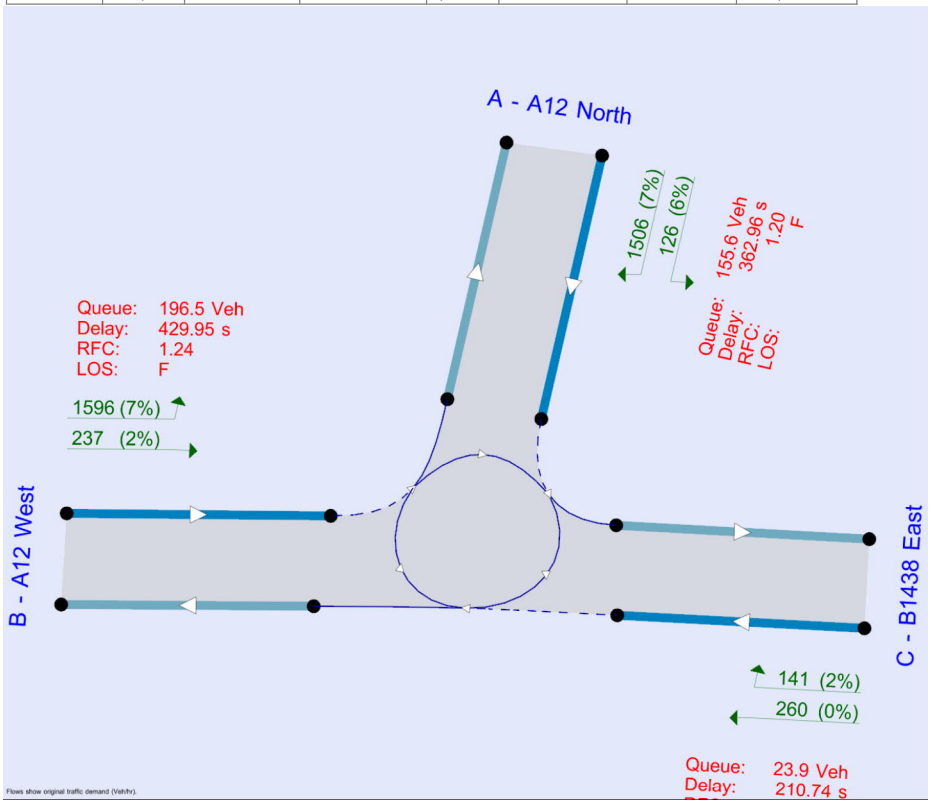
File summary

File Description

Title	A12 / B1438
Location	52° 5'2.99"N, 1°17'16.92"E
Site number	26
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	2.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A12 West	
C	B1438 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	8.10	10.50	4.8	26.8	78.0	29.0	
B - A12 West	6.70	9.60	28.6	21.5	78.0	35.8	
C - B1438 East	2.90	8.30	25.8	20.6	78.0	42.0	

Exit Restrictions

Arm	Exit restriction present	Linked exit restriction present	Maximum capacity (PCU/hr)
A - A12 North	✓		1680
B - A12 West			
C - B1438 East			

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-150
B - A12 West	None		
C - B1438 East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-200

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.641	2627
B - A12 West	0.614	2649
C - B1438 East	0.481	1583

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	760	100.000
B - A12 West		ONE HOUR	✓	600	100.000
C - B1438 East		ONE HOUR	✓	106	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	729	29
	B - A12 West	530	0	70
	C - B1438 East	23	83	0

Vehicle Mix

Heavy Vehicle Percentages

	To			

From		A - A12 North	B - A12 West	C - B1438 East
	A - A12 North	0	9	0
	B - A12 West	10	0	7
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	2.35	0.5	2.6	A	697	1046
B - A12 West	0.28	2.07	0.4	1.5	A	551	826
C - B1438 East	0.10	3.55	0.1	0.5	A	97	146

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	572	143	53	2384	0.240	571	417	0.0	0.3	1.985	A
B - A12 West	452	113	19	2404	0.188	451	610	0.0	0.2	1.842	A
C - B1438 East	80	20	549	1260	0.063	80	74	0.0	0.1	3.050	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	683	171	63	2377	0.287	683	499	0.3	0.4	2.124	A
B - A12 West	539	135	22	2402	0.225	539	730	0.2	0.3	1.932	A
C - B1438 East	95	24	657	1205	0.079	95	89	0.1	0.1	3.243	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	837	209	77	2368	0.353	836	611	0.4	0.5	2.349	A
B - A12 West	661	165	27	2399	0.275	660	893	0.3	0.4	2.070	A
C - B1438 East	117	29	804	1130	0.103	117	109	0.1	0.1	3.552	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	837	209	77	2368	0.353	837	611	0.5	0.5	2.349	A
B - A12 West	661	165	28	2399	0.275	661	894	0.4	0.4	2.070	A
C - B1438 East	117	29	805	1129	0.103	117	109	0.1	0.1	3.553	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	683	171	63	2377	0.287	684	499	0.5	0.4	2.127	A
B - A12 West	539	135	23	2402	0.225	540	731	0.4	0.3	1.933	A
C - B1438 East	95	24	658	1204	0.079	95	89	0.1	0.1	3.245	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	572	143	53	2384	0.240	573	418	0.4	0.3	1.987	A
B - A12 West	452	113	19	2404	0.188	452	612	0.3	0.2	1.846	A
C - B1438 East	80	20	551	1259	0.063	80	75	0.1	0.1	3.052	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A12 West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - B1438 East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A12 West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - B1438 East	0.09	0.03	0.26	0.47	0.50			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.03	0.25	0.54	0.54			N/A	N/A
B - A12 West	0.38	0.03	0.25	0.45	0.48			N/A	N/A
C - B1438 East	0.11	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.03	0.30	1.39	2.55			N/A	N/A
B - A12 West	0.38	0.03	0.33	1.23	1.48			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A12 West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A12 West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - B1438 East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	4.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1327	100.000
B - A12 West		ONE HOUR	✓	1436	100.000
C - B1438 East		ONE HOUR	✓	257	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1207	109
	B - A12 West	1236	1	199
	C - B1438 East	109	147	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	4	4
	B - A12 West	8	0	5
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.61	3.92	1.6	2.7	A	1218	1827
B - A12 West	0.66	4.50	2.0	3.9	A	1318	1977
C - B1438 East	0.32	5.89	0.5	1.9	A	236	354

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	999	250	151	2425	0.412	996	1018	0.0	0.7	2.516	A
B - A12 West	1081	270	91	2406	0.449	1078	1017	0.0	0.8	2.703	A
C - B1438 East	193	48	915	1103	0.175	193	232	0.0	0.2	3.949	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1193	298	180	2406	0.496	1192	1218	0.7	1.0	2.962	A
B - A12 West	1291	323	109	2396	0.539	1290	1217	0.8	1.2	3.250	A
C - B1438 East	231	58	1095	1015	0.228	231	277	0.2	0.3	4.586	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1461	365	221	2380	0.614	1459	1490	1.0	1.6	3.898	A
B - A12 West	1581	395	133	2382	0.664	1578	1489	1.2	1.9	4.461	A
C - B1438 East	283	71	1340	895	0.316	282	340	0.3	0.5	5.871	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1461	365	221	2380	0.614	1461	1493	1.6	1.6	3.919	A
B - A12 West	1581	395	133	2381	0.664	1581	1492	1.9	2.0	4.497	A
C - B1438 East	283	71	1342	894	0.317	283	340	0.5	0.5	5.892	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1193	298	181	2406	0.496	1195	1222	1.6	1.0	2.982	A
B - A12 West	1291	323	109	2395	0.539	1294	1221	2.0	1.2	3.279	A
C - B1438 East	231	58	1098	1014	0.228	232	278	0.5	0.3	4.608	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	999	250	152	2425	0.412	1000	1022	1.0	0.7	2.530	A
B - A12 West	1081	270	91	2406	0.449	1083	1021	1.2	0.8	2.722	A
C - B1438 East	193	48	919	1102	0.176	194	233	0.3	0.2	3.966	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.70	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.81	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.21	0.00	0.00	0.21	0.21			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.06	0.71	1.89	2.69			N/A	N/A
B - A12 West	1.16	0.05	0.56	2.68	3.91			N/A	N/A
C - B1438 East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.57	0.03	0.26	1.57	1.57			N/A	N/A
B - A12 West	1.95	0.03	0.26	1.95	1.95			N/A	N/A
C - B1438 East	0.46	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.03	0.26	1.58	1.58			N/A	N/A
B - A12 West	1.96	0.03	0.26	1.96	1.96			N/A	N/A
C - B1438 East	0.46	0.03	0.32	1.41	1.87			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.51	1.02	1.32	1.32			N/A	N/A
B - A12 West	1.18	0.23	1.12	1.71	1.94			N/A	N/A
C - B1438 East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.70	0.09	0.82	1.38	1.45			N/A	N/A
B - A12 West	0.82	0.07	0.80	1.18	1.66			N/A	N/A
C - B1438 East	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	6.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1616	100.000
B - A12 West		ONE HOUR	✓	1503	100.000
C - B1438 East		ONE HOUR	✓	342	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1401	202
	B - A12 West	1170	2	331
	C - B1438 East	152	190	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	6	4
	B - A12 West	8	0	5
	C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	7.64	3.7	11.4	A	1483	2224
B - A12 West	0.70	5.14	2.3	5.0	A	1379	2069
C - B1438 East	0.50	9.54	1.0	3.8	A	314	471

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1217	304	250	2324	0.524	1212	1002	0.0	1.1	3.228	A
B - A12 West	1132	283	124	2390	0.473	1128	1195	0.0	0.9	2.844	A
C - B1438 East	257	64	1062	995	0.259	256	400	0.0	0.3	4.860	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1453	363	299	2292	0.634	1450	1199	1.1	1.7	4.262	A
B - A12 West	1351	338	148	2375	0.569	1350	1430	0.9	1.3	3.503	A
C - B1438 East	307	77	1271	894	0.344	307	478	0.3	0.5	6.122	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1779	445	366	2250	0.791	1772	1466	1.7	3.6	7.409	A
B - A12 West	1655	414	181	2356	0.702	1651	1746	1.3	2.3	5.076	A
C - B1438 East	377	94	1552	757	0.497	375	585	0.5	1.0	9.373	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1779	445	367	2249	0.791	1779	1470	3.6	3.7	7.642	A
B - A12 West	1655	414	182	2355	0.703	1655	1754	2.3	2.3	5.136	A
C - B1438 East	377	94	1559	754	0.500	376	587	1.0	1.0	9.538	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1453	363	300	2292	0.634	1461	1204	3.7	1.8	4.371	A
B - A12 West	1351	338	149	2375	0.569	1355	1440	2.3	1.3	3.544	A
C - B1438 East	307	77	1280	890	0.346	309	481	1.0	0.5	6.224	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1217	304	251	2323	0.524	1219	1007	1.8	1.1	3.271	A
B - A12 West	1132	283	125	2389	0.474	1133	1202	1.3	0.9	2.871	A
C - B1438 East	257	64	1068	993	0.259	258	402	0.5	0.4	4.907	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.89	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.04	0.43	4.58	7.73			N/A	N/A
B - A12 West	1.31	0.05	0.48	3.23	4.97			N/A	N/A
C - B1438 East	0.52	0.06	0.59	1.32	1.41			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.64	0.03	0.29	3.64	11.41			N/A	N/A
B - A12 West	2.32	0.03	0.27	2.32	2.32			N/A	N/A
C - B1438 East	0.97	0.03	0.26	0.97	0.97			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.71	0.03	0.27	3.71	3.71			N/A	N/A
B - A12 West	2.34	0.03	0.26	2.34	2.34			N/A	N/A
C - B1438 East	0.99	0.03	0.28	1.04	3.83			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.07	1.01	4.09	5.86			N/A	N/A
B - A12 West	1.33	0.14	1.17	2.18	2.81			N/A	N/A
C - B1438 East	0.53	0.06	0.61	1.32	1.41			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.04	0.42	2.77	4.54			N/A	N/A
B - A12 West	0.90	0.06	0.72	1.69	2.24			N/A	N/A
C - B1438 East	0.35	0.03	0.29	0.74	1.12			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	15.96	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1337	100.000
B - A12 West		ONE HOUR	✓	1511	100.000
C - B1438 East		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1187	144
	B - A12 West	1255	1	255
	C - B1438 East	189	243	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	5
	B - A12 West	6	0	1
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	14.63	5.9	29.3	B	1227	1840
B - A12 West	0.89	15.89	7.2	36.7	C	1387	2080
C - B1438 East	0.74	20.46	2.6	14.0	C	396	595

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1007	252	192	2363	0.426	1004	1088	0.0	0.7	2.643	A
B - A12 West	1138	284	146	2423	0.470	1134	1074	0.0	0.9	2.787	A
C - B1438 East	325	81	896	1096	0.297	324	299	0.0	0.4	4.650	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1202	300	230	2340	0.514	1201	1302	0.7	1.0	3.158	A
B - A12 West	1358	340	175	2405	0.565	1357	1285	0.9	1.3	3.423	A
C - B1438 East	388	97	1072	1009	0.385	388	358	0.4	0.6	5.788	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1472	368	280	1887	0.780	1463	1585	1.0	3.4	8.300	A
B - A12 West	1664	416	213	2037	0.817	1652	1565	1.3	4.2	9.080	A
C - B1438 East	476	119	1306	754	0.631	472	436	0.6	1.6	12.561	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1472	368	280	1698	0.867	1462	1585	3.4	5.9	14.627	B
B - A12 West	1664	416	213	1866	0.892	1652	1565	4.2	7.2	15.892	C
C - B1438 East	476	119	1306	643	0.739	472	436	1.6	2.6	20.465	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1202	300	234	2337	0.514	1221	1327	5.9	1.1	3.282	A
B - A12 West	1358	340	179	2403	0.565	1382	1308	7.2	1.3	3.607	A
C - B1438 East	388	97	1090	1000	0.388	396	365	2.6	0.6	6.044	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1007	252	193	2362	0.426	1008	1093	1.1	0.7	2.661	A
B - A12 West	1138	284	147	2422	0.470	1139	1079	1.3	0.9	2.809	A
C - B1438 East	325	81	900	1094	0.297	326	301	0.6	0.4	4.694	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.88	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.42	0.00	0.00	0.42	0.42			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.04	0.39	2.64	4.56			N/A	N/A
B - A12 West	1.29	0.04	0.37	3.30	6.06			N/A	N/A
C - B1438 East	0.62	0.06	0.62	1.36	1.45			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.40	0.03	0.29	3.40	11.64			N/A	N/A
B - A12 West	4.22	0.03	0.30	4.22	18.24			N/A	N/A
C - B1438 East	1.65	0.03	0.28	1.65	3.73			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.86	0.03	0.32	8.44	29.26			N/A	N/A
B - A12 West	7.17	0.03	0.33	11.24	36.74			N/A	N/A
C - B1438 East	2.63	0.03	0.34	5.60	14.04			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.06	0.78	2.06	2.90			N/A	N/A
B - A12 West	1.31	0.06	0.69	2.99	4.47			N/A	N/A
C - B1438 East	0.64	0.06	0.62	1.39	1.48			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.04	0.42	1.62	2.45			N/A	N/A
B - A12 West	0.89	0.04	0.39	2.11	3.58			N/A	N/A
C - B1438 East	0.43	0.04	0.37	1.23	1.40			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	4.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1252	100.000
B - A12 West		ONE HOUR	✓	1487	100.000
C - B1438 East		ONE HOUR	✓	479	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1102	143
	B - A12 West	1260	2	225
	C - B1438 East	191	288	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	3
	B - A12 West	3	0	0
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.57	3.49	1.3	1.9	A	1149	1723
B - A12 West	0.67	4.41	2.0	4.0	A	1364	2047
C - B1438 East	0.54	8.17	1.2	2.8	A	440	659

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	943	236	170	2460	0.383	940	1094	0.0	0.6	2.363	A
B - A12 West	1119	280	148	2495	0.449	1116	1045	0.0	0.8	2.605	A
C - B1438 East	361	90	834	1156	0.312	359	276	0.0	0.4	4.504	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1126	281	204	2439	0.461	1125	1309	0.6	0.9	2.737	A
B - A12 West	1337	334	178	2477	0.540	1335	1250	0.8	1.2	3.148	A
C - B1438 East	431	108	998	1077	0.400	430	331	0.4	0.7	5.555	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1378	345	249	2411	0.572	1377	1602	0.9	1.3	3.475	A
B - A12 West	1637	409	217	2453	0.667	1634	1530	1.2	2.0	4.376	A
C - B1438 East	527	132	1222	969	0.544	525	404	0.7	1.2	8.081	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1378	345	250	2410	0.572	1378	1605	1.3	1.3	3.487	A
B - A12 West	1637	409	218	2453	0.668	1637	1533	2.0	2.0	4.414	A
C - B1438 East	527	132	1223	968	0.545	527	405	1.2	1.2	8.168	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1126	281	205	2439	0.461	1127	1314	1.3	0.9	2.748	A
B - A12 West	1337	334	179	2477	0.540	1340	1254	2.0	1.2	3.175	A
C - B1438 East	431	108	1000	1076	0.400	433	332	1.2	0.7	5.616	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	943	236	171	2460	0.383	944	1099	0.9	0.6	2.376	A
B - A12 West	1119	280	149	2495	0.449	1121	1049	1.2	0.8	2.622	A
C - B1438 East	361	90	837	1155	0.312	361	277	0.7	0.5	4.544	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.62	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.81	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.07	0.76	1.44	1.86			N/A	N/A
B - A12 West	1.16	0.05	0.51	2.72	4.00			N/A	N/A
C - B1438 East	0.66	0.09	0.81	1.37	1.44			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.03	0.26	1.32	1.32			N/A	N/A
B - A12 West	1.98	0.03	0.26	1.98	1.98			N/A	N/A
C - B1438 East	1.17	0.03	0.26	1.17	1.17			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.33	0.03	0.26	1.33	1.33			N/A	N/A
B - A12 West	1.99	0.03	0.26	1.99	1.99			N/A	N/A
C - B1438 East	1.18	0.03	0.27	1.18	2.78			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.54	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.18	0.24	1.12	1.72	1.94			N/A	N/A
C - B1438 East	0.67	0.10	0.84	1.37	1.44			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.62	0.10	0.84	1.37	1.43			N/A	N/A
B - A12 West	0.82	0.07	0.79	1.17	1.66			N/A	N/A
C - B1438 East	0.46	0.04	0.39	1.23	1.36			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	2.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	809	100.000
B - A12 West		ONE HOUR	✓	660	100.000
C - B1438 East		ONE HOUR	✓	119	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	779	28
	B - A12 West	584	0	76
	C - B1438 East	31	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	0
	B - A12 West	8	0	6
	C - B1438 East	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.41	0.6	2.7	A	743	1114
B - A12 West	0.30	2.12	0.4	1.6	A	606	908
C - B1438 East	0.12	3.76	0.1	0.5	A	109	164

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	609	152	57	2400	0.254	608	463	0.0	0.3	2.008	A
B - A12 West	497	124	24	2434	0.204	496	652	0.0	0.3	1.857	A
C - B1438 East	90	22	587	1225	0.073	89	78	0.0	0.1	3.171	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	727	182	69	2393	0.304	727	554	0.3	0.4	2.161	A
B - A12 West	593	148	29	2431	0.244	593	780	0.3	0.3	1.958	A
C - B1438 East	107	27	702	1167	0.092	107	94	0.1	0.1	3.395	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	891	223	84	2383	0.374	890	678	0.4	0.6	2.410	A
B - A12 West	727	182	36	2428	0.299	726	955	0.3	0.4	2.116	A
C - B1438 East	131	33	859	1089	0.121	131	115	0.1	0.1	3.758	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	891	223	84	2383	0.374	891	678	0.6	0.6	2.412	A
B - A12 West	727	182	36	2428	0.299	727	955	0.4	0.4	2.116	A
C - B1438 East	131	33	860	1089	0.121	131	115	0.1	0.1	3.759	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	727	182	69	2393	0.304	728	554	0.6	0.4	2.164	A
B - A12 West	593	148	29	2431	0.244	594	781	0.4	0.3	1.960	A
C - B1438 East	107	27	703	1167	0.092	107	94	0.1	0.1	3.400	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	609	152	57	2400	0.254	610	464	0.4	0.3	2.012	A
B - A12 West	497	124	25	2434	0.204	497	654	0.3	0.3	1.860	A
C - B1438 East	90	22	588	1224	0.073	90	79	0.1	0.1	3.176	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - A12 West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - A12 West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - B1438 East	0.10	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.03	0.25	0.59	0.59			N/A	N/A
B - A12 West	0.43	0.03	0.25	0.45	0.48			N/A	N/A
C - B1438 East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.29	1.24	2.73			N/A	N/A
B - A12 West	0.43	0.03	0.33	1.35	1.56			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - A12 West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - A12 West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	48.59	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1384	100.000
B - A12 West		ONE HOUR	✓	1541	100.000
C - B1438 East		ONE HOUR	✓	277	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1265	108
	B - A12 West	1327	1	213
	C - B1438 East	119	156	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	4
	B - A12 West	8	0	6
	C - B1438 East	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	46.16	20.3	83.8	E	1270	1904
B - A12 West	1.00	50.16	25.2	96.0	F	1414	2121
C - B1438 East	0.85	51.81	4.2	18.4	F	254	381

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1042	260	161	2399	0.434	1039	1093	0.0	0.8	2.640	A
B - A12 West	1160	290	99	2396	0.484	1156	1067	0.0	0.9	2.896	A
C - B1438 East	208	52	958	1067	0.195	207	242	0.0	0.2	4.184	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1244	311	193	2379	0.523	1242	1308	0.8	1.1	3.165	A
B - A12 West	1385	346	118	2385	0.581	1383	1277	0.9	1.4	3.589	A
C - B1438 East	249	62	1147	975	0.255	248	289	0.2	0.3	4.954	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1523	381	230	1616	0.943	1484	1560	1.1	10.9	22.826	C
B - A12 West	1696	424	141	1769	0.959	1649	1525	1.4	13.2	24.208	C
C - B1438 East	304	76	1370	415	0.733	296	345	0.3	2.4	28.502	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1523	381	230	1536	0.992	1486	1560	10.9	20.3	46.156	E
B - A12 West	1696	424	141	1690	1.004	1648	1527	13.2	25.2	50.163	F
C - B1438 East	304	76	1371	360	0.846	298	345	2.4	4.2	51.810	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1244	311	207	2370	0.525	1321	1399	20.3	1.1	3.690	A
B - A12 West	1385	346	125	2380	0.582	1480	1357	25.2	1.4	4.446	A
C - B1438 East	249	62	1219	939	0.265	264	309	4.2	0.4	5.451	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1042	260	162	2399	0.434	1043	1099	1.1	0.8	2.659	A
B - A12 West	1160	290	99	2395	0.484	1162	1072	1.4	0.9	2.921	A
C - B1438 East	208	52	962	1065	0.196	209	243	0.4	0.2	4.207	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.47	0.97	1.40	1.45			N/A	N/A
B - A12 West	0.93	0.42	1.00	1.02	1.02			N/A	N/A
C - B1438 East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.03	0.32	2.07	5.53			N/A	N/A
B - A12 West	1.37	0.03	0.32	2.78	7.09			N/A	N/A
C - B1438 East	0.34	0.03	0.32	1.05	1.28			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.90	0.07	1.61	31.75	50.75			N/A	N/A
B - A12 West	13.17	0.10	3.31	37.59	57.18			N/A	N/A
C - B1438 East	2.45	0.03	0.32	4.17	12.67			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.34	0.14	6.81	56.82	83.77			N/A	N/A
B - A12 West	25.15	0.22	10.91	67.50	96.03			N/A	N/A
C - B1438 East	4.18	0.06	1.09	11.70	18.36			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.04	0.36	2.76	5.29			N/A	N/A
B - A12 West	1.41	0.04	0.35	3.48	7.04			N/A	N/A
C - B1438 East	0.36	0.03	0.33	1.16	1.38			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.03	0.31	1.42	3.77			N/A	N/A
B - A12 West	0.94	0.03	0.30	1.52	4.67			N/A	N/A
C - B1438 East	0.24	0.03	0.29	0.88	1.24			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	43.43	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1630	100.000
B - A12 West		ONE HOUR	✓	1624	100.000
C - B1438 East		ONE HOUR	✓	367	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1429	188
	B - A12 West	1274	2	347
	C - B1438 East	162	206	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	7	5
	B - A12 West	8	0	6
	C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	44.46	23.2	96.8	E	1496	2244
B - A12 West	0.99	41.24	21.2	92.8	E	1490	2235
C - B1438 East	0.88	48.71	5.2	25.5	E	337	506

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1227	307	262	2296	0.535	1223	1087	0.0	1.1	3.341	A
B - A12 West	1222	306	131	2384	0.513	1218	1227	0.0	1.0	3.077	A
C - B1438 East	277	69	1083	982	0.282	275	402	0.0	0.4	5.082	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1466	366	313	2264	0.648	1463	1301	1.1	1.8	4.481	A
B - A12 West	1460	365	157	2368	0.616	1457	1468	1.0	1.6	3.942	A
C - B1438 East	330	83	1296	877	0.377	330	481	0.4	0.6	6.562	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1795	449	376	1889	0.950	1753	1560	1.8	12.3	22.008	C
B - A12 West	1788	447	188	1897	0.943	1749	1760	1.6	11.3	20.569	C
C - B1438 East	405	101	1553	520	0.778	395	577	0.6	3.1	26.892	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1795	449	376	1802	0.996	1751	1560	12.3	23.2	44.464	E
B - A12 West	1788	447	188	1806	0.990	1748	1759	11.3	21.2	41.245	E
C - B1438 East	405	101	1551	461	0.877	396	576	3.1	5.2	48.705	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1466	366	331	2253	0.651	1551	1373	23.2	1.9	5.786	A
B - A12 West	1460	365	166	2363	0.618	1538	1556	21.2	1.6	4.796	A
C - B1438 East	330	83	1374	839	0.394	349	508	5.2	0.7	7.610	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1227	307	263	2295	0.535	1230	1093	1.9	1.2	3.391	A
B - A12 West	1222	306	132	2383	0.513	1225	1235	1.6	1.1	3.115	A
C - B1438 East	277	69	1090	979	0.283	278	404	0.7	0.4	5.143	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.50	1.10	1.52	1.79			N/A	N/A
B - A12 West	1.05	0.51	1.04	1.11	1.56			N/A	N/A
C - B1438 East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.03	0.35	4.34	9.44			N/A	N/A
B - A12 West	1.59	0.03	0.34	3.59	8.21			N/A	N/A
C - B1438 East	0.60	0.04	0.43	1.47	1.58			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.28	0.08	2.00	35.79	56.74			N/A	N/A
B - A12 West	11.33	0.07	1.26	33.20	54.35			N/A	N/A
C - B1438 East	3.07	0.04	0.35	7.10	16.51			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	23.20	0.14	7.55	65.30	96.81			N/A	N/A
B - A12 West	21.22	0.11	5.56	60.99	92.80			N/A	N/A
C - B1438 East	5.25	0.05	0.65	15.06	25.52			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.89	0.04	0.37	4.90	9.55			N/A	N/A
B - A12 West	1.64	0.04	0.37	4.21	8.07			N/A	N/A
C - B1438 East	0.66	0.04	0.40	1.40	2.09			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.03	0.30	1.79	5.76			N/A	N/A
B - A12 West	1.06	0.03	0.31	1.86	5.35			N/A	N/A
C - B1438 East	0.40	0.03	0.31	1.29	1.57			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	98.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1399	100.000
B - A12 West		ONE HOUR	✓	1586	100.000
C - B1438 East		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1231	162
	B - A12 West	1316	1	268
	C - B1438 East	208	261	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	7	4
	B - A12 West	7	0	2
	C - B1438 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	92.34	44.3	111.9	F	1284	1926
B - A12 West	1.06	102.87	57.3	129.6	F	1455	2182
C - B1438 East	1.02	104.32	15.5	50.2	F	430	646

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1053	263	202	2343	0.450	1050	1148	0.0	0.8	2.777	A
B - A12 West	1194	298	160	2401	0.497	1190	1120	0.0	1.0	2.962	A
C - B1438 East	353	88	929	1074	0.329	351	323	0.0	0.5	4.968	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1258	314	242	2319	0.542	1256	1374	0.8	1.2	3.384	A
B - A12 West	1425	356	192	2382	0.598	1423	1340	1.0	1.5	3.748	A
C - B1438 East	422	105	1112	983	0.429	421	387	0.5	0.7	6.389	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1540	385	278	1509	1.021	1451	1579	1.2	23.4	40.858	E
B - A12 West	1746	436	221	1687	1.035	1636	1547	1.5	29.0	43.233	E
C - B1438 East	516	129	1284	536	0.964	484	445	0.7	8.9	52.895	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1540	385	277	1470	1.048	1457	1579	23.4	44.3	92.337	F
B - A12 West	1746	436	224	1641	1.064	1633	1555	29.0	57.3	102.874	F
C - B1438 East	516	129	1289	509	1.015	490	445	8.9	15.5	104.319	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1258	314	279	1687	0.745	1422	1579	44.3	3.1	23.259	C
B - A12 West	1425	356	218	1833	0.778	1639	1518	57.3	3.8	37.773	E
C - B1438 East	422	105	1259	702	0.601	477	442	15.5	1.6	20.042	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1053	263	205	2341	0.450	1062	1163	3.1	0.8	2.833	A
B - A12 West	1194	298	163	2399	0.498	1205	1134	3.8	1.0	3.043	A
C - B1438 East	353	88	940	1069	0.330	357	327	1.6	0.5	5.091	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.13	0.91	1.43	1.49			N/A	N/A
B - A12 West	0.98	0.13	0.98	1.43	1.78			N/A	N/A
C - B1438 East	0.49	0.00	0.00	0.49	0.49			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.03	0.30	1.71	5.77			N/A	N/A
B - A12 West	1.48	0.03	0.31	2.34	7.44			N/A	N/A
C - B1438 East	0.74	0.03	0.34	1.74	3.28			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	23.41	1.10	16.50	51.90	66.89			N/A	N/A
B - A12 West	28.97	2.82	22.29	60.10	75.38			N/A	N/A
C - B1438 East	8.88	0.16	3.96	22.91	32.17			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	44.27	5.41	35.12	89.99	111.86			N/A	N/A
B - A12 West	57.28	11.50	48.73	107.33	129.57			N/A	N/A
C - B1438 East	15.45	0.41	9.06	37.36	50.18			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.09	0.08	1.48	7.76	11.10			N/A	N/A
B - A12 West	3.78	0.08	1.08	9.89	14.45			N/A	N/A
C - B1438 East	1.57	0.05	0.54	3.95	6.09			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.03	0.29	1.08	3.38			N/A	N/A
B - A12 West	1.00	0.03	0.28	1.00	3.81			N/A	N/A
C - B1438 East	0.50	0.03	0.28	0.64	1.88			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	64.49	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1344	100.000
B - A12 West		ONE HOUR	✓	1550	100.000
C - B1438 East		ONE HOUR	✓	522	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1177	160
	B - A12 West	1314	2	234
	C - B1438 East	214	308	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	3	2
	B - A12 West	4	0	2
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	58.90	26.1	90.3	F	1233	1850
B - A12 West	1.03	65.10	34.2	106.4	F	1422	2133
C - B1438 East	0.99	77.22	12.6	48.0	F	479	718

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1012	253	177	2438	0.415	1009	1152	0.0	0.7	2.514	A
B - A12 West	1167	292	165	2462	0.474	1163	1116	0.0	0.9	2.764	A
C - B1438 East	393	98	890	1123	0.350	391	296	0.0	0.5	4.902	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1208	302	212	2416	0.500	1207	1378	0.7	1.0	2.976	A
B - A12 West	1393	348	198	2442	0.571	1392	1335	0.9	1.3	3.421	A
C - B1438 East	469	117	1065	1038	0.452	468	354	0.5	0.8	6.304	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1480	370	250	1527	0.969	1428	1624	1.0	13.9	28.244	D
B - A12 West	1707	427	233	1730	0.987	1641	1577	1.3	17.6	30.037	D
C - B1438 East	575	144	1260	624	0.920	550	418	0.8	7.0	39.768	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1480	370	250	1463	1.011	1431	1624	13.9	26.1	58.904	F
B - A12 West	1707	427	234	1665	1.025	1640	1581	17.6	34.2	65.095	F
C - B1438 East	575	144	1263	582	0.987	552	418	7.0	12.6	77.216	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1208	302	232	2403	0.503	1308	1511	26.1	1.0	3.608	A
B - A12 West	1393	348	218	2430	0.573	1525	1452	34.2	1.4	4.619	A
C - B1438 East	469	117	1155	994	0.472	516	386	12.6	0.9	8.284	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1012	253	178	2437	0.415	1013	1158	1.0	0.7	2.531	A
B - A12 West	1167	292	167	2461	0.474	1169	1121	1.4	0.9	2.789	A
C - B1438 East	393	98	894	1121	0.350	394	297	0.9	0.5	4.961	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.71	0.21	0.93	1.39	1.44			N/A	N/A
B - A12 West	0.90	0.22	0.97	1.17	1.17			N/A	N/A
C - B1438 East	0.53	0.53	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.03	0.30	1.63	4.93			N/A	N/A
B - A12 West	1.32	0.03	0.31	2.31	6.72			N/A	N/A
C - B1438 East	0.81	0.04	0.36	1.92	3.46			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.87	0.13	4.93	38.13	55.64			N/A	N/A
B - A12 West	17.62	0.25	8.60	45.61	63.54			N/A	N/A
C - B1438 East	7.04	0.08	1.50	19.89	30.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	26.07	0.40	14.12	65.91	90.28			N/A	N/A
B - A12 West	34.23	1.31	22.12	80.60	106.37			N/A	N/A
C - B1438 East	12.61	0.16	5.19	33.63	47.98			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.03	0.34	2.40	4.96			N/A	N/A
B - A12 West	1.36	0.03	0.34	3.10	6.93			N/A	N/A
C - B1438 East	0.91	0.03	0.34	2.10	4.27			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.71	0.03	0.30	1.02	3.44			N/A	N/A
B - A12 West	0.91	0.03	0.29	1.01	4.22			N/A	N/A
C - B1438 East	0.54	0.03	0.29	1.15	2.45			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	2.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	823	100.000
B - A12 West		ONE HOUR	✓	758	100.000
C - B1438 East		ONE HOUR	✓	123	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	793	28
	B - A12 West	682	0	76
	C - B1438 East	34	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	0
	B - A12 West	11	0	6
	C - B1438 East	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.43	0.6	2.7	A	755	1133
B - A12 West	0.35	2.33	0.5	2.5	A	696	1044
C - B1438 East	0.13	3.80	0.1	0.5	A	113	170

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	620	155	57	2403	0.258	618	540	0.0	0.3	2.017	A
B - A12 West	571	143	27	2389	0.239	570	662	0.0	0.3	1.978	A
C - B1438 East	93	23	597	1222	0.076	93	79	0.0	0.1	3.188	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	740	185	69	2396	0.309	739	646	0.3	0.4	2.173	A
B - A12 West	682	170	33	2386	0.286	681	792	0.3	0.4	2.112	A
C - B1438 East	111	28	714	1163	0.095	111	94	0.1	0.1	3.419	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	906	227	84	2386	0.380	905	791	0.4	0.6	2.430	A
B - A12 West	835	209	40	2382	0.351	834	970	0.4	0.5	2.327	A
C - B1438 East	136	34	874	1084	0.125	136	115	0.1	0.1	3.797	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	906	227	84	2386	0.380	906	791	0.6	0.6	2.432	A
B - A12 West	835	209	40	2382	0.351	835	971	0.5	0.5	2.327	A
C - B1438 East	136	34	875	1083	0.125	136	115	0.1	0.1	3.798	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	740	185	69	2395	0.309	740	646	0.6	0.4	2.175	A
B - A12 West	682	170	33	2386	0.286	682	793	0.5	0.4	2.115	A
C - B1438 East	111	28	715	1163	0.095	111	94	0.1	0.1	3.422	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	620	155	58	2403	0.258	620	541	0.4	0.3	2.019	A
B - A12 West	571	143	27	2389	0.239	571	664	0.4	0.3	1.980	A
C - B1438 East	93	23	599	1221	0.076	93	79	0.1	0.1	3.191	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - A12 West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B - A12 West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.03	0.25	0.61	0.61			N/A	N/A
B - A12 West	0.54	0.03	0.25	0.54	0.54			N/A	N/A
C - B1438 East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.03	0.29	1.17	2.73			N/A	N/A
B - A12 West	0.54	0.03	0.30	1.39	2.51			N/A	N/A
C - B1438 East	0.14	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B - A12 West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - A12 West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	285.81	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1404	100.000
B - A12 West		ONE HOUR	✓	1714	100.000
C - B1438 East		ONE HOUR	✓	293	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1287	106
	B - A12 West	1500	1	213
	C - B1438 East	135	158	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	4
	B - A12 West	11	0	6
	C - B1438 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.13	228.78	94.2	165.2	F	1289	1933
B - A12 West	1.20	352.61	159.9	200.0	F	1573	2359
C - B1438 East	1.01	144.92	12.6	47.6	F	269	404

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1057	264	161	2396	0.441	1054	1234	0.0	0.8	2.677	A
B - A12 West	1290	323	110	2332	0.553	1285	1085	0.0	1.2	3.424	A
C - B1438 East	221	55	975	1060	0.208	220	241	0.0	0.3	4.280	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1262	316	193	2376	0.531	1261	1476	0.8	1.1	3.225	A
B - A12 West	1541	385	132	2320	0.664	1538	1298	1.2	1.9	4.586	A
C - B1438 East	264	66	1166	966	0.273	263	288	0.3	0.4	5.121	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - A12 North	1546	387	198	1368	1.131	1345	1522	1.1	51.4	79.212	F
B - A12 West	1887	472	145	1590	1.187	1575	1390	1.9	80.0	101.133	F
C - B1438 East	323	81	1244	324	0.996	291	299	0.4	8.4	77.908	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1546	387	197	1377	1.123	1375	1523	51.4	94.2	198.794	F
B - A12 West	1887	472	152	1568	1.203	1567	1425	80.0	159.9	280.238	F
C - B1438 East	323	81	1272	320	1.008	306	300	8.4	12.6	144.916	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1262	316	198	1357	0.931	1342	1522	94.2	74.3	228.778	F
B - A12 West	1541	385	141	1589	0.970	1579	1383	159.9	150.3	352.612	F
C - B1438 East	264	66	1242	308	0.856	282	299	12.6	7.9	133.825	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1057	264	201	1248	0.847	1231	1520	74.3	30.7	156.595	F
B - A12 West	1290	323	117	1614	0.799	1604	1254	150.3	71.9	250.971	F
C - B1438 East	221	55	1139	275	0.802	233	294	7.9	5.0	91.914	F

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.04	0.38	1.84	3.12			N/A	N/A
B - A12 West	1.23	0.03	0.35	2.97	6.04			N/A	N/A
C - B1438 East	0.26	0.03	0.25	0.46	0.48			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.03	0.27	1.13	2.26			N/A	N/A
B - A12 West	1.95	0.03	0.28	1.95	6.34			N/A	N/A
C - B1438 East	0.37	0.03	0.28	0.83	1.57			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	51.43	19.95	47.61	81.57	93.47			N/A	N/A
B - A12 West	79.96	40.55	76.41	115.72	128.87			N/A	N/A
C - B1438 East	8.39	0.37	5.17	19.15	25.26			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	94.24	40.31	88.52	145.53	165.17			N/A	N/A
B - A12 West	159.87	>199	>199	>199	>199			N/A	N/A
C - B1438 East	12.57	0.16	5.22	33.44	47.63			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	74.25	27.52	68.52	119.87	137.93			N/A	N/A
B - A12 West	150.27	>199	>199	>199	>199			N/A	N/A
C - B1438 East	7.95	0.07	1.26	22.88	36.10			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	30.71	15.42	29.07	43.95	48.92			N/A	N/A
B - A12 West	71.91	47.05	70.21	92.76	99.91			N/A	N/A
C - B1438 East	4.99	0.10	1.74	13.06	18.84			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	139.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1634	100.000
B - A12 West		ONE HOUR	✓	1677	100.000
C - B1438 East		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1436	186
	B - A12 West	1328	2	347
	C - B1438 East	155	206	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	8	5
	B - A12 West	13	0	6
	C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.10	142.05	81.5	153.9	F	1500	2249
B - A12 West	1.10	142.62	84.0	157.4	F	1539	2308
C - B1438 East	1.00	115.66	12.6	41.9	F	331	497

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1230	308	262	2278	0.540	1226	1122	0.0	1.2	3.405	A
B - A12 West	1262	316	126	2311	0.546	1258	1233	0.0	1.2	3.402	A
C - B1438 East	272	68	1088	974	0.279	270	400	0.0	0.4	5.105	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1469	367	313	2246	0.654	1466	1342	1.2	1.9	4.601	A
B - A12 West	1507	377	151	2297	0.656	1505	1475	1.2	1.9	4.529	A
C - B1438 East	325	81	1302	868	0.374	324	478	0.4	0.6	6.605	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1799	450	351	1677	1.073	1643	1505	1.9	41.0	56.318	F
B - A12 West	1846	462	172	1718	1.075	1684	1656	1.9	42.4	56.422	F
C - B1438 East	398	99	1458	415	0.959	369	535	0.6	7.7	60.219	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1799	450	350	1642	1.096	1638	1505	41.0	81.5	142.049	F
B - A12 West	1846	462	175	1684	1.097	1680	1657	42.4	84.0	142.615	F
C - B1438 East	398	99	1454	397	1.002	378	534	7.7	12.6	115.658	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1469	367	353	1670	0.880	1650	1504	81.5	36.3	129.902	F
B - A12 West	1507	377	163	1715	0.879	1694	1650	84.0	37.2	130.198	F
C - B1438 East	325	81	1464	389	0.836	349	538	12.6	6.5	95.428	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1230	308	293	2259	0.545	1371	1252	36.3	1.2	4.775	A
B - A12 West	1262	316	138	2304	0.548	1406	1375	37.2	1.2	4.736	A
C - B1438 East	272	68	1217	910	0.299	296	447	6.5	0.4	6.097	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.10	1.03	1.93	2.60			N/A	N/A
B - A12 West	1.19	0.10	1.04	1.97	2.68			N/A	N/A
C - B1438 East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.03	0.32	3.36	9.69			N/A	N/A
B - A12 West	1.88	0.03	0.32	3.33	9.75			N/A	N/A
C - B1438 East	0.59	0.03	0.34	1.31	2.45			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	41.04	9.87	35.71	73.68	87.79			N/A	N/A
B - A12 West	42.37	10.53	37.04	75.51	89.74			N/A	N/A
C - B1438 East	7.72	0.14	3.32	19.93	28.08			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	81.45	29.08	74.86	133.18	153.86			N/A	N/A
B - A12 West	83.98	30.61	77.39	136.48	157.36			N/A	N/A
C - B1438 East	12.56	0.30	6.93	30.85	41.88			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	36.28	23.63	35.19	46.40	49.94			N/A	N/A
B - A12 West	37.24	24.42	36.15	47.50	51.08			N/A	N/A
C - B1438 East	6.54	3.01	5.82	8.87	9.87			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.03	0.28	1.21	3.56			N/A	N/A
B - A12 West	1.22	0.03	0.28	1.22	3.61			N/A	N/A
C - B1438 East	0.43	0.03	0.28	0.65	1.68			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	134.70	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1410	100.000
B - A12 West		ONE HOUR	✓	1586	100.000
C - B1438 East		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1257	147
	B - A12 West	1322	1	263
	C - B1438 East	208	261	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	9	5
	B - A12 West	10	0	2
	C - B1438 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	127.78	62.4	129.8	F	1294	1941
B - A12 West	1.10	141.14	78.5	149.7	F	1455	2183
C - B1438 East	1.04	133.76	19.7	55.6	F	431	646

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1061	265	198	2296	0.462	1058	1153	0.0	0.9	2.899	A
B - A12 West	1194	298	161	2352	0.508	1190	1139	0.0	1.0	3.088	A
C - B1438 East	353	88	948	1053	0.335	351	308	0.0	0.5	5.112	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1268	317	237	2273	0.558	1266	1379	0.9	1.2	3.569	A
B - A12 West	1426	356	192	2333	0.611	1424	1363	1.0	1.6	3.945	A
C - B1438 East	422	105	1135	959	0.440	421	368	0.5	0.8	6.680	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1552	388	265	1470	1.056	1429	1546	1.2	32.0	52.126	F
B - A12 West	1746	437	217	1630	1.071	1594	1539	1.6	39.5	55.734	F
C - B1438 East	517	129	1281	514	1.005	475	413	0.8	11.3	64.186	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1552	388	264	1437	1.080	1431	1546	32.0	62.4	127.777	F
B - A12 West	1746	437	221	1594	1.095	1590	1545	39.5	78.5	141.142	F
C - B1438 East	517	129	1283	495	1.044	483	413	11.3	19.7	133.761	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1268	317	266	1435	0.883	1412	1546	62.4	26.2	115.097	F
B - A12 West	1426	356	211	1621	0.879	1601	1517	78.5	34.7	128.632	F
C - B1438 East	422	105	1266	486	0.869	462	413	19.7	9.6	119.670	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1061	265	221	2282	0.465	1163	1286	26.2	0.9	3.524	A
B - A12 West	1194	298	178	2342	0.510	1329	1254	34.7	1.0	4.075	A
C - B1438 East	353	88	1042	1006	0.351	389	342	9.6	0.5	6.192	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.10	0.89	1.50	1.53			N/A	N/A
B - A12 West	1.02	0.10	0.96	1.67	1.97			N/A	N/A
C - B1438 East	0.50	0.05	0.48	1.29	1.40			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.03	0.30	1.60	5.95			N/A	N/A
B - A12 West	1.55	0.03	0.30	2.22	7.67			N/A	N/A
C - B1438 East	0.78	0.03	0.33	1.77	3.60			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	32.04	5.32	26.49	61.59	75.16			N/A	N/A
B - A12 West	39.48	9.15	34.19	71.42	85.32			N/A	N/A
C - B1438 East	11.27	0.43	6.93	26.25	34.77			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	62.38	16.87	55.29	109.71	129.76			N/A	N/A
B - A12 West	78.45	27.25	71.85	129.27	149.69			N/A	N/A
C - B1438 East	19.69	1.43	13.93	43.26	55.59			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	26.20	17.72	25.36	32.59	34.84			N/A	N/A
B - A12 West	34.70	23.86	33.76	43.12	46.04			N/A	N/A
C - B1438 East	9.59	4.51	8.76	13.29	14.79			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.03	0.28	0.88	2.94			N/A	N/A
B - A12 West	1.05	0.03	0.28	1.05	3.13			N/A	N/A
C - B1438 East	0.55	0.03	0.28	0.55	1.85			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	87.69	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1379	100.000
B - A12 West		ONE HOUR	✓	1548	100.000
C - B1438 East		ONE HOUR	✓	516	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1211	161
	B - A12 West	1333	2	213
	C - B1438 East	214	302	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	2
	B - A12 West	4	0	2
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	81.76	39.0	105.8	F	1265	1898
B - A12 West	1.05	88.74	48.6	120.3	F	1420	2131
C - B1438 East	1.02	100.89	16.8	53.9	F	474	711

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1038	260	162	2388	0.435	1035	1166	0.0	0.8	2.655	A
B - A12 West	1165	291	166	2448	0.476	1162	1136	0.0	0.9	2.791	A
C - B1438 East	389	97	916	1098	0.354	387	281	0.0	0.5	5.044	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	193	2369	0.523	1238	1395	0.8	1.1	3.182	A
B - A12 West	1392	348	198	2428	0.573	1390	1360	0.9	1.3	3.461	A
C - B1438 East	464	116	1095	1008	0.461	463	336	0.5	0.8	6.589	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1518	380	224	1507	1.008	1441	1616	1.1	20.5	37.288	E
B - A12 West	1704	426	229	1671	1.020	1611	1580	1.3	24.7	38.900	E
C - B1438 East	569	142	1274	588	0.967	534	390	0.8	9.4	50.678	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1518	380	224	1460	1.040	1444	1616	20.5	39.0	81.764	F
B - A12 West	1704	426	231	1621	1.051	1609	1585	24.7	48.6	88.742	F
C - B1438 East	569	142	1277	557	1.021	539	391	9.4	16.8	100.891	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	220	2352	0.527	1391	1586	39.0	1.1	4.413	A
B - A12 West	1392	348	226	2412	0.577	1580	1532	48.6	1.4	5.513	A
C - B1438 East	464	116	1230	940	0.494	528	380	16.8	1.0	10.148	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1038	260	162	2388	0.435	1040	1172	1.1	0.8	2.674	A
B - A12 West	1165	291	167	2447	0.476	1167	1143	1.4	0.9	2.816	A
C - B1438 East	389	97	919	1096	0.355	391	282	1.0	0.6	5.115	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.15	0.90	1.40	1.46			N/A	N/A
B - A12 West	0.90	0.14	0.95	1.50	1.51			N/A	N/A
C - B1438 East	0.54	0.54	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.03	0.30	1.57	5.32			N/A	N/A
B - A12 West	1.33	0.03	0.31	1.99	6.63			N/A	N/A
C - B1438 East	0.84	0.03	0.35	1.97	3.80			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.49	0.78	13.00	48.13	63.64			N/A	N/A
B - A12 West	24.68	1.16	17.37	54.86	70.74			N/A	N/A
C - B1438 East	9.38	0.17	4.29	24.16	33.84			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	38.99	3.15	29.22	83.44	105.77			N/A	N/A
B - A12 West	48.56	6.60	39.11	97.30	120.27			N/A	N/A
C - B1438 East	16.83	0.48	10.11	40.35	53.95			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.03	0.32	2.30	5.71			N/A	N/A
B - A12 West	1.38	0.03	0.32	2.77	7.13			N/A	N/A
C - B1438 East	0.99	0.03	0.33	2.22	4.91			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.03	0.29	1.22	3.36			N/A	N/A
B - A12 West	0.91	0.03	0.29	1.17	3.79			N/A	N/A
C - B1438 East	0.55	0.03	0.28	0.71	2.10			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	2.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	837	100.000
B - A12 West		ONE HOUR	✓	698	100.000
C - B1438 East		ONE HOUR	✓	126	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	805	30
	B - A12 West	615	0	83
	C - B1438 East	33	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	0
	B - A12 West	8	0	6
	C - B1438 East	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.47	0.6	2.7	A	768	1152
B - A12 West	0.32	2.16	0.5	1.9	A	641	961
C - B1438 East	0.13	3.85	0.1	0.5	A	115	173

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	630	158	62	2400	0.263	629	489	0.0	0.4	2.030	A
B - A12 West	526	131	26	2439	0.216	525	674	0.0	0.3	1.880	A
C - B1438 East	95	24	606	1215	0.078	94	85	0.0	0.1	3.213	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	753	188	74	2392	0.315	752	585	0.4	0.5	2.195	A
B - A12 West	628	157	32	2436	0.258	627	807	0.3	0.3	1.990	A
C - B1438 East	113	28	725	1156	0.098	113	101	0.1	0.1	3.451	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	922	230	91	2382	0.387	921	716	0.5	0.6	2.463	A
B - A12 West	769	192	39	2432	0.316	768	988	0.3	0.5	2.164	A
C - B1438 East	139	35	888	1075	0.129	138	124	0.1	0.1	3.844	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	922	230	91	2382	0.387	922	716	0.6	0.6	2.465	A
B - A12 West	769	192	39	2432	0.316	769	989	0.5	0.5	2.164	A
C - B1438 East	139	35	889	1075	0.129	139	124	0.1	0.1	3.846	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	753	188	75	2392	0.315	753	585	0.6	0.5	2.198	A
B - A12 West	628	157	32	2436	0.258	628	808	0.5	0.3	1.993	A
C - B1438 East	113	28	726	1155	0.098	113	101	0.1	0.1	3.457	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	630	158	62	2400	0.263	631	490	0.5	0.4	2.036	A
B - A12 West	526	131	27	2439	0.216	526	676	0.3	0.3	1.884	A
C - B1438 East	95	24	608	1214	0.078	95	85	0.1	0.1	3.216	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - A12 West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.03	0.25	0.63	0.63			N/A	N/A
B - A12 West	0.46	0.03	0.25	0.46	0.48			N/A	N/A
C - B1438 East	0.15	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.03	0.29	1.08	2.71			N/A	N/A
B - A12 West	0.46	0.03	0.32	1.41	1.85			N/A	N/A
C - B1438 East	0.15	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - A12 West	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	126.86	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1420	100.000
B - A12 West		ONE HOUR	✓	1647	100.000
C - B1438 East		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1344	64
	B - A12 West	1413	1	233
	C - B1438 East	127	163	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	6
	B - A12 West	8	0	6
	C - B1438 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.07	117.31	57.2	124.8	F	1303	1954
B - A12 West	1.09	138.17	79.9	152.7	F	1511	2267
C - B1438 East	0.97	107.36	9.2	32.6	F	267	400

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	176	2390	0.447	1066	1163	0.0	0.8	2.711	A
B - A12 West	1240	310	104	2401	0.517	1236	1132	0.0	1.1	3.079	A
C - B1438 East	219	55	1018	1038	0.211	218	224	0.0	0.3	4.384	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1276	319	211	2368	0.539	1275	1392	0.8	1.2	3.289	A
B - A12 West	1481	370	125	2389	0.620	1478	1354	1.1	1.6	3.945	A
C - B1438 East	261	65	1218	940	0.278	261	268	0.3	0.4	5.296	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1563	391	237	1491	1.048	1447	1564	1.2	30.1	49.086	E
B - A12 West	1813	453	142	1695	1.070	1659	1539	1.6	40.3	54.658	F
C - B1438 East	320	80	1383	348	0.919	298	301	0.4	5.8	58.023	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1563	391	236	1462	1.069	1455	1565	30.1	57.2	117.307	F
B - A12 West	1813	453	146	1659	1.093	1655	1550	40.3	79.9	138.173	F
C - B1438 East	320	80	1390	329	0.972	307	301	5.8	9.2	107.364	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1276	319	238	1442	0.885	1417	1564	57.2	22.0	103.507	F
B - A12 West	1481	370	133	1690	0.876	1669	1499	79.9	32.9	123.469	F
C - B1438 East	261	65	1354	327	0.800	278	301	9.2	4.9	82.393	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	195	2378	0.449	1154	1285	22.0	0.8	3.154	A
B - A12 West	1240	310	113	2395	0.518	1367	1226	32.9	1.1	3.977	A
C - B1438 East	219	55	1102	997	0.220	237	247	4.9	0.3	4.855	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.10	0.87	1.22	1.22			N/A	N/A
B - A12 West	1.06	0.10	0.98	1.74	2.10			N/A	N/A
C - B1438 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.03	0.30	1.33	5.40			N/A	N/A
B - A12 West	1.61	0.03	0.31	2.35	7.98			N/A	N/A
C - B1438 East	0.38	0.03	0.32	1.27	1.37			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	30.11	4.14	24.25	59.57	73.41			N/A	N/A
B - A12 West	40.27	9.31	34.86	72.89	87.09			N/A	N/A
C - B1438 East	5.80	0.08	1.31	16.11	24.42			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	57.19	13.11	49.54	104.30	124.78			N/A	N/A
B - A12 West	79.91	27.67	73.17	131.82	152.69			N/A	N/A
C - B1438 East	9.17	0.17	4.29	23.42	32.64			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	22.00	14.40	21.18	27.67	29.71			N/A	N/A
B - A12 West	32.92	21.87	31.94	41.61	44.66			N/A	N/A
C - B1438 East	4.91	2.44	4.34	5.98	6.63			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.03	0.28	0.82	2.95			N/A	N/A
B - A12 West	1.08	0.03	0.28	1.08	3.31			N/A	N/A
C - B1438 East	0.28	0.03	0.28	0.58	1.02			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	161.81	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1671	100.000
B - A12 West		ONE HOUR	✓	1784	100.000
C - B1438 East		ONE HOUR	✓	385	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1511	147
	B - A12 West	1408	2	374
	C - B1438 East	160	225	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	7	6
	B - A12 West	8	0	5
	C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.11	164.35	95.4	168.1	F	1534	2300
B - A12 West	1.12	166.27	103.3	178.6	F	1637	2455
C - B1438 East	1.02	129.31	15.1	46.8	F	353	529

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1258	315	282	2285	0.551	1253	1186	0.0	1.2	3.475	A
B - A12 West	1343	336	130	2396	0.561	1338	1303	0.0	1.3	3.386	A
C - B1438 East	290	72	1144	953	0.304	288	391	0.0	0.4	5.396	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1502	376	337	2250	0.668	1499	1419	1.2	2.0	4.778	A
B - A12 West	1604	401	155	2381	0.674	1601	1559	1.3	2.0	4.596	A
C - B1438 East	346	86	1369	843	0.410	345	467	0.4	0.7	7.210	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1840	460	372	1684	1.093	1655	1567	2.0	48.2	63.454	F
B - A12 West	1964	491	175	1792	1.096	1764	1726	2.0	52.0	63.601	F
C - B1438 East	423	106	1512	428	0.989	389	515	0.7	9.3	66.358	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1840	460	370	1654	1.113	1651	1568	48.2	95.4	163.459	F
B - A12 West	1964	491	179	1761	1.115	1759	1728	52.0	103.3	165.353	F
C - B1438 East	423	106	1508	415	1.021	400	514	9.3	15.1	129.308	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1502	376	373	1675	0.897	1658	1567	95.4	56.7	164.350	F
B - A12 West	1604	401	168	1789	0.896	1772	1719	103.3	61.3	166.271	F
C - B1438 East	346	86	1514	404	0.857	374	517	15.1	8.1	112.690	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1258	315	333	2252	0.559	1480	1394	56.7	1.3	6.375	A
B - A12 West	1343	336	145	2387	0.563	1583	1527	61.3	1.3	6.222	A
C - B1438 East	290	72	1351	852	0.340	320	462	8.1	0.5	7.159	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.09	1.01	2.20	2.90			N/A	N/A
B - A12 West	1.26	0.09	1.03	2.38	3.09			N/A	N/A
C - B1438 East	0.43	0.00	0.00	0.43	0.43			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.98	0.03	0.32	3.53	10.28			N/A	N/A
B - A12 West	2.03	0.03	0.32	3.46	10.48			N/A	N/A
C - B1438 East	0.69	0.03	0.34	1.59	2.96			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	48.18	14.87	43.35	81.56	95.34			N/A	N/A
B - A12 West	51.98	17.01	47.15	86.72	100.89			N/A	N/A
C - B1438 East	9.30	0.26	5.15	22.45	30.34			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	95.45	40.35	89.53	147.95	168.09			N/A	N/A
B - A12 West	103.34	45.67	97.45	157.88	178.61			N/A	N/A
C - B1438 East	15.12	0.57	9.48	35.37	46.79			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	56.67	56.05	56.50	56.90	56.95			N/A	N/A
B - A12 West	61.27	60.05	60.50	61.27	61.27			N/A	N/A
C - B1438 East	8.10	3.62	7.31	11.26	12.59			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.03	0.28	1.28	3.28			N/A	N/A
B - A12 West	1.30	0.03	0.28	1.30	3.19			N/A	N/A
C - B1438 East	0.52	0.03	0.28	0.69	1.96			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	146.86	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1457	100.000
B - A12 West		ONE HOUR	✓	1653	100.000
C - B1438 East		ONE HOUR	✓	465	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1348	104
	B - A12 West	1392	1	260
	C - B1438 East	187	278	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	7
	B - A12 West	7	0	2
	C - B1438 East	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	139.00	70.4	138.6	F	1337	2006
B - A12 West	1.11	154.62	89.5	162.0	F	1517	2275
C - B1438 East	1.05	143.91	21.1	57.0	F	427	640

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1097	274	196	2349	0.467	1094	1189	0.0	0.9	2.859	A
B - A12 West	1245	311	144	2413	0.516	1240	1220	0.0	1.1	3.059	A
C - B1438 East	350	88	1017	1031	0.339	348	273	0.0	0.5	5.254	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1310	328	234	2325	0.563	1308	1423	0.9	1.3	3.533	A
B - A12 West	1486	372	173	2395	0.620	1484	1460	1.1	1.6	3.940	A
C - B1438 East	418	104	1216	932	0.448	417	326	0.5	0.8	6.969	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1604	401	260	1502	1.068	1466	1580	1.3	35.9	55.547	F
B - A12 West	1820	455	194	1678	1.085	1646	1636	1.6	45.0	59.997	F
C - B1438 East	512	128	1363	503	1.018	467	363	0.8	12.1	68.455	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1604	401	259	1471	1.091	1467	1580	35.9	70.4	139.002	F
B - A12 West	1820	455	197	1645	1.106	1642	1642	45.0	89.5	154.618	F
C - B1438 East	512	128	1363	486	1.053	476	362	12.1	21.1	143.905	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1310	328	261	1470	0.891	1449	1580	70.4	35.6	132.322	F
B - A12 West	1486	372	190	1669	0.890	1651	1615	89.5	48.4	150.158	F
C - B1438 East	418	104	1347	476	0.879	458	363	21.1	11.1	134.143	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1097	274	226	2330	0.471	1236	1370	35.6	0.9	3.753	A
B - A12 West	1245	311	163	2402	0.518	1434	1378	48.4	1.1	4.578	A
C - B1438 East	350	88	1149	966	0.363	392	313	11.1	0.6	6.747	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.09	0.88	1.19	1.65			N/A	N/A
B - A12 West	1.06	0.09	0.95	1.79	2.30			N/A	N/A
C - B1438 East	0.51	0.05	0.52	1.30	1.40			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.03	0.30	1.49	5.96			N/A	N/A
B - A12 West	1.62	0.03	0.30	2.16	7.86			N/A	N/A
C - B1438 East	0.80	0.03	0.33	1.82	3.75			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	35.92	7.53	30.67	66.19	79.57			N/A	N/A
B - A12 West	45.05	12.73	40.07	77.99	91.85			N/A	N/A
C - B1438 East	12.06	0.65	7.93	27.19	35.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	70.37	22.37	63.71	118.76	138.58			N/A	N/A
B - A12 West	89.53	35.54	83.36	141.70	162.05			N/A	N/A
C - B1438 East	21.06	1.42	15.50	44.91	57.02			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	35.63	35.05	35.50	35.90	35.95			N/A	N/A
B - A12 West	48.40	47.05	47.50	48.40	48.40			N/A	N/A
C - B1438 East	11.07	5.57	10.23	15.08	16.71			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.03	0.28	0.90	2.80			N/A	N/A
B - A12 West	1.08	0.03	0.28	1.08	2.90			N/A	N/A
C - B1438 East	0.57	0.03	0.28	0.57	1.87			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	111.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1443	100.000
B - A12 West		ONE HOUR	✓	1610	100.000
C - B1438 East		ONE HOUR	✓	520	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1270	166
	B - A12 West	1384	2	224
	C - B1438 East	198	322	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	3	2
	B - A12 West	4	0	2
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	102.77	50.6	119.3	F	1324	1986
B - A12 West	1.07	114.86	64.7	137.3	F	1477	2216
C - B1438 East	1.04	122.41	20.1	58.3	F	477	715

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1087	272	170	2444	0.445	1083	1192	0.0	0.8	2.640	A
B - A12 West	1212	303	153	2470	0.491	1208	1196	0.0	1.0	2.845	A
C - B1438 East	391	98	960	1089	0.359	389	293	0.0	0.6	5.127	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1297	324	203	2423	0.535	1296	1426	0.8	1.1	3.189	A
B - A12 West	1447	362	183	2452	0.590	1446	1431	1.0	1.4	3.572	A
C - B1438 East	467	117	1149	997	0.469	466	350	0.6	0.9	6.760	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1589	397	231	1538	1.033	1486	1625	1.1	26.8	44.032	E
B - A12 West	1773	443	209	1693	1.047	1648	1639	1.4	32.7	46.845	E
C - B1438 East	572	143	1318	574	0.997	530	400	0.9	11.4	58.786	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1589	397	231	1504	1.057	1494	1625	26.8	50.6	102.772	F
B - A12 West	1773	443	211	1651	1.073	1645	1650	32.7	64.7	114.859	F
C - B1438 East	572	143	1324	550	1.040	537	401	11.4	20.1	122.413	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1297	324	232	1473	0.881	1449	1625	50.6	12.8	84.986	F
B - A12 West	1447	362	205	1677	0.863	1652	1601	64.7	13.7	89.901	F
C - B1438 East	467	117	1284	562	0.831	522	396	20.1	6.5	91.102	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1087	272	177	2440	0.445	1135	1249	12.8	0.8	2.861	A
B - A12 West	1212	303	163	2464	0.492	1263	1257	13.7	1.0	3.126	A
C - B1438 East	391	98	1006	1067	0.367	415	306	6.5	0.6	5.720	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.11	0.88	1.43	1.50			N/A	N/A
B - A12 West	0.96	0.11	0.95	1.42	1.78			N/A	N/A
C - B1438 East	0.56	0.08	0.77	1.35	1.43			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.03	0.30	1.39	5.39			N/A	N/A
B - A12 West	1.43	0.03	0.30	1.95	6.96			N/A	N/A
C - B1438 East	0.87	0.03	0.34	2.00	4.02			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	26.81	2.34	20.33	56.22	70.82			N/A	N/A
B - A12 West	32.70	4.70	26.51	64.40	79.22			N/A	N/A
C - B1438 East	11.35	0.36	6.70	26.98	36.10			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	50.61	8.66	42.11	97.73	119.28			N/A	N/A
B - A12 West	64.72	16.41	56.87	115.55	137.27			N/A	N/A
C - B1438 East	20.15	1.25	13.92	45.04	58.31			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.81	6.12	11.84	18.04	20.12			N/A	N/A
B - A12 West	13.70	5.35	12.43	20.79	23.67			N/A	N/A
C - B1438 East	6.48	1.53	5.43	10.51	12.32			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.03	0.28	0.95	3.17			N/A	N/A
B - A12 West	0.97	0.03	0.28	0.97	3.53			N/A	N/A
C - B1438 East	0.58	0.03	0.28	0.58	1.98			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	2.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	843	100.000
B - A12 West		ONE HOUR	✓	892	100.000
C - B1438 East		ONE HOUR	✓	132	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	811	30
	B - A12 West	809	0	83
	C - B1438 East	39	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	0
	B - A12 West	9	0	6
	C - B1438 East	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.48	0.6	2.7	A	773	1160
B - A12 West	0.41	2.52	0.7	2.6	A	818	1227
C - B1438 East	0.14	3.88	0.2	0.5	A	121	182

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	635	159	62	2396	0.265	633	638	0.0	0.4	2.040	A
B - A12 West	671	168	31	2416	0.278	670	679	0.0	0.4	2.060	A
C - B1438 East	99	25	611	1215	0.082	99	85	0.0	0.1	3.227	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	758	189	75	2388	0.317	757	764	0.4	0.5	2.207	A
B - A12 West	802	200	37	2412	0.332	801	812	0.4	0.5	2.234	A
C - B1438 East	119	30	730	1155	0.103	119	101	0.1	0.1	3.473	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	928	232	91	2377	0.390	927	935	0.5	0.6	2.481	A
B - A12 West	982	245	45	2407	0.408	981	994	0.5	0.7	2.522	A
C - B1438 East	145	36	894	1073	0.135	145	124	0.1	0.2	3.879	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	928	232	91	2377	0.390	928	936	0.6	0.6	2.483	A
B - A12 West	982	245	45	2407	0.408	982	995	0.7	0.7	2.524	A
C - B1438 East	145	36	895	1073	0.135	145	124	0.2	0.2	3.881	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	758	189	75	2388	0.317	758	765	0.6	0.5	2.211	A
B - A12 West	802	200	37	2412	0.332	802	813	0.7	0.5	2.238	A
C - B1438 East	119	30	731	1154	0.103	119	102	0.2	0.1	3.478	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	635	159	63	2395	0.265	635	640	0.5	0.4	2.046	A
B - A12 West	671	168	31	2416	0.278	672	681	0.5	0.4	2.064	A
C - B1438 East	99	25	612	1214	0.082	99	85	0.1	0.1	3.232	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - A12 West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.03	0.25	0.64	0.64			N/A	N/A
B - A12 West	0.69	0.03	0.25	0.69	0.69			N/A	N/A
C - B1438 East	0.16	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.03	0.29	1.03	2.69			N/A	N/A
B - A12 West	0.69	0.03	0.28	0.71	2.55			N/A	N/A
C - B1438 East	0.16	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.47	0.00	0.00	0.47	0.47			N/A	N/A
B - A12 West	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C - B1438 East	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.00	0.00	0.36	0.36			N/A	N/A
B - A12 West	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	327.72	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1427	100.000
B - A12 West		ONE HOUR	✓	1776	100.000
C - B1438 East		ONE HOUR	✓	296	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1354	62
	B - A12 West	1541	1	234
	C - B1438 East	132	163	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	7
	B - A12 West	11	0	6
	C - B1438 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.15	256.91	103.2	174.5	F	1309	1964
B - A12 West	1.23	409.37	183.1	200.0	F	1629	2444
C - B1438 East	1.02	152.36	13.4	48.7	F	272	407

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1074	269	177	2382	0.451	1071	1263	0.0	0.8	2.737	A
B - A12 West	1337	334	108	2342	0.571	1331	1139	0.0	1.3	3.543	A
C - B1438 East	223	56	1025	1033	0.216	222	222	0.0	0.3	4.431	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1283	321	211	2360	0.543	1281	1511	0.8	1.2	3.331	A
B - A12 West	1596	399	129	2330	0.685	1593	1363	1.3	2.1	4.862	A
C - B1438 East	266	67	1227	935	0.285	266	266	0.3	0.4	5.379	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - A12 North	1571	393	212	1368	1.148	1348	1526	1.2	56.9	85.944	F
B - A12 West	1955	489	141	1609	1.215	1597	1441	2.1	91.6	112.804	F
C - B1438 East	326	81	1291	323	1.010	292	269	0.4	9.0	81.576	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1571	393	211	1387	1.132	1386	1527	56.9	103.2	215.910	F
B - A12 West	1955	489	149	1589	1.230	1589	1486	91.6	183.1	315.503	F
C - B1438 East	326	81	1327	321	1.015	308	270	9.0	13.4	152.361	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1283	321	212	1360	0.943	1347	1526	103.2	87.1	256.910	F
B - A12 West	1596	399	138	1609	0.992	1600	1436	183.1	182.1	409.374	F
C - B1438 East	266	67	1290	308	0.864	285	270	13.4	8.6	144.224	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1074	269	215	1274	0.843	1260	1524	87.1	40.7	185.036	F
B - A12 West	1337	334	116	1633	0.819	1624	1327	182.1	110.4	325.256	F
C - B1438 East	223	56	1206	275	0.810	236	269	8.6	5.3	99.423	F

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.04	0.35	1.92	3.64			N/A	N/A
B - A12 West	1.32	0.03	0.30	1.91	6.51			N/A	N/A
C - B1438 East	0.27	0.03	0.26	0.47	0.50			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.03	0.27	1.18	1.96			N/A	N/A
B - A12 West	2.14	0.03	0.28	2.14	4.95			N/A	N/A
C - B1438 East	0.39	0.03	0.28	0.78	1.63			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	56.86	24.06	53.19	87.67	99.55			N/A	N/A
B - A12 West	91.61	48.81	88.02	130.12	144.09			N/A	N/A
C - B1438 East	8.96	0.53	5.86	19.87	25.86			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	103.18	47.72	97.78	155.03	174.51			N/A	N/A
B - A12 West	183.11	>199	>199	>199	>199			N/A	N/A
C - B1438 East	13.37	0.20	6.23	34.75	48.69			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	87.07	35.01	81.18	137.20	156.69			N/A	N/A
B - A12 West	182.12	>199	>199	>199	>199			N/A	N/A
C - B1438 East	8.63	0.07	1.53	24.80	38.83			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	40.66	19.62	38.47	59.47	66.53			N/A	N/A
B - A12 West	110.36	57.82	105.94	158.06	175.40			N/A	N/A
C - B1438 East	5.30	0.08	1.31	14.57	21.86			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	212.39	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1677	100.000
B - A12 West		ONE HOUR	✓	1762	100.000
C - B1438 East		ONE HOUR	✓	391	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1515	149
	B - A12 West	1386	2	374
	C - B1438 East	165	227	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	8	6
	B - A12 West	12	0	5
	C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.14	215.67	114.4	186.8	F	1539	2309
B - A12 West	1.14	223.80	123.5	197.7	F	1617	2425
C - B1438 East	1.03	143.60	17.2	50.0	F	359	539

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1263	316	282	2266	0.557	1258	1172	0.0	1.2	3.552	A
B - A12 West	1326	332	133	2321	0.571	1321	1307	0.0	1.3	3.580	A
C - B1438 East	295	74	1147	947	0.311	293	392	0.0	0.4	5.485	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1508	377	337	2232	0.676	1505	1402	1.2	2.0	4.930	A
B - A12 West	1584	396	159	2306	0.687	1580	1564	1.3	2.2	4.937	A
C - B1438 East	352	88	1373	836	0.421	351	469	0.4	0.7	7.402	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1847	462	363	1648	1.121	1625	1515	2.0	57.4	74.356	F
B - A12 West	1940	485	177	1722	1.127	1700	1697	2.2	62.0	76.060	F
C - B1438 East	431	108	1483	425	1.013	391	506	0.7	10.7	72.952	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1847	462	361	1621	1.140	1619	1515	57.4	114.4	197.204	F
B - A12 West	1940	485	183	1695	1.144	1694	1699	62.0	123.5	202.917	F
C - B1438 East	431	108	1477	417	1.034	405	504	10.7	17.2	143.603	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1508	377	364	1641	0.919	1627	1514	114.4	84.7	215.668	F
B - A12 West	1584	396	174	1718	0.922	1704	1693	123.5	93.3	223.798	F
C - B1438 East	352	88	1484	405	0.868	383	507	17.2	9.4	129.935	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1263	316	361	2217	0.570	1596	1484	84.7	1.3	11.143	B
B - A12 West	1326	332	151	2311	0.574	1694	1635	93.3	1.4	12.289	B
C - B1438 East	295	74	1456	795	0.371	330	502	9.4	0.6	8.342	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.07	0.95	2.48	3.34			N/A	N/A
B - A12 West	1.32	0.07	0.98	2.69	3.67			N/A	N/A
C - B1438 East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.05	0.03	0.32	3.47	10.55			N/A	N/A
B - A12 West	2.16	0.03	0.32	3.64	11.10			N/A	N/A
C - B1438 East	0.72	0.03	0.33	1.65	3.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	57.41	22.18	53.17	91.30	104.68			N/A	N/A
B - A12 West	61.99	25.27	57.77	96.85	110.38			N/A	N/A
C - B1438 East	10.66	0.49	6.77	24.31	31.93			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	114.38	>199	>199	>199	>199			N/A	N/A
B - A12 West	123.49	>199	>199	>199	>199			N/A	N/A
C - B1438 East	17.19	1.03	11.73	38.52	49.97			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	84.69	84.05	84.50	84.90	84.95			N/A	N/A
B - A12 West	93.34	92.05	92.50	93.34	93.34			N/A	N/A
C - B1438 East	9.40	4.34	8.56	13.07	14.61			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.03	0.27	1.34	2.80			N/A	N/A
B - A12 West	1.37	0.03	0.27	1.37	2.48			N/A	N/A
C - B1438 East	0.60	0.03	0.28	0.84	2.39			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	217.38	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1521	100.000
B - A12 West		ONE HOUR	✓	1644	100.000
C - B1438 East		ONE HOUR	✓	430	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1425	90
	B - A12 West	1442	1	201
	C - B1438 East	151	278	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	8
	B - A12 West	10	0	3
	C - B1438 East	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.13	209.81	98.2	167.6	F	1396	2094
B - A12 West	1.15	235.71	117.8	189.5	F	1509	2263
C - B1438 East	1.07	171.68	23.1	58.2	F	394	591

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1145	286	152	2331	0.491	1142	1199	0.0	1.0	3.016	A
B - A12 West	1238	309	118	2366	0.523	1233	1279	0.0	1.1	3.167	A
C - B1438 East	323	81	1075	989	0.327	321	219	0.0	0.5	5.376	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1368	342	182	2313	0.591	1366	1435	1.0	1.4	3.793	A
B - A12 West	1478	369	141	2352	0.628	1476	1530	1.1	1.7	4.096	A
C - B1438 East	386	97	1286	883	0.437	385	262	0.5	0.8	7.215	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1675	419	194	1501	1.116	1476	1540	1.4	51.1	72.980	F
B - A12 West	1810	453	155	1602	1.130	1580	1658	1.7	59.2	77.632	F
C - B1438 East	473	118	1390	451	1.048	423	281	0.8	13.4	80.429	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1675	419	194	1489	1.125	1487	1540	51.1	98.2	188.359	F
B - A12 West	1810	453	159	1577	1.148	1576	1675	59.2	117.8	208.301	F
C - B1438 East	473	118	1400	442	1.071	434	281	13.4	23.1	171.026	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1368	342	195	1478	0.925	1463	1540	98.2	74.4	209.811	F
B - A12 West	1478	369	153	1595	0.927	1581	1643	117.8	91.9	235.708	F
C - B1438 East	386	97	1377	430	0.897	419	280	23.1	14.8	171.681	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1145	286	197	1786	0.641	1435	1540	74.4	1.8	25.727	D
B - A12 West	1238	309	139	1856	0.667	1597	1592	91.9	2.1	48.432	E
C - B1438 East	323	81	1352	717	0.451	379	280	14.8	0.8	12.532	B

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.07	0.82	1.71	2.20			N/A	N/A
B - A12 West	1.09	0.07	0.84	2.04	2.86			N/A	N/A
C - B1438 East	0.48	0.04	0.42	1.25	1.38			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.03	0.29	1.43	6.41			N/A	N/A
B - A12 West	1.67	0.03	0.30	1.81	7.71			N/A	N/A
C - B1438 East	0.77	0.03	0.32	1.69	3.66			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	51.15	18.51	46.95	82.80	95.43			N/A	N/A
B - A12 West	59.16	24.06	55.11	92.52	105.50			N/A	N/A
C - B1438 East	13.38	1.27	9.75	28.18	35.74			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	98.21	44.55	92.86	148.59	167.60			N/A	N/A
B - A12 West	117.77	>199	>199	>199	>199			N/A	N/A
C - B1438 East	23.08	2.54	18.05	46.76	58.21			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	74.37	73.05	73.50	74.37	74.37			N/A	N/A
B - A12 West	91.90	91.05	91.50	91.90	91.95			N/A	N/A
C - B1438 East	14.79	8.42	13.95	19.52	21.31			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.03	0.32	3.34	9.58			N/A	N/A
B - A12 West	2.09	0.03	0.32	3.55	10.77			N/A	N/A
C - B1438 East	0.84	0.03	0.30	1.05	3.96			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	105.98	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1458	100.000
B - A12 West		ONE HOUR	✓	1566	100.000
C - B1438 East		ONE HOUR	✓	502	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1317	134
	B - A12 West	1379	2	185
	C - B1438 East	180	323	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	3
	B - A12 West	5	0	2
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	100.94	50.6	119.6	F	1338	2006
B - A12 West	1.07	106.64	58.2	129.9	F	1437	2156
C - B1438 East	1.04	119.01	19.0	56.4	F	461	692

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1097	274	141	2406	0.456	1094	1174	0.0	0.8	2.738	A
B - A12 West	1179	295	140	2454	0.480	1175	1232	0.0	0.9	2.807	A
C - B1438 East	378	95	995	1059	0.357	376	239	0.0	0.6	5.254	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1310	328	168	2389	0.549	1309	1405	0.8	1.2	3.330	A
B - A12 West	1408	352	167	2437	0.578	1406	1474	0.9	1.4	3.484	A
C - B1438 East	452	113	1191	962	0.470	450	286	0.6	0.9	7.023	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1605	401	193	1558	1.030	1505	1610	1.2	26.3	43.045	E
B - A12 West	1724	431	191	1662	1.038	1612	1692	1.4	29.5	44.232	E
C - B1438 East	553	138	1369	559	0.990	514	329	0.9	10.7	57.853	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1605	401	192	1518	1.058	1508	1610	26.3	50.6	100.945	F
B - A12 West	1724	431	193	1618	1.066	1609	1698	29.5	58.2	106.644	F
C - B1438 East	553	138	1371	534	1.036	520	329	10.7	19.0	119.008	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1310	328	193	1554	0.843	1486	1610	50.6	6.7	64.982	F
B - A12 West	1408	352	191	1662	0.847	1612	1675	58.2	7.3	72.942	F
C - B1438 East	452	113	1352	604	0.748	514	327	19.0	3.4	54.798	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1097	274	144	2404	0.457	1121	1205	6.7	0.8	2.859	A
B - A12 West	1179	295	145	2451	0.481	1204	1264	7.3	0.9	2.948	A
C - B1438 East	378	95	1020	1047	0.361	389	245	3.4	0.6	5.566	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.12	0.91	1.22	1.22			N/A	N/A
B - A12 West	0.92	0.12	0.94	1.22	1.65			N/A	N/A
C - B1438 East	0.55	0.08	0.76	1.35	1.43			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.03	0.30	1.62	5.82			N/A	N/A
B - A12 West	1.36	0.03	0.30	1.87	6.63			N/A	N/A
C - B1438 East	0.87	0.03	0.35	2.05	3.99			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	26.29	2.06	19.66	55.72	70.47			N/A	N/A
B - A12 West	29.51	3.18	23.00	60.45	75.46			N/A	N/A
C - B1438 East	10.67	0.29	5.99	25.83	34.87			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	50.63	8.53	42.03	97.96	119.62			N/A	N/A
B - A12 West	58.23	12.35	49.93	107.99	129.94			N/A	N/A
C - B1438 East	19.04	1.03	12.81	43.25	56.39			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.69	1.29	5.23	12.24	14.91			N/A	N/A
B - A12 West	7.29	1.21	5.62	13.76	16.91			N/A	N/A
C - B1438 East	3.38	0.20	1.91	7.19	9.46			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.03	0.28	1.00	3.36			N/A	N/A
B - A12 West	0.93	0.03	0.28	0.96	3.57			N/A	N/A
C - B1438 East	0.57	0.03	0.28	0.57	1.92			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	2.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	923	100.000
B - A12 West		ONE HOUR	✓	749	100.000
C - B1438 East		ONE HOUR	✓	84	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	905	15
	B - A12 West	747	0	2
	C - B1438 East	42	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	0
	B - A12 West	8	0	0
	C - B1438 East	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.55	0.7	2.4	A	847	1270
B - A12 West	0.34	2.24	0.5	2.3	A	687	1031
C - B1438 East	0.09	3.71	0.1	0.5	A	77	116

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	695	174	2	2429	0.286	693	594	0.0	0.4	2.071	A
B - A12 West	564	141	33	2437	0.231	563	712	0.0	0.3	1.920	A
C - B1438 East	64	16	682	1229	0.052	63	13	0.0	0.1	3.089	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	830	207	2	2429	0.342	829	710	0.4	0.5	2.250	A
B - A12 West	673	168	39	2433	0.277	673	852	0.3	0.4	2.045	A
C - B1438 East	76	19	815	1159	0.065	76	16	0.1	0.1	3.322	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1016	254	3	2429	0.418	1015	869	0.5	0.7	2.545	A
B - A12 West	825	206	48	2428	0.340	824	1043	0.4	0.5	2.244	A
C - B1438 East	93	23	998	1064	0.087	93	20	0.1	0.1	3.706	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1016	254	3	2429	0.418	1016	870	0.7	0.7	2.547	A
B - A12 West	825	206	48	2428	0.340	825	1044	0.5	0.5	2.245	A
C - B1438 East	93	23	999	1064	0.087	93	20	0.1	0.1	3.708	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	830	207	2	2429	0.342	830	711	0.7	0.5	2.252	A
B - A12 West	673	168	39	2433	0.277	674	853	0.5	0.4	2.048	A
C - B1438 East	76	19	817	1158	0.065	76	16	0.1	0.1	3.327	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	695	174	2	2429	0.286	695	595	0.5	0.4	2.077	A
B - A12 West	564	141	33	2436	0.231	564	714	0.4	0.3	1.922	A
C - B1438 East	64	16	684	1228	0.052	64	13	0.1	0.1	3.092	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A12 West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - B1438 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - B1438 East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.25	0.72	0.72			N/A	N/A
B - A12 West	0.51	0.03	0.25	0.51	0.51			N/A	N/A
C - B1438 East	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.28	0.72	2.37			N/A	N/A
B - A12 West	0.51	0.03	0.31	1.43	2.33			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - B1438 East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A12 West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - B1438 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	349.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1401	100.000
B - A12 West		ONE HOUR	✓	1748	100.000
C - B1438 East		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1390	0
	B - A12 West	1644	1	102
	C - B1438 East	101	208	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	0
	B - A12 West	7	0	0
	C - B1438 East	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.16	281.48	109.4	180.0	F	1285	1928
B - A12 West	1.24	433.24	188.5	200.0	F	1604	2406
C - B1438 East	1.04	168.57	15.7	51.6	F	284	426

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1055	264	78	2455	0.430	1052	1317	0.0	0.7	2.560	A
B - A12 West	1316	329	84	2435	0.541	1311	1200	0.0	1.2	3.191	A
C - B1438 East	233	58	1052	1052	0.222	232	78	0.0	0.3	4.383	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1259	315	94	2289	0.550	1258	1576	0.7	1.2	3.485	A
B - A12 West	1571	393	101	2365	0.664	1568	1435	1.2	2.0	4.499	A
C - B1438 East	279	70	1258	918	0.303	278	93	0.3	0.4	5.618	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - A12 North	1542	386	93	1327	1.162	1309	1576	1.2	59.6	92.050	F
B - A12 West	1925	481	109	1572	1.224	1560	1502	2.0	93.0	116.644	F
C - B1438 East	341	85	1310	329	1.035	302	92	0.4	10.3	87.683	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1542	386	93	1345	1.147	1343	1576	59.6	109.4	234.058	F
B - A12 West	1925	481	115	1555	1.238	1554	1549	93.0	185.6	327.597	F
C - B1438 East	341	85	1344	330	1.034	320	92	10.3	15.7	168.571	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1259	315	93	1331	0.946	1319	1576	109.4	94.5	281.483	F
B - A12 West	1571	393	109	1563	1.006	1560	1512	185.6	188.5	433.236	F
C - B1438 East	279	70	1320	319	0.872	302	92	15.7	9.8	162.857	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1055	264	94	1243	0.848	1230	1575	94.5	50.6	214.376	F
B - A12 West	1316	329	91	1587	0.829	1579	1387	188.5	122.9	355.927	F
C - B1438 East	233	58	1231	280	0.833	247	93	9.8	6.4	113.883	F

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.03	0.31	1.44	3.64			N/A	N/A
B - A12 West	1.17	0.03	0.29	1.19	4.62			N/A	N/A
C - B1438 East	0.28	0.03	0.30	0.89	1.20			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.03	0.27	1.21	1.51			N/A	N/A
B - A12 West	1.95	0.03	0.27	1.95	2.50			N/A	N/A
C - B1438 East	0.43	0.03	0.28	0.50	1.52			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	59.63	26.27	56.06	90.74	102.63			N/A	N/A
B - A12 West	93.04	49.72	89.42	131.99	146.09			N/A	N/A
C - B1438 East	10.29	0.93	7.34	21.69	27.60			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	109.37	53.53	104.28	160.93	180.01			N/A	N/A
B - A12 West	185.64	>199	>199	>199	>199			N/A	N/A
C - B1438 East	15.67	0.38	8.98	38.23	51.58			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	94.53	37.70	88.09	149.51	170.94			N/A	N/A
B - A12 West	188.50	>199	>199	>199	>199			N/A	N/A
C - B1438 East	9.75	0.07	1.52	28.30	44.96			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	50.61	19.62	46.84	80.25	91.95			N/A	N/A
B - A12 West	122.86	>199	>199	>199	>199			N/A	N/A
C - B1438 East	6.39	0.06	0.99	18.51	30.68			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	379.81	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1645	100.000
B - A12 West		ONE HOUR	✓	1835	100.000
C - B1438 East		ONE HOUR	✓	401	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1506	126
	B - A12 West	1596	2	237
	C - B1438 East	141	260	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	7	6
	B - A12 West	7	0	2
	C - B1438 East	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.20	362.96	155.6	200.0	F	1509	2264
B - A12 West	1.24	429.95	196.5	200.0	F	1684	2526
C - B1438 East	1.08	210.74	23.9	62.2	F	368	552

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1238	310	179	2346	0.528	1234	1312	0.0	1.1	3.222	A
B - A12 West	1381	345	115	2420	0.571	1376	1325	0.0	1.3	3.431	A
C - B1438 East	302	75	1141	989	0.305	300	272	0.0	0.4	5.214	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1479	370	214	2325	0.636	1476	1570	1.1	1.7	4.229	A
B - A12 West	1649	412	138	2407	0.685	1646	1586	1.3	2.1	4.711	A
C - B1438 East	360	90	1365	875	0.412	359	326	0.4	0.7	6.975	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - A12 North	1811	453	214	1514	1.196	1499	1574	1.7	79.6	105.003	F
B - A12 West	2020	505	148	1652	1.223	1640	1625	2.1	97.2	115.839	F
C - B1438 East	442	110	1386	410	1.076	386	327	0.7	14.5	91.956	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1811	453	213	1507	1.201	1507	1574	79.6	155.6	286.290	F
B - A12 West	2020	505	154	1634	1.237	1633	1643	97.2	193.9	325.452	F
C - B1438 East	442	110	1393	411	1.075	404	327	14.5	23.9	191.776	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1479	370	214	1519	0.973	1510	1574	155.6	147.8	362.964	F
B - A12 West	1649	412	148	1642	1.004	1639	1635	193.9	196.5	429.954	F
C - B1438 East	360	90	1396	394	0.915	388	328	23.9	17.0	210.738	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1238	310	216	1498	0.827	1488	1573	147.8	85.5	283.644	F
B - A12 West	1381	345	130	1668	0.828	1659	1582	196.5	126.9	351.674	F
C - B1438 East	302	75	1375	355	0.851	336	328	17.0	8.4	146.777	F

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.03	0.31	1.94	5.62			N/A	N/A
B - A12 West	1.32	0.03	0.29	1.32	5.73			N/A	N/A
C - B1438 East	0.44	0.03	0.34	1.35	1.39			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.03	0.27	1.73	3.14			N/A	N/A
B - A12 West	2.14	0.03	0.27	2.14	3.60			N/A	N/A
C - B1438 East	0.69	0.03	0.28	0.77	2.62			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	79.56	40.26	76.00	115.22	128.32			N/A	N/A
B - A12 West	97.16	52.45	93.50	137.37	151.90			N/A	N/A
C - B1438 East	14.54	1.76	11.49	28.46	35.10			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	155.63	>199	>199	>199	>199			N/A	N/A
B - A12 West	193.94	>199	>199	>199	>199			N/A	N/A
C - B1438 East	23.85	2.17	18.20	49.56	62.25			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	147.83	>199	>199	>199	>199			N/A	N/A
B - A12 West	196.46	>199	>199	>199	>199			N/A	N/A
C - B1438 East	17.03	0.26	8.59	43.63	60.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	85.50	42.44	81.56	124.91	139.50			N/A	N/A
B - A12 West	126.95	>199	>199	>199	>199			N/A	N/A
C - B1438 East	8.43	0.06	1.46	24.45	39.54			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	189.54	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1444	100.000
B - A12 West		ONE HOUR	✓	1777	100.000
C - B1438 East		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1357	81
	B - A12 West	1462	1	314
	C - B1438 East	164	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	7	8
	B - A12 West	6	0	0
	C - B1438 East	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	158.51	76.0	143.9	F	1325	1987
B - A12 West	1.14	212.24	119.1	193.8	F	1630	2445
C - B1438 East	1.12	198.51	38.4	80.0	F	540	810

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1087	272	236	2319	0.469	1083	1224	0.0	0.9	2.905	A
B - A12 West	1337	334	127	2438	0.549	1333	1336	0.0	1.2	3.241	A
C - B1438 East	443	111	1023	1047	0.423	440	296	0.0	0.7	5.900	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1298	324	282	2291	0.566	1296	1464	0.9	1.3	3.612	A
B - A12 West	1597	399	152	2423	0.659	1594	1599	1.2	1.9	4.328	A
C - B1438 East	529	132	1224	945	0.560	527	354	0.7	1.2	8.561	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1589	397	305	1460	1.089	1430	1582	1.3	41.3	63.137	F
B - A12 West	1956	489	165	1745	1.121	1722	1757	1.9	60.3	73.124	F
C - B1438 East	648	162	1350	596	1.087	572	384	1.2	20.3	85.012	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1589	397	305	1454	1.093	1451	1582	41.3	76.0	154.111	F
B - A12 West	1956	489	166	1723	1.135	1721	1779	60.3	119.1	193.783	F
C - B1438 East	648	162	1370	579	1.118	575	385	20.3	38.4	198.515	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1298	324	305	1423	0.912	1405	1582	76.0	49.3	158.510	F
B - A12 West	1597	399	167	1734	0.921	1720	1739	119.1	88.5	212.244	F
C - B1438 East	529	132	1327	595	0.889	580	383	38.4	25.6	195.921	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1087	272	299	2281	0.476	1280	1544	49.3	0.9	4.420	A
B - A12 West	1337	334	156	2421	0.553	1686	1595	88.5	1.2	8.690	A
C - B1438 East	443	111	1209	953	0.465	542	370	25.6	0.9	11.227	B

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.08	0.85	1.34	1.75			N/A	N/A
B - A12 West	1.21	0.07	0.93	2.37	3.17			N/A	N/A
C - B1438 East	0.72	0.08	0.81	1.40	1.48			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.03	0.29	1.36	5.90			N/A	N/A
B - A12 West	1.91	0.03	0.31	2.64	9.36			N/A	N/A
C - B1438 East	1.24	0.03	0.34	2.95	6.24			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	41.26	11.40	36.57	71.69	84.54			N/A	N/A
B - A12 West	60.34	23.88	56.05	95.25	108.93			N/A	N/A
C - B1438 East	20.27	3.40	16.73	38.33	46.61			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	75.99	26.90	69.75	124.50	143.92			N/A	N/A
B - A12 West	119.09	>199	>199	>199	>199			N/A	N/A
C - B1438 East	38.40	10.07	33.79	67.54	79.98			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	49.28	48.05	48.50	49.28	49.28			N/A	N/A
B - A12 West	88.45	87.05	87.50	88.45	88.45			N/A	N/A
C - B1438 East	25.62	15.91	24.64	33.27	36.01			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.03	0.27	0.92	2.46			N/A	N/A
B - A12 West	1.25	0.03	0.27	1.25	2.38			N/A	N/A
C - B1438 East	0.88	0.03	0.27	0.88	2.33			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	87.30	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1515	100.000
B - A12 West		ONE HOUR	✓	1756	100.000
C - B1438 East		ONE HOUR	✓	559	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1412	96
	B - A12 West	1437	2	317
	C - B1438 East	122	437	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	1
	B - A12 West	3	0	0
	C - B1438 East	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	79.43	41.5	112.8	F	1390	2085
B - A12 West	1.05	87.79	54.5	131.8	F	1611	2417
C - B1438 East	1.03	107.42	19.6	59.7	F	513	770

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1140	285	240	2416	0.472	1137	1175	0.0	0.9	2.805	A
B - A12 West	1322	331	97	2523	0.524	1318	1388	0.0	1.1	2.977	A
C - B1438 East	421	105	1066	1053	0.400	418	310	0.0	0.7	5.652	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1362	340	287	2387	0.571	1360	1406	0.9	1.3	3.499	A
B - A12 West	1579	395	116	2511	0.629	1576	1661	1.1	1.7	3.843	A
C - B1438 East	503	126	1276	950	0.529	501	371	0.7	1.1	7.980	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1668	417	332	1652	1.009	1585	1630	1.3	22.0	36.356	E
B - A12 West	1934	483	134	1888	1.024	1828	1930	1.7	28.0	38.398	E
C - B1438 East	616	154	1487	626	0.983	577	431	1.1	10.8	53.244	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1668	417	332	1606	1.038	1590	1630	22.0	41.5	79.434	F
B - A12 West	1934	483	135	1839	1.051	1827	1938	28.0	54.5	87.788	F
C - B1438 East	616	154	1492	596	1.032	581	431	10.8	19.6	107.417	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1362	340	325	2363	0.576	1522	1598	41.5	1.4	5.227	A
B - A12 West	1579	395	133	2500	0.631	1790	1870	54.5	1.7	6.970	A
C - B1438 East	503	126	1428	876	0.574	575	420	19.6	1.4	15.118	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1140	285	241	2416	0.472	1142	1182	1.4	0.9	2.830	A
B - A12 West	1322	331	98	2522	0.524	1325	1397	1.7	1.1	3.012	A
C - B1438 East	421	105	1072	1050	0.401	424	312	1.4	0.7	5.773	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.16	0.95	1.38	1.38			N/A	N/A
B - A12 West	1.09	0.14	1.04	1.67	1.93			N/A	N/A
C - B1438 East	0.66	0.17	0.92	1.38	1.44			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.03	0.31	2.11	6.64			N/A	N/A
B - A12 West	1.67	0.03	0.31	2.91	8.63			N/A	N/A
C - B1438 East	1.10	0.04	0.37	2.78	5.02			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	22.02	0.93	14.26	51.29	67.52			N/A	N/A
B - A12 West	27.96	1.79	20.39	60.70	77.49			N/A	N/A
C - B1438 East	10.82	0.25	5.80	26.65	36.31			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	41.48	3.32	31.04	88.92	112.76			N/A	N/A
B - A12 West	54.51	8.34	44.65	107.35	131.84			N/A	N/A
C - B1438 East	19.55	0.85	12.67	45.37	59.68			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.03	0.33	2.90	7.08			N/A	N/A
B - A12 West	1.74	0.03	0.33	3.57	9.12			N/A	N/A
C - B1438 East	1.39	0.03	0.35	3.35	7.03			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.03	0.29	1.24	3.84			N/A	N/A
B - A12 West	1.11	0.03	0.29	1.24	4.53			N/A	N/A
C - B1438 East	0.68	0.03	0.28	0.68	2.34			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	2.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	924	100.000
B - A12 West		ONE HOUR	✓	750	100.000
C - B1438 East		ONE HOUR	✓	84	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	907	15
	B - A12 West	748	0	2
	C - B1438 East	42	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	0
	B - A12 West	8	0	0
	C - B1438 East	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.55	0.7	2.4	A	848	1272
B - A12 West	0.34	2.25	0.5	2.3	A	688	1032
C - B1438 East	0.09	3.71	0.1	0.5	A	77	116

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	696	174	2	2430	0.286	694	595	0.0	0.4	2.072	A
B - A12 West	565	141	33	2437	0.232	563	713	0.0	0.3	1.921	A
C - B1438 East	64	16	682	1228	0.052	63	13	0.0	0.1	3.090	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	831	208	2	2429	0.342	830	711	0.4	0.5	2.251	A
B - A12 West	674	169	39	2433	0.277	674	853	0.3	0.4	2.046	A
C - B1438 East	76	19	816	1159	0.066	76	16	0.1	0.1	3.324	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1017	254	3	2429	0.419	1017	871	0.5	0.7	2.547	A
B - A12 West	826	206	48	2428	0.340	825	1044	0.4	0.5	2.246	A
C - B1438 East	93	23	1000	1063	0.087	93	20	0.1	0.1	3.709	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1017	254	3	2429	0.419	1017	871	0.7	0.7	2.549	A
B - A12 West	826	206	48	2428	0.340	826	1045	0.5	0.5	2.246	A
C - B1438 East	93	23	1000	1063	0.087	93	20	0.1	0.1	3.710	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	831	208	2	2429	0.342	831	712	0.7	0.5	2.255	A
B - A12 West	674	169	39	2433	0.277	675	854	0.5	0.4	2.047	A
C - B1438 East	76	19	818	1158	0.066	76	16	0.1	0.1	3.329	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	696	174	2	2430	0.286	696	596	0.5	0.4	2.078	A
B - A12 West	565	141	33	2437	0.232	565	715	0.4	0.3	1.925	A
C - B1438 East	64	16	684	1227	0.052	64	13	0.1	0.1	3.093	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A12 West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - B1438 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.06	0.60	1.32	1.41			N/A	N/A
B - A12 West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - B1438 East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.25	0.72	0.72			N/A	N/A
B - A12 West	0.51	0.03	0.25	0.51	0.51			N/A	N/A
C - B1438 East	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.28	0.72	2.36			N/A	N/A
B - A12 West	0.51	0.03	0.31	1.43	2.34			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - B1438 East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A12 West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - B1438 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	348.13	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1368	100.000
B - A12 West		ONE HOUR	✓	1757	100.000
C - B1438 East		ONE HOUR	✓	311	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1338	19
	B - A12 West	1644	1	112
	C - B1438 East	101	209	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	15
	B - A12 West	7	0	0
	C - B1438 East	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.16	271.81	104.0	173.2	F	1255	1883
B - A12 West	1.24	436.85	191.1	200.0	F	1613	2419
C - B1438 East	1.03	166.20	15.5	50.7	F	285	427

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1030	257	86	2443	0.422	1027	1317	0.0	0.7	2.537	A
B - A12 West	1323	331	84	2433	0.544	1318	1162	0.0	1.2	3.217	A
C - B1438 East	234	58	1013	1071	0.218	233	99	0.0	0.3	4.289	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1230	307	103	2082	0.591	1227	1574	0.7	1.4	4.195	A
B - A12 West	1580	395	101	2247	0.703	1575	1388	1.2	2.3	5.324	A
C - B1438 East	279	70	1211	851	0.328	278	119	0.3	0.5	6.277	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - A12 North	1506	377	102	1301	1.158	1282	1574	1.4	57.4	91.195	F
B - A12 West	1935	484	110	1578	1.226	1567	1459	2.3	94.3	118.189	F
C - B1438 East	342	85	1265	331	1.033	303	119	0.5	10.2	87.252	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1506	377	102	1321	1.140	1320	1575	57.4	104.0	227.995	F
B - A12 West	1935	484	116	1561	1.239	1561	1507	94.3	187.9	330.227	F
C - B1438 East	342	85	1302	332	1.032	321	119	10.2	15.5	166.199	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1230	307	102	1304	0.943	1291	1574	104.0	88.6	271.811	F
B - A12 West	1580	395	109	1570	1.007	1567	1467	187.9	191.1	436.849	F
C - B1438 East	279	70	1274	320	0.872	302	119	15.5	9.7	160.231	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1030	257	103	1210	0.851	1197	1573	88.6	46.9	206.002	F
B - A12 West	1323	331	91	1594	0.830	1586	1338	191.1	125.4	360.171	F
C - B1438 East	234	58	1181	281	0.832	247	119	9.7	6.3	112.219	F

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.73	0.03	0.30	1.09	3.51			N/A	N/A
B - A12 West	1.18	0.03	0.28	1.18	3.98			N/A	N/A
C - B1438 East	0.28	0.03	0.30	0.91	1.22			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.03	0.27	1.43	3.14			N/A	N/A
B - A12 West	2.32	0.03	0.28	2.32	5.00			N/A	N/A
C - B1438 East	0.48	0.03	0.28	0.71	1.88			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	57.35	24.43	53.70	88.24	100.13			N/A	N/A
B - A12 West	94.33	50.20	90.63	134.04	148.42			N/A	N/A
C - B1438 East	10.22	0.91	7.27	21.56	27.44			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	103.98	49.64	98.87	154.43	173.23			N/A	N/A
B - A12 West	187.87	>199	>199	>199	>199			N/A	N/A
C - B1438 East	15.46	0.39	8.92	37.61	50.69			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	88.65	33.14	81.95	142.94	164.36			N/A	N/A
B - A12 West	191.08	>199	>199	>199	>199			N/A	N/A
C - B1438 East	9.66	0.07	1.55	28.00	44.37			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	46.88	16.01	42.72	77.19	89.47			N/A	N/A
B - A12 West	125.43	>199	>199	>199	>199			N/A	N/A
C - B1438 East	6.32	0.06	1.01	18.29	30.25			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	386.59	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1644	100.000
B - A12 West		ONE HOUR	✓	1814	100.000
C - B1438 East		ONE HOUR	✓	398	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1499	132
	B - A12 West	1592	2	220
	C - B1438 East	142	256	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	7	6
	B - A12 West	7	0	2
	C - B1438 East	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.21	378.78	157.5	200.0	F	1509	2263
B - A12 West	1.24	429.85	194.2	200.0	F	1665	2497
C - B1438 East	1.08	212.07	23.8	62.1	F	365	548

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1238	310	167	2352	0.526	1234	1310	0.0	1.1	3.206	A
B - A12 West	1366	341	116	2415	0.566	1361	1318	0.0	1.3	3.400	A
C - B1438 East	300	75	1136	991	0.302	298	265	0.0	0.4	5.182	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1478	370	200	2332	0.634	1476	1567	1.1	1.7	4.191	A
B - A12 West	1631	408	139	2401	0.679	1628	1577	1.3	2.1	4.636	A
C - B1438 East	358	89	1359	877	0.408	357	317	0.4	0.7	6.910	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - A12 North	1811	453	199	1511	1.198	1497	1571	1.7	80.1	105.836	F
B - A12 West	1998	499	148	1634	1.223	1622	1613	2.1	96.0	115.803	F
C - B1438 East	438	110	1378	407	1.076	383	318	0.7	14.5	92.275	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1811	453	198	1502	1.206	1501	1572	80.1	157.5	291.044	F
B - A12 West	1998	499	155	1615	1.237	1615	1628	96.0	191.7	325.402	F
C - B1438 East	438	110	1382	407	1.076	401	317	14.5	23.8	192.764	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1478	370	199	1496	0.988	1496	1571	157.5	153.2	378.782	F
B - A12 West	1631	408	149	1624	1.004	1621	1613	191.7	194.2	429.855	F
C - B1438 East	358	89	1377	391	0.915	385	317	23.8	17.0	212.070	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1238	310	201	1503	0.824	1494	1571	153.2	89.3	293.490	F
B - A12 West	1366	341	131	1649	0.828	1641	1578	194.2	125.5	351.574	F
C - B1438 East	300	75	1375	352	0.851	334	320	17.0	8.5	148.168	F

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.03	0.31	1.89	5.57			N/A	N/A
B - A12 West	1.29	0.03	0.29	1.29	5.61			N/A	N/A
C - B1438 East	0.43	0.03	0.34	1.34	1.37			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.03	0.27	1.71	2.94			N/A	N/A
B - A12 West	2.09	0.03	0.27	2.09	3.28			N/A	N/A
C - B1438 East	0.68	0.03	0.28	0.72	2.53			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	80.12	40.74	76.58	115.84	128.94			N/A	N/A
B - A12 West	96.03	51.71	92.38	135.87	150.27			N/A	N/A
C - B1438 East	14.48	1.74	11.44	28.33	34.95			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	157.51	>199	>199	>199	>199			N/A	N/A
B - A12 West	191.72	>199	>199	>199	>199			N/A	N/A
C - B1438 East	23.79	2.17	18.15	49.44	62.10			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	153.18	>199	>199	>199	>199			N/A	N/A
B - A12 West	194.21	>199	>199	>199	>199			N/A	N/A
C - B1438 East	17.03	0.26	8.59	43.62	60.40			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	89.30	45.39	85.40	129.26	143.93			N/A	N/A
B - A12 West	125.48	>199	>199	>199	>199			N/A	N/A
C - B1438 East	8.47	0.06	1.45	24.57	39.77			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	192.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1443	100.000
B - A12 West		ONE HOUR	✓	1781	100.000
C - B1438 East		ONE HOUR	✓	590	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1349	88
	B - A12 West	1464	1	316
	C - B1438 East	164	426	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	7	7
	B - A12 West	6	0	0
	C - B1438 East	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	160.12	76.4	144.3	F	1324	1986
B - A12 West	1.14	216.07	120.9	195.7	F	1635	2452
C - B1438 East	1.12	199.10	38.6	80.1	F	541	812

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1086	272	238	2316	0.469	1083	1226	0.0	0.9	2.910	A
B - A12 West	1341	335	127	2439	0.550	1336	1331	0.0	1.2	3.251	A
C - B1438 East	444	111	1017	1050	0.423	441	303	0.0	0.7	5.897	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1297	324	285	2288	0.567	1295	1466	0.9	1.3	3.619	A
B - A12 West	1601	400	152	2423	0.661	1599	1593	1.2	1.9	4.350	A
C - B1438 East	530	133	1217	948	0.559	528	363	0.7	1.2	8.525	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1588	397	307	1457	1.090	1427	1583	1.3	41.6	63.628	F
B - A12 West	1961	490	165	1747	1.123	1724	1748	1.9	61.2	73.946	F
C - B1438 East	649	162	1341	597	1.088	573	393	1.2	20.4	85.283	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1588	397	307	1453	1.093	1449	1583	41.6	76.4	155.184	F
B - A12 West	1961	490	166	1724	1.137	1723	1772	61.2	120.9	196.311	F
C - B1438 East	649	162	1362	581	1.118	576	394	20.4	38.6	199.098	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1297	324	306	1421	0.913	1402	1583	76.4	50.0	160.119	F
B - A12 West	1601	400	167	1736	0.923	1722	1731	120.9	90.9	216.069	F
C - B1438 East	530	133	1318	596	0.889	581	391	38.6	25.8	196.745	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1086	272	302	2277	0.477	1282	1554	50.0	0.9	4.468	A
B - A12 West	1341	335	157	2421	0.554	1700	1592	90.9	1.3	9.141	A
C - B1438 East	444	111	1205	954	0.465	544	380	25.8	0.9	11.272	B

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.08	0.85	1.35	1.77			N/A	N/A
B - A12 West	1.21	0.07	0.93	2.41	3.24			N/A	N/A
C - B1438 East	0.72	0.08	0.80	1.40	1.48			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.03	0.29	1.35	5.90			N/A	N/A
B - A12 West	1.92	0.03	0.31	2.66	9.43			N/A	N/A
C - B1438 East	1.24	0.03	0.34	2.94	6.24			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	41.59	11.65	36.93	72.02	84.83			N/A	N/A
B - A12 West	61.22	24.56	56.95	96.15	109.75			N/A	N/A
C - B1438 East	20.41	3.47	16.87	38.51	46.81			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	76.41	27.24	70.19	124.91	144.31			N/A	N/A
B - A12 West	120.87	>199	>199	>199	>199			N/A	N/A
C - B1438 East	38.59	10.18	33.97	67.72	80.12			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	50.03	49.05	49.50	50.03	50.03			N/A	N/A
B - A12 West	90.86	90.05	90.50	90.90	90.95			N/A	N/A
C - B1438 East	25.85	16.11	24.86	33.52	36.28			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.03	0.27	0.92	2.44			N/A	N/A
B - A12 West	1.26	0.03	0.27	1.26	2.33			N/A	N/A
C - B1438 East	0.89	0.03	0.27	0.89	2.33			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout	A, C, B	89.49	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1515	100.000
B - A12 West		ONE HOUR	✓	1760	100.000
C - B1438 East		ONE HOUR	✓	555	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1412	96
	B - A12 West	1440	2	318
	C - B1438 East	123	433	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	1
	B - A12 West	3	0	0
	C - B1438 East	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	81.51	42.7	114.0	F	1390	2085
B - A12 West	1.05	90.37	56.4	133.7	F	1615	2423
C - B1438 East	1.03	108.79	19.7	59.6	F	510	764

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1140	285	240	2416	0.472	1137	1177	0.0	0.9	2.806	A
B - A12 West	1325	331	97	2523	0.525	1321	1385	0.0	1.1	2.984	A
C - B1438 East	418	105	1066	1053	0.397	415	311	0.0	0.7	5.627	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1362	340	287	2386	0.571	1360	1409	0.9	1.3	3.501	A
B - A12 West	1582	396	116	2511	0.630	1580	1657	1.1	1.7	3.857	A
C - B1438 East	499	125	1276	950	0.525	498	372	0.7	1.1	7.920	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1668	417	333	1647	1.012	1582	1630	1.3	22.6	37.127	E
B - A12 West	1938	484	134	1886	1.027	1829	1923	1.7	28.9	39.317	E
C - B1438 East	611	153	1484	621	0.985	572	431	1.1	10.9	53.918	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1668	417	333	1603	1.040	1587	1630	22.6	42.7	81.511	F
B - A12 West	1938	484	134	1839	1.054	1828	1931	28.9	56.4	90.366	F
C - B1438 East	611	153	1489	592	1.033	576	431	10.9	19.7	108.791	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1362	340	328	2361	0.577	1527	1607	42.7	1.4	5.310	A
B - A12 West	1582	396	133	2500	0.633	1801	1872	56.4	1.7	7.213	A
C - B1438 East	499	125	1432	874	0.572	572	422	19.7	1.4	15.117	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1140	285	242	2415	0.472	1142	1184	1.4	0.9	2.833	A
B - A12 West	1325	331	98	2522	0.525	1328	1394	1.7	1.1	3.022	A
C - B1438 East	418	105	1071	1050	0.398	421	312	1.4	0.7	5.744	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.15	0.95	1.40	1.40			N/A	N/A
B - A12 West	1.10	0.14	1.04	1.69	1.95			N/A	N/A
C - B1438 East	0.65	0.16	0.91	1.38	1.44			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.03	0.31	2.08	6.63			N/A	N/A
B - A12 West	1.68	0.03	0.31	2.91	8.67			N/A	N/A
C - B1438 East	1.09	0.04	0.37	2.73	4.97			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	22.63	1.09	15.01	52.04	68.11			N/A	N/A
B - A12 West	28.90	2.17	21.49	61.79	78.39			N/A	N/A
C - B1438 East	10.91	0.27	5.94	26.77	36.38			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	42.71	3.86	32.49	90.34	113.96			N/A	N/A
B - A12 West	56.40	9.44	46.78	109.41	133.66			N/A	N/A
C - B1438 East	19.68	0.90	12.86	45.41	59.56			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.03	0.33	2.87	7.10			N/A	N/A
B - A12 West	1.75	0.03	0.32	3.54	9.18			N/A	N/A
C - B1438 East	1.37	0.03	0.34	3.30	6.96			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.03	0.29	1.21	3.80			N/A	N/A
B - A12 West	1.11	0.03	0.29	1.20	4.48			N/A	N/A
C - B1438 East	0.67	0.03	0.28	0.67	2.28			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 2020.07.23_J27_Model_CV_Adjusted v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J27\Model
Report generation date: 18/12/2020 10:43:36

»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base Year																								
A - A12 North	0.5	1.7	1.96	0.31	A	2.1	4.5	4.39	0.68	A	6.6	33.7	12.87	0.88	B	2.1	4.1	4.66	0.68	A	1.4	2.1	3.37	0.59	A
B - Grundisburgh Rd West	0.1	0.5	3.14	0.06	A	0.4	1.1	6.51	0.28	A	3.2	16.0	24.80	0.78	C	1.4	5.3	13.23	0.58	B	0.7	3.3	8.30	0.41	A
C - A12 South	0.3	1.4	2.17	0.26	A	2.2	4.0	5.71	0.69	A	4.7	21.4	11.24	0.83	B	3.8	13.4	8.68	0.79	A	2.8	5.8	6.48	0.74	A
D - B1079 East	0.1	0.5	3.42	0.06	A	0.4	1.5	7.51	0.28	A	3.3	17.4	31.66	0.78	D	1.0	4.3	9.99	0.51	A	0.5	2.5	6.45	0.36	A
	2023 Reference Case																								
A - A12 North	0.5	2.1	2.01	0.33	A	2.5	5.4	4.94	0.71	A	8.6	43.1	16.61	0.90	C	2.4	5.1	5.31	0.71	A	1.7	3.2	3.87	0.64	A
B - Grundisburgh Rd West	0.1	0.5	3.25	0.07	A	0.5	1.8	7.47	0.31	A	5.0	26.9	39.23	0.85	E	2.0	8.7	18.60	0.67	C	0.9	3.9	9.90	0.46	A
C - A12 South	0.4	1.3	2.22	0.29	A	2.9	6.0	7.07	0.75	A	8.4	42.9	19.03	0.90	C	5.4	26.4	11.94	0.85	B	3.8	12.8	8.23	0.79	A
D - B1079 East	0.1	0.5	3.44	0.07	A	0.5	1.7	8.55	0.32	A	5.4	28.3	50.47	0.87	F	1.5	5.5	12.78	0.60	B	0.7	3.3	7.66	0.41	A
	2023 Early Years																								
A - A12 North	0.5	2.2	2.03	0.34	A	2.6	5.8	5.15	0.73	A	8.6	42.7	16.48	0.90	C	2.8	5.8	5.89	0.74	A	2.1	4.4	4.44	0.68	A
B - Grundisburgh Rd West	0.1	0.5	3.48	0.07	A	0.7	3.4	11.17	0.42	B	11.3	45.7	84.57	0.97	F	2.6	12.7	23.72	0.74	C	0.8	3.8	9.71	0.44	A
C - A12 South	0.5	2.4	2.46	0.34	A	6.6	34.4	14.60	0.88	B	17.1	84.7	37.60	0.96	E	6.4	33.2	14.29	0.87	B	4.3	17.2	9.20	0.81	A
D - B1079 East	0.1	0.5	3.47	0.08	A	0.5	2.2	9.16	0.35	A	5.8	30.0	53.72	0.88	F	1.5	6.1	13.96	0.61	B	0.8	3.8	8.78	0.45	A
	2028 Reference Case																								
A - A12 North	0.5	2.3	2.05	0.34	A	2.8	6.1	5.41	0.74	A	9.9	52.5	18.93	0.92	C	3.2	6.7	6.54	0.76	A	2.1	4.4	4.48	0.68	A
B - Grundisburgh Rd West	0.1	0.5	3.31	0.07	A	0.5	2.3	8.49	0.35	A	11.8	47.7	83.77	0.98	F	3.6	19.4	30.75	0.80	D	1.3	5.2	12.75	0.57	B
C - A12 South	0.4	1.6	2.27	0.30	A	3.9	14.4	8.91	0.80	A	21.6	96.2	44.10	0.98	E	7.5	38.2	16.15	0.89	C	4.8	21.4	10.15	0.83	B
D - B1079 East	0.1	0.5	3.54	0.08	A	0.6	2.5	9.54	0.36	A	8.9	39.4	76.02	0.94	F	1.7	7.0	15.59	0.64	C	1.0	4.1	9.70	0.49	A
	2028 Peak Construction																								
A - A12 North	0.5	2.4	2.06	0.34	A	2.8	6.3	5.49	0.74	A	10.4	56.3	19.71	0.92	C	4.0	13.3	7.91	0.80	A	2.4	5.2	5.01	0.71	A
B - Grundisburgh Rd West	0.1	0.5	3.77	0.09	A	0.8	3.8	11.81	0.44	B	27.9	65.5	172.62	1.09	F	4.7	25.6	40.45	0.85	E	1.3	5.3	12.87	0.58	B
C - A12 South	0.7	2.6	2.68	0.40	A	7.9	40.3	17.13	0.90	C	31.0	108.2	60.93	1.00	F	10.4	57.6	22.73	0.92	C	4.7	20.9	10.13	0.83	B
D - B1079 East	0.1	0.5	3.55	0.08	A	0.6	2.6	9.75	0.37	A	10.1	41.9	85.12	0.96	F	2.4	11.3	21.90	0.71	C	1.1	4.5	10.73	0.52	B
	2034 Reference Case																								
A - A12 North	0.6	2.8	2.27	0.39	A	2.9	6.2	6.02	0.75	A	13.3	73.1	25.97	0.94	D	3.9	12.9	8.00	0.80	A	3.5	7.7	6.54	0.78	A
B - Grundisburgh Rd West	0.1	0.5	3.60	0.09	A	1.0	5.0	14.29	0.52	B	106.0	156.3	658.54	1.33	F	9.4	43.4	66.90	0.94	F	1.8	6.7	14.88	0.65	B
C - A12 South	0.6	2.7	2.51	0.37	A	9.7	52.4	20.31	0.92	C	111.6	188.3	175.92	1.11	F	14.3	76.2	30.43	0.95	D	5.4	26.5	11.77	0.85	B
D - B1079 East	0.1	0.5	3.78	0.10	A	0.7	3.5	9.83	0.42	A	17.5	54.9	116.29	1.02	F	2.6	12.3	21.87	0.73	C	1.4	5.9	13.92	0.58	B
	2034 Operational Led																								
A - A12 North	0.6	2.8	2.28	0.39	A	2.9	6.2	5.94	0.75	A	13.2	72.5	25.86	0.94	D	4.0	13.0	8.03	0.80	A	3.5	7.8	6.55	0.78	A
B - Grundisburgh Rd West	0.1	0.5	3.60	0.09	A	1.0	5.0	14.07	0.51	B	120.8	173.6	747.69	1.38	F	9.8	44.4	68.96	0.95	F	1.9	7.0	15.27	0.66	C
C - A12 South	0.6	2.7	2.52	0.37	A	9.8	53.2	20.54	0.92	C	111.9	188.6	176.66	1.11	F	14.5	77.1	30.96	0.95	D	5.5	27.2	11.95	0.85	B
D - B1079 East	0.1	0.5	3.78	0.10	A	0.7	3.5	9.83	0.42	A	16.5	54.0	111.09	1.02	F	2.6	12.4	22.01	0.73	C	1.4	5.9	13.95	0.58	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

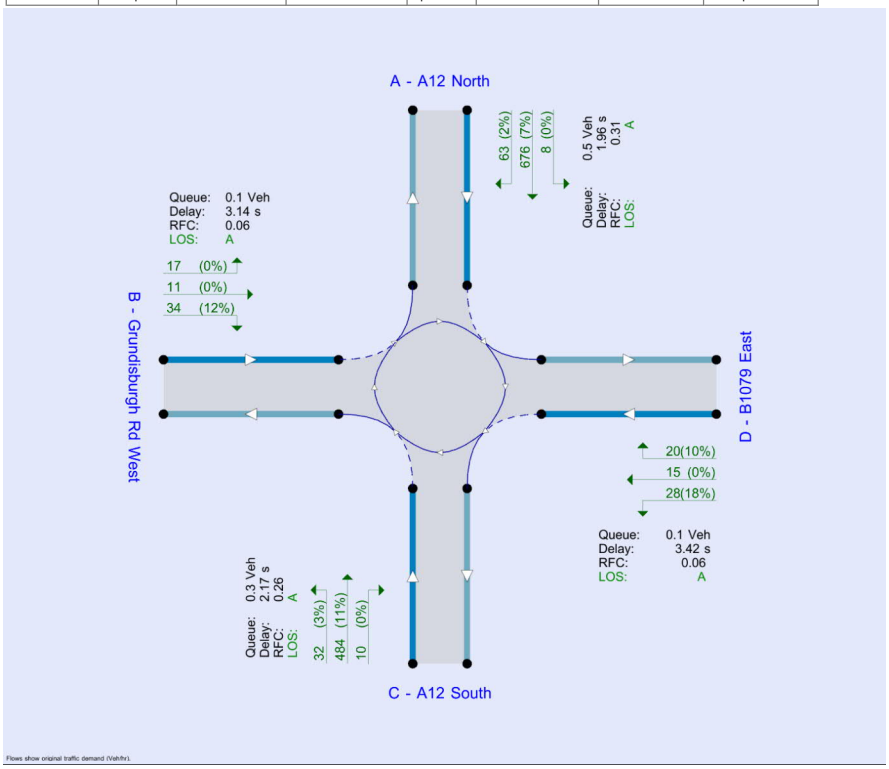
File summary

File Description

Title	A12 / B1079 Grundisburgh Road
Location	52° 5'45.80"N, 1°17'54.03"E
Site number	27
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	2.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Grundisburgh Rd West	
C	A12 South	
D	B1079 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.40	7.40	0.0	32.9	55.1	9.0	
B - Grundisburgh Rd West	2.70	6.10	12.0	22.1	55.1	13.5	
C - A12 South	6.70	7.80	5.2	25.1	55.1	3.5	
D - B1079 East	2.60	7.10	11.6	26.6	55.1	6.5	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct		425
B - Grundisburgh Rd West	Direct		200
C - A12 South	Direct		100
D - B1079 East	Direct		250

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.745	2874
B - Grundisburgh Rd West	0.554	1642
C - A12 South	0.749	2556
D - B1079 East	0.578	1775

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	752	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	528	100.000
D - B1079 East		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	63	676	8
	B - Grundisburgh Rd West	17	0	34	11
	C - A12 South	484	32	2	10
	D - B1079 East	20	15	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	7	0
	B - Grundisburgh Rd West	0	0	12	0
	C - A12 South	11	3	0	0
	D - B1079 East	10	0	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.31	1.96	0.5	1.7	A	690	1035
B - Grundisburgh Rd West	0.06	3.14	0.1	0.5	A	57	85
C - A12 South	0.26	2.17	0.3	1.4	A	485	727
D - B1079 East	0.06	3.42	0.1	0.5	A	58	87

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	566	142	43	2679	0.211	565	395	0.0	0.3	1.702	A
B - Grundisburgh Rd West	47	12	391	1318	0.035	47	83	0.0	0.0	2.832	A
C - A12 South	398	99	77	2265	0.176	397	556	0.0	0.2	1.925	A
D - B1079 East	47	12	586	1274	0.037	47	22	0.0	0.0	2.934	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	676	169	51	2673	0.253	676	473	0.3	0.3	1.802	A
B - Grundisburgh Rd West	56	14	468	1273	0.044	56	99	0.0	0.0	2.955	A
C - A12 South	475	119	93	2254	0.211	474	665	0.2	0.3	2.022	A
D - B1079 East	57	14	701	1210	0.047	57	26	0.0	0.0	3.119	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	828	207	63	2664	0.311	828	579	0.3	0.4	1.960	A
B - Grundisburgh Rd West	68	17	573	1213	0.056	68	121	0.0	0.1	3.144	A
C - A12 South	581	145	113	2240	0.260	581	814	0.3	0.3	2.170	A
D - B1079 East	69	17	858	1123	0.062	69	32	0.0	0.1	3.414	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	828	207	63	2664	0.311	828	579	0.4	0.5	1.960	A
B - Grundisburgh Rd West	68	17	574	1213	0.056	68	121	0.1	0.1	3.145	A
C - A12 South	581	145	113	2240	0.260	581	815	0.3	0.3	2.170	A
D - B1079 East	69	17	859	1123	0.062	69	32	0.1	0.1	3.415	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	676	169	51	2673	0.253	676	473	0.5	0.3	1.805	A
B - Grundisburgh Rd West	56	14	469	1273	0.044	56	99	0.1	0.0	2.959	A
C - A12 South	475	119	93	2254	0.211	475	666	0.3	0.3	2.023	A
D - B1079 East	57	14	702	1210	0.047	57	26	0.1	0.0	3.123	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	566	142	43	2679	0.211	566	396	0.3	0.3	1.706	A
B - Grundisburgh Rd West	47	12	392	1317	0.035	47	83	0.0	0.0	2.833	A
C - A12 South	398	99	78	2265	0.176	398	557	0.3	0.2	1.929	A
D - B1079 East	47	12	588	1273	0.037	47	22	0.0	0.0	2.939	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B - Grundisburgh Rd West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D - B1079 East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Grundisburgh Rd West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - B1079 East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.45	0.03	0.25	0.45	0.48			N/A	N/A
B - Grundisburgh Rd West	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	0.35	0.03	0.25	0.45	0.48			N/A	N/A
D - B1079 East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.45	0.03	0.33	1.40	1.73			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A

C - A12 South	0.35	0.03	0.33	1.15	1.38			N/A	N/A
D - B1079 East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Grundisburgh Rd West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B - Grundisburgh Rd West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D - B1079 East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	5.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1594	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	191	100.000
C - A12 South		ONE HOUR	✓	1258	100.000
D - B1079 East		ONE HOUR	✓	167	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	285	1261	41
	B - Grundisburgh Rd West	35	0	96	60
	C - A12 South	1113	76	2	67
	D - B1079 East	74	53	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	4	0
	B - Grundisburgh Rd West	6	0	6	3
	C - A12 South	10	4	0	0
	D - B1079 East	1	0	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.39	2.1	4.5	A	1463	2194
B - Grundisburgh Rd West	0.28	6.51	0.4	1.1	A	175	263
C - A12 South	0.69	5.71	2.2	4.0	A	1154	1732
D - B1079 East	0.28	7.51	0.4	1.5	A	153	230

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1200	300	169	2634	0.456	1197	922	0.0	0.8	2.499	A
B - Grundisburgh Rd West	144	36	948	1017	0.141	143	311	0.0	0.2	4.117	A
C - A12 South	947	237	314	2120	0.447	944	1050	0.0	0.8	3.055	A
D - B1079 East	126	31	1239	1004	0.125	125	126	0.0	0.1	4.094	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1433	358	202	2610	0.549	1431	1103	0.8	1.2	3.051	A
B - Grundisburgh Rd West	172	43	1134	910	0.189	171	372	0.2	0.2	4.872	A
C - A12 South	1131	283	376	2076	0.545	1129	1256	0.8	1.2	3.796	A
D - B1079 East	150	38	1483	861	0.174	150	151	0.1	0.2	5.065	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1755	439	247	2576	0.681	1751	1349	1.2	2.1	4.345	A
B - Grundisburgh Rd West	210	53	1387	765	0.275	210	455	0.2	0.4	6.474	A
C - A12 South	1385	346	460	2017	0.687	1381	1537	1.2	2.2	5.631	A
D - B1079 East	184	46	1814	665	0.276	183	184	0.2	0.4	7.454	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1755	439	248	2576	0.681	1755	1353	2.1	2.1	4.385	A
B - Grundisburgh Rd West	210	53	1390	763	0.276	210	456	0.4	0.4	6.512	A
C - A12 South	1385	346	461	2016	0.687	1385	1540	2.2	2.2	5.705	A
D - B1079 East	184	46	1818	663	0.277	184	185	0.4	0.4	7.509	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1433	358	203	2609	0.549	1437	1109	2.1	1.2	3.079	A
B - Grundisburgh Rd West	172	43	1139	907	0.189	172	373	0.4	0.2	4.904	A
C - A12 South	1131	283	378	2075	0.545	1135	1261	2.2	1.2	3.846	A
D - B1079 East	150	38	1488	857	0.175	151	152	0.4	0.2	5.098	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1200	300	170	2634	0.456	1202	927	1.2	0.8	2.518	A
B - Grundisburgh Rd West	144	36	952	1014	0.142	144	312	0.2	0.2	4.139	A
C - A12 South	947	237	316	2119	0.447	949	1055	1.2	0.8	3.080	A
D - B1079 East	126	31	1245	1001	0.126	126	127	0.2	0.1	4.116	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A12 South	0.80	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.05	0.48	2.90	4.49			N/A	N/A
B - Grundisburgh Rd West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.19	0.05	0.56	2.75	4.02			N/A	N/A
D - B1079 East	0.21	0.00	0.00	0.21	0.21			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.11	0.03	0.26	2.11	2.11			N/A	N/A
B - Grundisburgh Rd West	0.38	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	2.15	0.03	0.27	2.15	2.15			N/A	N/A
D - B1079 East	0.38	0.03	0.26	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.03	0.26	2.12	2.12			N/A	N/A
B - Grundisburgh Rd West	0.38	0.03	0.33	1.07	1.07			N/A	N/A
C - A12 South	2.17	0.03	0.26	2.17	2.17			N/A	N/A
D - B1079 East	0.38	0.03	0.33	1.24	1.49			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.21	1.15	1.80	2.09			N/A	N/A
B - Grundisburgh Rd West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.21	0.13	1.10	1.90	2.49			N/A	N/A
D - B1079 East	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.07	0.79	1.33	1.77			N/A	N/A
B - Grundisburgh Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.81	0.06	0.65	1.47	1.91			N/A	N/A
D - B1079 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	15.19	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1756	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	446	100.000
C - A12 South		ONE HOUR	✓	1406	100.000
D - B1079 East		ONE HOUR	✓	355	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	373	1298	69
	B - Grundisburgh Rd West	61	0	185	200
	C - A12 South	1077	89	1	239
	D - B1079 East	154	71	130	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	7	1
	B - Grundisburgh Rd West	15	0	4	1
	C - A12 South	11	6	0	4
	D - B1079 East	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	12.87	6.6	33.7	B	1611	2417
B - Grundisburgh Rd West	0.78	24.80	3.2	16.0	C	409	614
C - A12 South	0.83	11.24	4.7	21.4	B	1290	1935
D - B1079 East	0.78	31.66	3.3	17.4	D	326	489

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1322	331	468	2366	0.559	1317	980	0.0	1.3	3.415	A
B - Grundisburgh Rd West	336	84	1115	935	0.359	334	400	0.0	0.6	5.960	A
C - A12 South	1059	265	460	2017	0.525	1054	1210	0.0	1.1	3.722	A
D - B1079 East	267	67	1404	895	0.298	266	381	0.0	0.4	5.701	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1579	395	560	2300	0.686	1575	1173	1.3	2.2	4.943	A
B - Grundisburgh Rd West	401	100	1333	809	0.496	399	478	0.6	1.0	8.761	A
C - A12 South	1264	316	550	1953	0.647	1261	1447	1.1	1.8	5.178	A
D - B1079 East	319	80	1680	730	0.437	318	455	0.4	0.8	8.710	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1933	483	679	2214	0.873	1917	1427	2.2	6.3	11.543	B
B - Grundisburgh Rd West	491	123	1623	640	0.767	483	581	1.0	3.0	21.860	C
C - A12 South	1548	387	667	1871	0.827	1537	1758	1.8	4.5	10.462	B
D - B1079 East	391	98	2043	511	0.765	382	553	0.8	2.9	26.483	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1933	483	687	2208	0.876	1932	1439	6.3	6.6	12.868	B
B - Grundisburgh Rd West	491	123	1636	633	0.776	490	586	3.0	3.2	24.798	C
C - A12 South	1548	387	675	1866	0.830	1547	1775	4.5	4.7	11.242	B
D - B1079 East	391	98	2060	500	0.781	389	559	2.9	3.3	31.662	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1579	395	571	2291	0.689	1596	1190	6.6	2.3	5.305	A
B - Grundisburgh Rd West	401	100	1352	798	0.502	410	486	3.2	1.0	9.470	A
C - A12 South	1264	316	562	1945	0.650	1275	1471	4.7	1.9	5.460	A
D - B1079 East	319	80	1704	715	0.446	329	463	3.3	0.8	9.553	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1322	331	473	2363	0.560	1326	988	2.3	1.3	3.484	A
B - Grundisburgh Rd West	336	84	1123	931	0.361	338	403	1.0	0.6	6.088	A
C - A12 South	1059	265	464	2014	0.526	1062	1219	1.9	1.1	3.793	A
D - B1079 East	267	67	1415	889	0.301	269	384	0.8	0.4	5.818	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.56	1.16	1.60	1.81			N/A	N/A
B - Grundisburgh Rd West	0.55	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.09	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.42	0.00	0.00	0.42	0.42			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.04	0.40	5.82	10.61			N/A	N/A
B - Grundisburgh Rd West	0.97	0.06	0.68	1.89	2.70			N/A	N/A
C - A12 South	1.80	0.04	0.43	4.85	8.18			N/A	N/A
D - B1079 East	0.76	0.05	0.56	1.39	1.88			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.26	0.03	0.34	12.09	33.67			N/A	N/A
B - Grundisburgh Rd West	2.98	0.03	0.33	6.11	15.95			N/A	N/A
C - A12 South	4.49	0.03	0.31	5.39	21.38			N/A	N/A
D - B1079 East	2.89	0.03	0.35	6.57	15.51			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.64	0.03	0.30	6.64	24.43			N/A	N/A
B - Grundisburgh Rd West	3.23	0.03	0.31	4.33	15.78			N/A	N/A
C - A12 South	4.69	0.03	0.28	4.69	11.17			N/A	N/A
D - B1079 East	3.25	0.03	0.34	6.60	17.44			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.25	0.05	0.49	6.12	9.87			N/A	N/A
B - Grundisburgh Rd West	1.03	0.05	0.46	2.43	3.72			N/A	N/A
C - A12 South	1.89	0.05	0.69	4.86	7.45			N/A	N/A
D - B1079 East	0.82	0.04	0.42	1.84	2.85			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.03	0.34	2.93	6.53			N/A	N/A
B - Grundisburgh Rd West	0.57	0.03	0.32	1.18	2.53			N/A	N/A
C - A12 South	1.12	0.04	0.36	2.78	5.31			N/A	N/A
D - B1079 East	0.43	0.03	0.31	1.32	1.85			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	7.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1466	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	340	100.000
C - A12 South		ONE HOUR	✓	1448	100.000
D - B1079 East		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	225	1129	98
	B - Grundisburgh Rd West	70	1	141	128
	C - A12 South	1200	125	3	120
	D - B1079 East	164	95	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	4	7	3
	B - Grundisburgh Rd West	6	0	4	2
	C - A12 South	7	5	0	1
	D - B1079 East	2	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.66	2.1	4.1	A	1345	2018
B - Grundisburgh Rd West	0.58	13.23	1.4	5.3	B	312	468
C - A12 South	0.79	8.68	3.8	13.4	A	1329	1993
D - B1079 East	0.51	9.99	1.0	4.3	A	316	473

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1104	276	294	2486	0.444	1101	1086	0.0	0.8	2.593	A
B - Grundisburgh Rd West	256	64	1126	944	0.271	254	335	0.0	0.4	5.209	A
C - A12 South	1090	273	374	2138	0.510	1086	1019	0.0	1.0	3.412	A
D - B1079 East	259	65	1135	1061	0.244	258	259	0.0	0.3	4.475	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1318	329	352	2444	0.539	1316	1299	0.8	1.2	3.187	A
B - Grundisburgh Rd West	306	76	1347	819	0.373	305	400	0.4	0.6	6.989	A
C - A12 South	1302	325	448	2083	0.625	1299	1219	1.0	1.6	4.578	A
D - B1079 East	309	77	1358	926	0.334	309	310	0.3	0.5	5.829	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1614	404	430	2389	0.676	1611	1586	1.2	2.1	4.604	A
B - Grundisburgh Rd West	374	94	1644	651	0.575	371	489	0.6	1.3	12.766	B
C - A12 South	1594	399	547	2009	0.793	1586	1491	1.6	3.7	8.347	A
D - B1079 East	379	95	1661	742	0.511	377	379	0.5	1.0	9.805	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1614	404	433	2387	0.676	1614	1594	2.1	2.1	4.658	A
B - Grundisburgh Rd West	374	94	1652	646	0.579	374	491	1.3	1.4	13.227	B
C - A12 South	1594	399	549	2008	0.794	1594	1495	3.7	3.8	8.677	A
D - B1079 East	379	95	1666	739	0.512	379	381	1.0	1.0	9.985	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1318	329	356	2441	0.540	1321	1310	2.1	1.2	3.226	A
B - Grundisburgh Rd West	306	76	1358	813	0.376	309	403	1.4	0.6	7.184	A
C - A12 South	1302	325	451	2081	0.626	1310	1225	3.8	1.7	4.718	A
D - B1079 East	309	77	1365	922	0.336	311	313	1.0	0.5	5.920	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1104	276	297	2484	0.444	1105	1093	1.2	0.8	2.615	A
B - Grundisburgh Rd West	256	64	1133	940	0.272	257	336	0.6	0.4	5.276	A
C - A12 South	1090	273	376	2136	0.510	1093	1024	1.7	1.1	3.458	A
D - B1079 East	259	65	1141	1058	0.245	260	261	0.5	0.3	4.516	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - A12 South	1.03	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.05	0.49	2.74	4.07			N/A	N/A
B - Grundisburgh Rd West	0.59	0.07	0.70	1.34	1.42			N/A	N/A
C - A12 South	1.64	0.04	0.44	4.36	7.23			N/A	N/A
D - B1079 East	0.50	0.05	0.46	1.28	1.39			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.05	0.03	0.26	2.05	2.05			N/A	N/A
B - Grundisburgh Rd West	1.31	0.03	0.27	1.31	1.76			N/A	N/A
C - A12 South	3.68	0.03	0.29	3.68	13.40			N/A	N/A
D - B1079 East	1.02	0.03	0.26	1.02	1.02			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.07	0.03	0.26	2.07	2.07			N/A	N/A
B - Grundisburgh Rd West	1.35	0.03	0.29	1.35	5.33			N/A	N/A
C - A12 South	3.77	0.03	0.27	3.77	3.95			N/A	N/A
D - B1079 East	1.04	0.03	0.29	1.21	4.26			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.20	1.11	1.75	1.97			N/A	N/A
B - Grundisburgh Rd West	0.61	0.06	0.64	1.35	1.44			N/A	N/A
C - A12 South	1.69	0.06	0.91	4.00	5.83			N/A	N/A
D - B1079 East	0.51	0.05	0.49	1.30	1.40			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.07	0.75	1.22	1.71			N/A	N/A
B - Grundisburgh Rd West	0.38	0.03	0.34	1.13	1.33			N/A	N/A
C - A12 South	1.05	0.04	0.40	2.64	4.44			N/A	N/A
D - B1079 East	0.33	0.03	0.28	0.52	1.01			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	5.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1379	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	275	100.000
C - A12 South		ONE HOUR	✓	1454	100.000
D - B1079 East		ONE HOUR	✓	280	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	195	1103	76
	B - Grundisburgh Rd West	63	0	90	122
	C - A12 South	1260	131	0	63
	D - B1079 East	118	98	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	3
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	3	2	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.59	3.37	1.4	2.1	A	1265	1898
B - Grundisburgh Rd West	0.41	8.30	0.7	3.3	A	252	379
C - A12 South	0.74	6.48	2.8	5.8	A	1334	2001
D - B1079 East	0.36	6.45	0.5	2.5	A	257	385

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1038	260	206	2656	0.391	1036	1085	0.0	0.6	2.215	A
B - Grundisburgh Rd West	207	52	1085	1023	0.202	206	318	0.0	0.3	4.401	A
C - A12 South	1095	274	312	2263	0.484	1091	944	0.0	0.9	3.060	A
D - B1079 East	211	53	1046	1153	0.183	210	196	0.0	0.2	3.812	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	247	2626	0.472	1239	1298	0.6	0.9	2.594	A
B - Grundisburgh Rd West	247	62	1298	902	0.274	247	381	0.3	0.4	5.487	A
C - A12 South	1307	327	374	2218	0.589	1305	1129	0.9	1.4	3.934	A
D - B1079 East	252	63	1251	1033	0.244	251	234	0.2	0.3	4.606	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1518	380	302	2586	0.587	1516	1587	0.9	1.4	3.359	A
B - Grundisburgh Rd West	303	76	1587	739	0.410	302	466	0.4	0.7	8.202	A
C - A12 South	1601	400	457	2157	0.742	1595	1382	1.4	2.8	6.351	A
D - B1079 East	308	77	1531	868	0.355	307	286	0.3	0.5	6.415	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1518	380	303	2585	0.587	1518	1592	1.4	1.4	3.374	A
B - Grundisburgh Rd West	303	76	1592	736	0.411	303	467	0.7	0.7	8.303	A
C - A12 South	1601	400	458	2156	0.743	1601	1384	2.8	2.8	6.481	A
D - B1079 East	308	77	1534	866	0.356	308	287	0.5	0.5	6.451	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	248	2625	0.472	1242	1305	1.4	0.9	2.608	A
B - Grundisburgh Rd West	247	62	1305	898	0.275	248	382	0.7	0.4	5.552	A
C - A12 South	1307	327	375	2217	0.590	1313	1132	2.8	1.5	4.005	A
D - B1079 East	252	63	1255	1030	0.244	253	236	0.5	0.3	4.634	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1038	260	208	2655	0.391	1039	1091	0.9	0.6	2.230	A
B - Grundisburgh Rd West	207	52	1091	1020	0.203	208	320	0.4	0.3	4.436	A
C - A12 South	1095	274	314	2262	0.484	1097	947	1.5	0.9	3.096	A
D - B1079 East	211	53	1050	1151	0.183	211	197	0.3	0.2	3.834	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	0.93	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.06	0.72	1.64	2.12			N/A	N/A
B - Grundisburgh Rd West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - A12 South	1.42	0.05	0.45	3.65	5.82			N/A	N/A
D - B1079 East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.41	0.03	0.26	1.41	1.41			N/A	N/A
B - Grundisburgh Rd West	0.68	0.03	0.26	0.68	0.68			N/A	N/A
C - A12 South	2.81	0.03	0.27	2.81	4.74			N/A	N/A
D - B1079 East	0.55	0.03	0.25	0.55	0.55			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.03	0.26	1.42	1.42			N/A	N/A
B - Grundisburgh Rd West	0.69	0.03	0.30	1.00	3.33			N/A	N/A
C - A12 South	2.84	0.03	0.27	2.84	2.84			N/A	N/A
D - B1079 East	0.55	0.03	0.31	1.01	2.52			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.54	1.00	1.40	1.46			N/A	N/A
B - Grundisburgh Rd West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.45	0.09	1.11	2.86	3.85			N/A	N/A
D - B1079 East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.11	0.85	1.37	1.44			N/A	N/A
B - Grundisburgh Rd West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	0.94	0.05	0.48	2.01	3.03			N/A	N/A
D - B1079 East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	2.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	799	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	71	100.000
C - A12 South		ONE HOUR	✓	589	100.000
D - B1079 East		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	68	715	11
	B - Grundisburgh Rd West	21	0	38	13
	C - A12 South	535	37	2	15
	D - B1079 East	23	17	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	0
	B - Grundisburgh Rd West	0	0	11	0
	C - A12 South	9	2	0	0
	D - B1079 East	7	0	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.33	2.01	0.5	2.1	A	733	1100
B - Grundisburgh Rd West	0.07	3.25	0.1	0.5	A	65	98
C - A12 South	0.29	2.22	0.4	1.3	A	541	811
D - B1079 East	0.07	3.44	0.1	0.5	A	68	102

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	602	150	51	2688	0.224	601	438	0.0	0.3	1.724	A
B - Grundisburgh Rd West	54	13	436	1302	0.041	53	91	0.0	0.0	2.883	A
C - A12 South	443	111	85	2297	0.193	443	593	0.0	0.2	1.940	A
D - B1079 East	56	14	623	1292	0.043	55	29	0.0	0.0	2.909	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	718	180	61	2680	0.268	718	524	0.3	0.4	1.834	A
B - Grundisburgh Rd West	64	16	521	1253	0.051	64	109	0.0	0.1	3.026	A
C - A12 South	530	132	101	2285	0.232	529	710	0.2	0.3	2.050	A
D - B1079 East	66	17	745	1223	0.054	66	34	0.0	0.1	3.110	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	880	220	75	2670	0.330	879	642	0.4	0.5	2.010	A
B - Grundisburgh Rd West	78	20	638	1187	0.066	78	134	0.1	0.1	3.246	A
C - A12 South	649	162	124	2269	0.286	648	869	0.3	0.4	2.221	A
D - B1079 East	81	20	912	1129	0.072	81	42	0.1	0.1	3.435	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	880	220	75	2670	0.330	880	642	0.5	0.5	2.010	A
B - Grundisburgh Rd West	78	20	639	1187	0.066	78	134	0.1	0.1	3.247	A
C - A12 South	649	162	124	2269	0.286	649	870	0.4	0.4	2.221	A
D - B1079 East	81	20	912	1128	0.072	81	42	0.1	0.1	3.436	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	718	180	61	2680	0.268	719	525	0.5	0.4	1.835	A
B - Grundisburgh Rd West	64	16	522	1253	0.051	64	110	0.1	0.1	3.029	A
C - A12 South	530	132	101	2285	0.232	530	710	0.4	0.3	2.053	A
D - B1079 East	66	17	746	1223	0.054	66	34	0.1	0.1	3.112	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	602	150	51	2688	0.224	602	440	0.4	0.3	1.728	A
B - Grundisburgh Rd West	54	13	437	1301	0.041	54	92	0.1	0.0	2.884	A
C - A12 South	443	111	85	2296	0.193	444	595	0.3	0.2	1.943	A
D - B1079 East	56	14	624	1292	0.043	56	29	0.1	0.0	2.914	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.29	0.00	0.00	0.29	0.29			N/A	N/A
B - Grundisburgh Rd West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - B1079 East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Grundisburgh Rd West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - B1079 East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.49	0.03	0.25	0.49	0.49			N/A	N/A
B - Grundisburgh Rd West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.40	0.03	0.25	0.45	0.48			N/A	N/A
D - B1079 East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.49	0.03	0.31	1.44	2.06			N/A	N/A
B - Grundisburgh Rd West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.40	0.03	0.33	1.26	1.26			N/A	N/A
D - B1079 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Grundisburgh Rd West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - B1079 East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.29	0.00	0.00	0.29	0.29			N/A	N/A
B - Grundisburgh Rd West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	6.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1650	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	201	100.000
C - A12 South		ONE HOUR	✓	1360	100.000
D - B1079 East		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	290	1307	46
	B - Grundisburgh Rd West	38	0	101	62
	C - A12 South	1194	86	2	78
	D - B1079 East	77	56	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	1
	B - Grundisburgh Rd West	5	0	6	4
	C - A12 South	10	4	0	0
	D - B1079 East	2	0	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.94	2.5	5.4	A	1514	2271
B - Grundisburgh Rd West	0.31	7.47	0.5	1.8	A	184	276
C - A12 South	0.75	7.07	2.9	6.0	A	1248	1871
D - B1079 East	0.32	8.55	0.5	1.7	A	164	245

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1242	311	182	2607	0.476	1239	986	0.0	0.9	2.624	A
B - Grundisburgh Rd West	151	38	1018	976	0.155	150	325	0.0	0.2	4.355	A
C - A12 South	1024	256	323	2112	0.485	1020	1092	0.0	0.9	3.286	A
D - B1079 East	134	34	1282	971	0.138	134	139	0.0	0.2	4.298	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1483	371	218	2581	0.575	1482	1180	0.9	1.3	3.268	A
B - Grundisburgh Rd West	180	45	1218	861	0.210	180	388	0.2	0.3	5.283	A
C - A12 South	1222	306	386	2067	0.591	1220	1307	0.9	1.4	4.241	A
D - B1079 East	160	40	1533	822	0.195	160	166	0.2	0.2	5.434	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1817	454	267	2545	0.714	1812	1443	1.3	2.4	4.883	A
B - Grundisburgh Rd West	221	55	1489	706	0.313	220	475	0.3	0.5	7.404	A
C - A12 South	1497	374	472	2006	0.746	1491	1598	1.4	2.9	6.927	A
D - B1079 East	196	49	1875	620	0.317	195	203	0.2	0.5	8.460	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1817	454	267	2544	0.714	1816	1448	2.4	2.5	4.943	A
B - Grundisburgh Rd West	221	55	1494	703	0.315	221	476	0.5	0.5	7.474	A
C - A12 South	1497	374	474	2005	0.747	1497	1602	2.9	2.9	7.075	A
D - B1079 East	196	49	1880	617	0.318	196	204	0.5	0.5	8.548	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1483	371	219	2580	0.575	1488	1188	2.5	1.4	3.311	A
B - Grundisburgh Rd West	180	45	1226	857	0.211	181	390	0.5	0.3	5.333	A
C - A12 South	1222	306	388	2065	0.592	1228	1313	2.9	1.5	4.326	A
D - B1079 East	160	40	1540	818	0.196	161	167	0.5	0.2	5.484	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1242	311	183	2606	0.477	1244	992	1.4	0.9	2.645	A
B - Grundisburgh Rd West	151	38	1024	973	0.155	151	326	0.3	0.2	4.385	A
C - A12 South	1024	256	325	2111	0.485	1026	1097	1.5	0.9	3.326	A
D - B1079 East	134	34	1287	967	0.139	135	140	0.2	0.2	4.326	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.93	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.05	0.45	3.42	5.44			N/A	N/A
B - Grundisburgh Rd West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.43	0.05	0.47	3.67	5.78			N/A	N/A
D - B1079 East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.45	0.03	0.27	2.45	2.45			N/A	N/A
B - Grundisburgh Rd West	0.45	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	2.86	0.03	0.28	2.86	5.97			N/A	N/A
D - B1079 East	0.46	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.47	0.03	0.26	2.47	2.47			N/A	N/A
B - Grundisburgh Rd West	0.46	0.03	0.32	1.41	1.77			N/A	N/A
C - A12 South	2.90	0.03	0.27	2.90	2.90			N/A	N/A
D - B1079 East	0.46	0.03	0.33	1.42	1.72			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.14	1.18	2.29	2.89			N/A	N/A
B - Grundisburgh Rd West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.47	0.08	1.07	2.96	4.04			N/A	N/A
D - B1079 East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.06	0.70	1.73	2.36			N/A	N/A
B - Grundisburgh Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.95	0.05	0.46	2.11	3.25			N/A	N/A
D - B1079 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	22.81	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1790	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	442	100.000
C - A12 South		ONE HOUR	✓	1520	100.000
D - B1079 East		ONE HOUR	✓	377	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	383	1311	79
	B - Grundisburgh Rd West	64	0	175	203
	C - A12 South	1158	108	1	253
	D - B1079 East	160	77	140	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	9	1
	B - Grundisburgh Rd West	14	0	4	0
	C - A12 South	11	4	0	3
	D - B1079 East	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	16.61	8.6	43.1	C	1642	2464
B - Grundisburgh Rd West	0.85	39.23	5.0	26.9	E	405	608
C - A12 South	0.90	19.03	8.4	42.9	C	1395	2092
D - B1079 East	0.87	50.47	5.4	28.3	F	346	519

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1347	337	473	2334	0.577	1342	1047	0.0	1.4	3.610	A
B - Grundisburgh Rd West	333	83	1190	891	0.373	330	426	0.0	0.6	6.389	A
C - A12 South	1144	286	476	2009	0.570	1139	1220	0.0	1.3	4.114	A
D - B1079 East	284	71	1414	877	0.324	282	401	0.0	0.5	6.030	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1609	402	566	2268	0.709	1605	1252	1.4	2.4	5.392	A
B - Grundisburgh Rd West	397	99	1423	756	0.525	395	509	0.6	1.1	9.922	A
C - A12 South	1366	342	570	1943	0.703	1362	1459	1.3	2.3	6.157	A
D - B1079 East	339	85	1691	708	0.478	337	479	0.5	0.9	9.655	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1971	493	682	2186	0.902	1949	1515	2.4	7.9	14.044	B
B - Grundisburgh Rd West	487	122	1723	582	0.836	474	616	1.1	4.2	30.405	D
C - A12 South	1673	418	687	1860	0.900	1652	1766	2.3	7.6	15.922	C
D - B1079 East	415	104	2052	489	0.849	401	579	0.9	4.4	36.505	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1971	493	693	2178	0.905	1968	1534	7.9	8.6	16.608	C
B - Grundisburgh Rd West	487	122	1744	570	0.853	483	624	4.2	5.0	39.227	E
C - A12 South	1673	418	697	1853	0.903	1670	1787	7.6	8.4	19.031	C
D - B1079 East	415	104	2073	476	0.872	411	587	4.4	5.4	50.472	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1609	402	585	2255	0.714	1633	1284	8.6	2.5	6.014	A
B - Grundisburgh Rd West	397	99	1457	737	0.539	412	521	5.0	1.2	11.589	B
C - A12 South	1366	342	588	1930	0.708	1390	1494	8.4	2.5	6.947	A
D - B1079 East	339	85	1725	688	0.493	357	493	5.4	1.0	11.428	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1347	337	479	2330	0.578	1352	1057	2.5	1.4	3.700	A
B - Grundisburgh Rd West	333	83	1201	885	0.376	335	429	1.2	0.6	6.570	A
C - A12 South	1144	286	481	2006	0.571	1149	1231	2.5	1.3	4.223	A
D - B1079 East	284	71	1426	870	0.326	286	405	1.0	0.5	6.182	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.55	1.26	1.78	1.93			N/A	N/A
B - Grundisburgh Rd West	0.59	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.31	0.56	1.21	1.70	1.88			N/A	N/A
D - B1079 East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.39	0.04	0.41	6.51	11.91			N/A	N/A
B - Grundisburgh Rd West	1.08	0.05	0.56	2.43	3.56			N/A	N/A
C - A12 South	2.32	0.04	0.43	6.35	11.11			N/A	N/A
D - B1079 East	0.90	0.05	0.47	1.91	2.86			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.88	0.04	0.40	19.86	43.06			N/A	N/A
B - Grundisburgh Rd West	4.19	0.04	0.43	11.57	21.63			N/A	N/A
C - A12 South	7.59	0.04	0.41	20.05	41.37			N/A	N/A
D - B1079 East	4.36	0.05	0.48	12.40	21.55			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.63	0.03	0.32	11.45	42.21			N/A	N/A
B - Grundisburgh Rd West	4.96	0.04	0.37	12.10	26.86			N/A	N/A
C - A12 South	8.37	0.03	0.33	13.16	42.93			N/A	N/A
D - B1079 East	5.42	0.04	0.44	15.03	28.32			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.55	0.05	0.46	7.04	11.85			N/A	N/A
B - Grundisburgh Rd West	1.20	0.04	0.41	3.02	5.13			N/A	N/A
C - A12 South	2.48	0.05	0.45	6.86	11.69			N/A	N/A
D - B1079 East	0.99	0.04	0.38	2.49	4.34			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.03	0.32	2.79	7.16			N/A	N/A
B - Grundisburgh Rd West	0.61	0.03	0.30	1.41	2.87			N/A	N/A
C - A12 South	1.34	0.03	0.32	2.62	6.92			N/A	N/A
D - B1079 East	0.49	0.03	0.29	1.07	2.14			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	9.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1524	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	361	100.000
C - A12 South		ONE HOUR	✓	1528	100.000
D - B1079 East		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	233	1170	108
	B - Grundisburgh Rd West	79	1	147	134
	C - A12 South	1263	129	3	133
	D - B1079 East	176	103	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	4	7	3
	B - Grundisburgh Rd West	4	0	4	3
	C - A12 South	7	5	0	0
	D - B1079 East	1	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	5.31	2.4	5.1	A	1399	2098
B - Grundisburgh Rd West	0.67	18.60	2.0	8.7	C	331	497
C - A12 South	0.85	11.94	5.4	26.4	B	1402	2103
D - B1079 East	0.60	12.78	1.5	5.5	B	348	522

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1148	287	313	2461	0.466	1144	1148	0.0	0.9	2.726	A
B - Grundisburgh Rd West	272	68	1191	907	0.300	270	349	0.0	0.4	5.642	A
C - A12 South	1150	288	394	2117	0.543	1146	1066	0.0	1.2	3.689	A
D - B1079 East	286	71	1176	1035	0.276	284	282	0.0	0.4	4.786	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1370	343	375	2417	0.567	1369	1373	0.9	1.3	3.427	A
B - Grundisburgh Rd West	325	81	1425	774	0.420	323	418	0.4	0.7	7.975	A
C - A12 South	1374	343	472	2060	0.667	1371	1275	1.2	2.0	5.200	A
D - B1079 East	341	85	1407	894	0.382	340	337	0.4	0.6	6.494	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1678	420	456	2360	0.711	1674	1673	1.3	2.4	5.216	A
B - Grundisburgh Rd West	398	99	1736	597	0.666	393	510	0.7	1.9	17.261	C
C - A12 South	1682	421	576	1983	0.848	1670	1558	2.0	5.2	11.059	B
D - B1079 East	418	104	1720	703	0.595	414	411	0.6	1.4	12.362	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1678	420	461	2356	0.712	1678	1685	2.4	2.4	5.307	A
B - Grundisburgh Rd West	398	99	1748	590	0.674	397	512	1.9	2.0	18.595	C
C - A12 South	1682	421	579	1981	0.849	1682	1564	5.2	5.4	11.940	B
D - B1079 East	418	104	1725	699	0.598	418	413	1.4	1.5	12.778	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1370	343	381	2413	0.568	1375	1390	2.4	1.3	3.482	A
B - Grundisburgh Rd West	325	81	1442	764	0.425	330	421	2.0	0.8	8.380	A
C - A12 South	1374	343	476	2057	0.668	1387	1283	5.4	2.0	5.479	A
D - B1079 East	341	85	1415	889	0.384	344	341	1.5	0.6	6.653	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1148	287	316	2459	0.467	1149	1156	1.3	0.9	2.753	A
B - Grundisburgh Rd West	272	68	1200	902	0.301	273	351	0.8	0.4	5.738	A
C - A12 South	1150	288	397	2115	0.544	1154	1072	2.0	1.2	3.757	A
D - B1079 East	286	71	1182	1031	0.277	287	284	0.6	0.4	4.844	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C - A12 South	1.18	0.56	1.07	1.18	1.57			N/A	N/A
D - B1079 East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.05	0.46	3.24	5.06			N/A	N/A
B - Grundisburgh Rd West	0.71	0.07	0.71	1.23	1.23			N/A	N/A
C - A12 South	1.97	0.04	0.42	5.33	9.23			N/A	N/A
D - B1079 East	0.61	0.07	0.69	1.35	1.43			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.42	0.03	0.27	2.42	2.42			N/A	N/A
B - Grundisburgh Rd West	1.89	0.03	0.29	1.89	7.75			N/A	N/A
C - A12 South	5.18	0.03	0.32	7.99	26.38			N/A	N/A
D - B1079 East	1.42	0.03	0.27	1.42	2.23			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.45	0.03	0.26	2.45	2.45			N/A	N/A
B - Grundisburgh Rd West	1.99	0.03	0.29	1.99	8.65			N/A	N/A
C - A12 South	5.40	0.03	0.29	5.40	15.69			N/A	N/A
D - B1079 East	1.46	0.03	0.29	1.46	5.50			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.33	0.13	1.15	2.22	2.84			N/A	N/A
B - Grundisburgh Rd West	0.75	0.05	0.57	1.30	1.81			N/A	N/A
C - A12 South	2.05	0.05	0.55	5.46	8.58			N/A	N/A
D - B1079 East	0.63	0.06	0.65	1.36	1.45			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.06	0.65	1.69	2.29			N/A	N/A
B - Grundisburgh Rd West	0.44	0.03	0.34	1.33	1.33			N/A	N/A
C - A12 South	1.20	0.03	0.35	2.91	5.93			N/A	N/A
D - B1079 East	0.39	0.03	0.34	1.16	1.35			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	6.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1480	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	287	100.000
C - A12 South		ONE HOUR	✓	1531	100.000
D - B1079 East		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	207	1186	82
	B - Grundisburgh Rd West	71	0	89	127
	C - A12 South	1327	134	0	71
	D - B1079 East	125	101	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	2
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	3	1	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	3.87	1.7	3.2	A	1358	2037
B - Grundisburgh Rd West	0.46	9.90	0.9	3.9	A	263	395
C - A12 South	0.79	8.23	3.8	12.8	A	1405	2108
D - B1079 East	0.41	7.66	0.7	3.3	A	275	412

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1114	279	215	2634	0.423	1111	1146	0.0	0.7	2.361	A
B - Grundisburgh Rd West	216	54	1146	985	0.219	215	331	0.0	0.3	4.667	A
C - A12 South	1153	288	328	2234	0.516	1149	1013	0.0	1.1	3.305	A
D - B1079 East	225	56	1116	1108	0.203	224	210	0.0	0.3	4.070	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1331	333	257	2603	0.511	1329	1371	0.7	1.0	2.825	A
B - Grundisburgh Rd West	258	64	1371	857	0.301	257	396	0.3	0.4	6.000	A
C - A12 South	1377	344	392	2187	0.630	1374	1212	1.1	1.7	4.416	A
D - B1079 East	269	67	1335	978	0.275	269	251	0.3	0.4	5.070	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1630	407	314	2561	0.636	1627	1674	1.0	1.7	3.842	A
B - Grundisburgh Rd West	316	79	1674	683	0.462	314	484	0.4	0.8	9.704	A
C - A12 South	1686	422	480	2123	0.794	1678	1483	1.7	3.7	7.947	A
D - B1079 East	330	82	1634	801	0.411	328	307	0.4	0.7	7.591	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1630	407	316	2560	0.637	1630	1682	1.7	1.7	3.870	A
B - Grundisburgh Rd West	316	79	1682	679	0.465	316	485	0.8	0.9	9.903	A
C - A12 South	1686	422	481	2122	0.795	1686	1486	3.7	3.8	8.234	A
D - B1079 East	330	82	1637	800	0.412	330	308	0.7	0.7	7.659	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1331	333	259	2601	0.512	1333	1381	1.7	1.1	2.845	A
B - Grundisburgh Rd West	258	64	1381	851	0.303	260	398	0.9	0.4	6.107	A
C - A12 South	1377	344	394	2186	0.630	1385	1216	3.8	1.7	4.541	A
D - B1079 East	269	67	1340	976	0.276	270	253	0.7	0.4	5.115	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1114	279	217	2632	0.423	1116	1153	1.1	0.7	2.374	A
B - Grundisburgh Rd West	216	54	1153	981	0.220	217	333	0.4	0.3	4.711	A
C - A12 South	1153	288	330	2233	0.516	1156	1017	1.7	1.1	3.351	A
D - B1079 East	225	56	1121	1105	0.204	226	211	0.4	0.3	4.095	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.73	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C - A12 South	1.06	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.05	0.60	2.23	3.23			N/A	N/A
B - Grundisburgh Rd West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C - A12 South	1.68	0.04	0.43	4.48	7.52			N/A	N/A
D - B1079 East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.03	0.26	1.73	1.73			N/A	N/A
B - Grundisburgh Rd West	0.84	0.03	0.26	0.84	0.84			N/A	N/A
C - A12 South	3.70	0.03	0.29	3.70	12.85			N/A	N/A
D - B1079 East	0.69	0.03	0.26	0.69	0.69			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.03	0.26	1.74	1.74			N/A	N/A
B - Grundisburgh Rd West	0.86	0.03	0.29	1.44	3.94			N/A	N/A
C - A12 South	3.78	0.03	0.27	3.78	3.78			N/A	N/A
D - B1079 East	0.70	0.03	0.30	1.49	3.34			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.49	1.05	1.25	1.63			N/A	N/A
B - Grundisburgh Rd West	0.44	0.03	0.32	1.05	1.28			N/A	N/A
C - A12 South	1.72	0.06	0.95	4.06	5.88			N/A	N/A
D - B1079 East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.09	0.82	1.41	1.48			N/A	N/A
B - Grundisburgh Rd West	0.28	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.08	0.04	0.40	2.70	4.52			N/A	N/A
D - B1079 East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	2.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	813	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	75	100.000
C - A12 South		ONE HOUR	✓	692	100.000
D - B1079 East		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	69	727	12
	B - Grundisburgh Rd West	24	0	39	13
	C - A12 South	638	37	2	15
	D - B1079 East	26	17	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	0
	B - Grundisburgh Rd West	0	0	11	0
	C - A12 South	11	2	0	0
	D - B1079 East	6	0	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	2.03	0.5	2.2	A	746	1119
B - Grundisburgh Rd West	0.07	3.48	0.1	0.5	A	69	104
C - A12 South	0.34	2.46	0.5	2.4	A	635	953
D - B1079 East	0.08	3.47	0.1	0.5	A	70	106

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	612	153	52	2690	0.228	611	520	0.0	0.3	1.732	A
B - Grundisburgh Rd West	57	14	515	1255	0.045	56	92	0.0	0.0	3.003	A
C - A12 South	521	130	88	2252	0.231	520	603	0.0	0.3	2.078	A
D - B1079 East	58	14	633	1288	0.045	58	29	0.0	0.0	2.925	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	731	183	62	2682	0.273	731	622	0.3	0.4	1.844	A
B - Grundisburgh Rd West	68	17	616	1196	0.057	68	110	0.0	0.1	3.188	A
C - A12 South	622	156	105	2240	0.278	622	721	0.3	0.4	2.225	A
D - B1079 East	69	17	757	1218	0.057	69	35	0.0	0.1	3.132	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	895	224	76	2672	0.335	895	762	0.4	0.5	2.026	A
B - Grundisburgh Rd West	83	21	755	1116	0.074	83	135	0.1	0.1	3.483	A
C - A12 South	762	190	128	2223	0.343	761	883	0.4	0.5	2.462	A
D - B1079 East	85	21	927	1122	0.075	84	43	0.1	0.1	3.470	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	895	224	76	2672	0.335	895	762	0.5	0.5	2.026	A
B - Grundisburgh Rd West	83	21	755	1116	0.074	83	135	0.1	0.1	3.484	A
C - A12 South	762	190	129	2223	0.343	762	884	0.5	0.5	2.463	A
D - B1079 East	85	21	928	1121	0.075	85	43	0.1	0.1	3.471	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	731	183	62	2682	0.273	732	623	0.5	0.4	1.848	A
B - Grundisburgh Rd West	68	17	617	1196	0.057	68	110	0.1	0.1	3.192	A
C - A12 South	622	156	105	2240	0.278	623	722	0.5	0.4	2.228	A
D - B1079 East	69	17	758	1217	0.057	69	35	0.1	0.1	3.134	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	612	153	52	2690	0.228	613	522	0.4	0.3	1.732	A
B - Grundisburgh Rd West	57	14	517	1254	0.045	57	93	0.1	0.0	3.007	A
C - A12 South	521	130	88	2251	0.231	521	605	0.4	0.3	2.080	A
D - B1079 East	58	14	635	1287	0.045	58	30	0.1	0.0	2.930	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.29	0.00	0.00	0.29	0.29			N/A	N/A
B - Grundisburgh Rd West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Grundisburgh Rd West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - B1079 East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.50	0.03	0.25	0.50	0.50			N/A	N/A
B - Grundisburgh Rd West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.52	0.03	0.25	0.52	0.52			N/A	N/A
D - B1079 East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.50	0.03	0.31	1.45	2.21			N/A	N/A
B - Grundisburgh Rd West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.52	0.03	0.30	1.41	2.39			N/A	N/A
D - B1079 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.39	0.00	0.00	0.39	0.39			N/A	N/A
D - B1079 East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Grundisburgh Rd West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	9.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1679	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	1549	100.000
D - B1079 East		ONE HOUR	✓	191	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	291	1334	47
	B - Grundisburgh Rd West	53	0	94	62
	C - A12 South	1383	86	2	78
	D - B1079 East	89	56	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	1
	B - Grundisburgh Rd West	4	0	7	4
	C - A12 South	13	4	0	0
	D - B1079 East	1	0	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	5.15	2.6	5.8	A	1541	2311
B - Grundisburgh Rd West	0.42	11.17	0.7	3.4	B	192	287
C - A12 South	0.88	14.60	6.6	34.4	B	1421	2131
D - B1079 East	0.35	9.16	0.5	2.2	A	176	263

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1264	316	177	2609	0.485	1260	1148	0.0	0.9	2.662	A
B - Grundisburgh Rd West	157	39	1168	873	0.180	156	325	0.0	0.2	5.013	A
C - A12 South	1166	291	333	2054	0.568	1161	1108	0.0	1.3	4.007	A
D - B1079 East	144	36	1297	962	0.150	143	140	0.0	0.2	4.392	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	377	212	2583	0.584	1507	1373	0.9	1.4	3.341	A
B - Grundisburgh Rd West	188	47	1397	739	0.254	187	389	0.2	0.3	6.524	A
C - A12 South	1392	348	398	2009	0.693	1388	1326	1.3	2.2	5.768	A
D - B1079 East	172	43	1552	811	0.212	172	167	0.2	0.3	5.624	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1849	462	258	2549	0.725	1844	1670	1.4	2.6	5.072	A
B - Grundisburgh Rd West	230	57	1700	560	0.410	228	475	0.3	0.7	10.797	B
C - A12 South	1705	426	486	1948	0.875	1689	1621	2.2	6.3	13.140	B
D - B1079 East	211	53	1898	607	0.347	210	204	0.3	0.5	9.044	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1849	462	260	2548	0.726	1848	1685	2.6	2.6	5.147	A
B - Grundisburgh Rd West	230	57	1714	552	0.416	230	477	0.7	0.7	11.171	B
C - A12 South	1705	426	488	1947	0.876	1704	1625	6.3	6.6	14.599	B
D - B1079 East	211	53	1903	604	0.349	211	205	0.5	0.5	9.159	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1509	377	214	2581	0.585	1514	1393	2.6	1.4	3.388	A
B - Grundisburgh Rd West	188	47	1418	726	0.258	189	392	0.7	0.4	6.715	A
C - A12 South	1392	348	400	2007	0.694	1409	1332	6.6	2.3	6.190	A
D - B1079 East	172	43	1559	807	0.213	173	169	0.5	0.3	5.686	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1264	316	178	2607	0.485	1266	1157	1.4	0.9	2.688	A
B - Grundisburgh Rd West	157	39	1177	868	0.181	158	327	0.4	0.2	5.072	A
C - A12 South	1166	291	334	2053	0.568	1170	1113	2.3	1.3	4.095	A
D - B1079 East	144	36	1303	959	0.150	144	141	0.3	0.2	4.425	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.30	0.56	1.19	1.64	1.83			N/A	N/A
D - B1079 East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.04	0.44	3.60	5.80			N/A	N/A
B - Grundisburgh Rd West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	2.21	0.04	0.43	6.02	10.49			N/A	N/A
D - B1079 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.59	0.03	0.27	2.59	2.59			N/A	N/A
B - Grundisburgh Rd West	0.68	0.03	0.26	0.68	0.68			N/A	N/A
C - A12 South	6.29	0.04	0.36	13.64	34.38			N/A	N/A
D - B1079 East	0.52	0.03	0.26	0.52	0.52			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.62	0.03	0.26	2.62	2.62			N/A	N/A
B - Grundisburgh Rd West	0.70	0.03	0.31	1.33	3.38			N/A	N/A
C - A12 South	6.63	0.03	0.30	6.63	27.12			N/A	N/A
D - B1079 East	0.53	0.03	0.33	1.07	2.21			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.12	1.19	2.54	3.22			N/A	N/A
B - Grundisburgh Rd West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A12 South	2.31	0.05	0.47	6.32	10.42			N/A	N/A
D - B1079 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.06	0.66	1.86	2.64			N/A	N/A
B - Grundisburgh Rd West	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.33	0.03	0.33	2.96	6.79			N/A	N/A
D - B1079 East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	34.78	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1793	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	445	100.000
C - A12 South		ONE HOUR	✓	1567	100.000
D - B1079 East		ONE HOUR	✓	381	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	383	1314	79
	B - Grundisburgh Rd West	67	0	175	203
	C - A12 South	1215	98	1	253
	D - B1079 East	163	77	141	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	10	1
	B - Grundisburgh Rd West	13	0	4	0
	C - A12 South	16	4	0	3
	D - B1079 East	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	16.48	8.6	42.7	C	1645	2468
B - Grundisburgh Rd West	0.97	84.57	11.3	45.7	F	408	612
C - A12 South	0.96	37.60	17.1	84.7	E	1438	2157
D - B1079 East	0.88	53.72	5.8	30.0	F	350	524

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1350	337	473	2331	0.579	1344	1094	0.0	1.4	3.631	A
B - Grundisburgh Rd West	335	84	1234	842	0.398	332	418	0.0	0.7	7.024	A
C - A12 South	1180	295	479	1939	0.608	1173	1223	0.0	1.5	4.663	A
D - B1079 East	287	72	1417	875	0.328	285	400	0.0	0.5	6.086	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1612	403	565	2265	0.712	1608	1308	1.4	2.4	5.440	A
B - Grundisburgh Rd West	400	100	1476	698	0.573	397	500	0.7	1.3	11.872	B
C - A12 South	1409	352	572	1875	0.751	1403	1462	1.5	2.9	7.533	A
D - B1079 East	343	86	1694	705	0.486	341	479	0.5	0.9	9.824	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1974	493	668	2192	0.901	1952	1565	2.4	7.8	13.922	B
B - Grundisburgh Rd West	490	122	1768	522	0.938	465	604	1.3	7.5	49.901	E
C - A12 South	1725	431	689	1795	0.961	1682	1766	2.9	13.6	25.563	D
D - B1079 East	420	105	2050	488	0.860	405	570	0.9	4.6	38.131	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1974	493	681	2183	0.904	1971	1593	7.8	8.6	16.477	C
B - Grundisburgh Rd West	490	122	1799	504	0.972	475	612	7.5	11.3	84.568	F
C - A12 South	1725	431	700	1788	0.965	1711	1787	13.6	17.1	37.600	E
D - B1079 East	420	105	2072	475	0.883	415	580	4.6	5.8	53.716	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1612	403	610	2233	0.722	1635	1370	8.6	2.7	6.249	A
B - Grundisburgh Rd West	400	100	1542	658	0.608	438	514	11.3	1.6	19.139	C
C - A12 South	1409	352	592	1862	0.756	1464	1507	17.1	3.2	10.251	B
D - B1079 East	343	86	1737	680	0.504	362	509	5.8	1.0	11.981	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1350	337	480	2325	0.580	1355	1106	2.7	1.4	3.727	A
B - Grundisburgh Rd West	335	84	1248	834	0.402	339	422	1.6	0.7	7.321	A
C - A12 South	1180	295	484	1936	0.609	1186	1235	3.2	1.6	4.841	A
D - B1079 East	287	72	1429	867	0.331	289	406	1.0	0.5	6.251	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.55	1.26	1.79	1.94			N/A	N/A
B - Grundisburgh Rd West	0.65	0.21	0.93	1.39	1.44			N/A	N/A
C - A12 South	1.53	0.42	1.39	2.24	2.76			N/A	N/A
D - B1079 East	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.42	0.04	0.41	6.59	12.00			N/A	N/A
B - Grundisburgh Rd West	1.30	0.05	0.47	3.24	5.03			N/A	N/A
C - A12 South	2.92	0.04	0.45	8.13	14.16			N/A	N/A
D - B1079 East	0.92	0.05	0.47	1.98	2.99			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.82	0.04	0.39	19.50	42.67			N/A	N/A
B - Grundisburgh Rd West	7.47	0.11	2.57	20.10	29.21			N/A	N/A
C - A12 South	13.60	0.10	3.40	38.85	59.18			N/A	N/A
D - B1079 East	4.63	0.05	0.58	13.25	22.39			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.57	0.03	0.32	11.13	41.73			N/A	N/A
B - Grundisburgh Rd West	11.25	0.11	3.71	31.05	45.67			N/A	N/A
C - A12 South	17.10	0.07	1.54	50.47	84.72			N/A	N/A
D - B1079 East	5.82	0.05	0.46	16.49	30.04			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.65	0.05	0.48	7.35	12.12			N/A	N/A
B - Grundisburgh Rd West	1.62	0.04	0.38	4.22	7.90			N/A	N/A
C - A12 South	3.23	0.04	0.42	8.86	16.40			N/A	N/A
D - B1079 East	1.04	0.04	0.38	2.62	4.62			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.40	0.03	0.32	2.83	7.23			N/A	N/A
B - Grundisburgh Rd West	0.68	0.03	0.28	0.68	2.38			N/A	N/A
C - A12 South	1.58	0.03	0.30	1.85	7.43			N/A	N/A
D - B1079 East	0.50	0.03	0.29	1.00	2.13			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	11.72	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1547	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	379	100.000
C - A12 South		ONE HOUR	✓	1535	100.000
D - B1079 East		ONE HOUR	✓	370	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	236	1190	108
	B - Grundisburgh Rd West	90	1	146	142
	C - A12 South	1277	129	3	126
	D - B1079 East	176	103	92	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	10	3
	B - Grundisburgh Rd West	4	0	4	2
	C - A12 South	10	5	0	0
	D - B1079 East	1	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	5.89	2.8	5.8	A	1420	2130
B - Grundisburgh Rd West	0.74	23.72	2.6	12.7	C	348	522
C - A12 South	0.87	14.29	6.4	33.2	B	1409	2113
D - B1079 East	0.61	13.96	1.5	6.1	B	340	510

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1165	291	313	2417	0.482	1161	1166	0.0	0.9	2.859	A
B - Grundisburgh Rd West	285	71	1196	892	0.320	283	351	0.0	0.5	5.898	A
C - A12 South	1156	289	397	2071	0.558	1151	1073	0.0	1.3	3.891	A
D - B1079 East	279	70	1192	1011	0.276	277	282	0.0	0.4	4.894	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1391	348	375	2374	0.586	1389	1395	0.9	1.4	3.651	A
B - Grundisburgh Rd West	341	85	1431	756	0.451	339	420	0.5	0.8	8.622	A
C - A12 South	1380	345	475	2015	0.685	1376	1284	1.3	2.1	5.607	A
D - B1079 East	333	83	1426	866	0.385	332	338	0.4	0.6	6.731	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1704	426	455	2318	0.735	1699	1697	1.4	2.7	5.764	A
B - Grundisburgh Rd West	417	104	1741	575	0.725	411	513	0.8	2.4	21.114	C
C - A12 South	1690	423	579	1940	0.871	1674	1568	2.1	6.1	12.861	B
D - B1079 East	408	102	1743	669	0.609	404	411	0.6	1.5	13.410	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1704	426	460	2314	0.736	1704	1712	2.7	2.8	5.893	A
B - Grundisburgh Rd West	417	104	1756	567	0.736	417	516	2.4	2.6	23.725	C
C - A12 South	1690	423	582	1937	0.872	1689	1575	6.1	6.4	14.291	B
D - B1079 East	408	102	1749	665	0.613	408	414	1.5	1.5	13.963	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1391	348	383	2368	0.588	1396	1416	2.8	1.4	3.724	A
B - Grundisburgh Rd West	341	85	1452	743	0.458	348	424	2.6	0.9	9.259	A
C - A12 South	1380	345	479	2012	0.686	1397	1294	6.4	2.2	6.010	A
D - B1079 East	333	83	1437	860	0.387	337	343	1.5	0.6	6.931	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1165	291	317	2415	0.483	1167	1176	1.4	0.9	2.889	A
B - Grundisburgh Rd West	285	71	1205	887	0.322	287	354	0.9	0.5	6.016	A
C - A12 South	1156	289	399	2069	0.559	1159	1079	2.2	1.3	3.975	A
D - B1079 East	279	70	1199	1007	0.277	280	285	0.6	0.4	4.957	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C - A12 South	1.25	0.56	1.14	1.55	1.78			N/A	N/A
D - B1079 East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.40	0.04	0.45	3.61	5.78			N/A	N/A
B - Grundisburgh Rd West	0.81	0.06	0.69	1.38	1.83			N/A	N/A
C - A12 South	2.13	0.04	0.42	5.80	10.10			N/A	N/A
D - B1079 East	0.62	0.06	0.68	1.35	1.43			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.71	0.03	0.27	2.71	3.30			N/A	N/A
B - Grundisburgh Rd West	2.43	0.03	0.32	3.93	12.46			N/A	N/A
C - A12 South	6.10	0.04	0.35	12.77	33.20			N/A	N/A
D - B1079 East	1.50	0.03	0.27	1.50	3.25			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.75	0.03	0.26	2.75	2.75			N/A	N/A
B - Grundisburgh Rd West	2.64	0.03	0.31	3.37	12.70			N/A	N/A
C - A12 South	6.44	0.03	0.30	6.44	25.57			N/A	N/A
D - B1079 East	1.55	0.03	0.29	1.55	6.12			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.44	0.10	1.15	2.72	3.58			N/A	N/A
B - Grundisburgh Rd West	0.86	0.05	0.48	1.81	2.68			N/A	N/A
C - A12 South	2.23	0.05	0.48	6.06	9.92			N/A	N/A
D - B1079 East	0.64	0.06	0.62	1.38	1.48			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.05	0.53	1.93	2.85			N/A	N/A
B - Grundisburgh Rd West	0.48	0.03	0.33	1.45	1.86			N/A	N/A
C - A12 South	1.28	0.03	0.33	2.88	6.51			N/A	N/A
D - B1079 East	0.39	0.03	0.34	1.18	1.38			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	7.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1556	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	266	100.000
C - A12 South		ONE HOUR	✓	1550	100.000
D - B1079 East		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	215	1244	92
	B - Grundisburgh Rd West	72	0	66	128
	C - A12 South	1343	136	0	72
	D - B1079 East	125	111	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	2
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	4	1	0	4
	D - B1079 East	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.44	2.1	4.4	A	1428	2142
B - Grundisburgh Rd West	0.44	9.71	0.8	3.8	A	244	366
C - A12 South	0.81	9.20	4.3	17.2	A	1423	2134
D - B1079 East	0.45	8.78	0.8	3.8	A	284	426

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1171	293	199	2591	0.452	1168	1158	0.0	0.8	2.526	A
B - Grundisburgh Rd West	200	50	1158	974	0.205	199	346	0.0	0.3	4.637	A
C - A12 South	1167	292	341	2212	0.528	1163	1039	0.0	1.1	3.416	A
D - B1079 East	233	58	1148	1076	0.217	232	219	0.0	0.3	4.261	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1399	350	238	2562	0.546	1397	1386	0.8	1.2	3.086	A
B - Grundisburgh Rd West	239	60	1386	844	0.283	238	414	0.3	0.4	5.941	A
C - A12 South	1394	348	408	2164	0.644	1391	1243	1.1	1.8	4.642	A
D - B1079 East	278	70	1374	939	0.296	278	262	0.3	0.4	5.437	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1713	428	291	2524	0.679	1710	1691	1.2	2.1	4.399	A
B - Grundisburgh Rd West	293	73	1691	668	0.438	291	506	0.4	0.8	9.504	A
C - A12 South	1707	427	499	2098	0.814	1698	1521	1.8	4.2	8.793	A
D - B1079 East	341	85	1681	753	0.453	339	320	0.4	0.8	8.666	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1713	428	293	2523	0.679	1713	1700	2.1	2.1	4.443	A
B - Grundisburgh Rd West	293	73	1700	663	0.441	293	507	0.8	0.8	9.707	A
C - A12 South	1707	427	501	2097	0.814	1707	1524	4.2	4.3	9.203	A
D - B1079 East	341	85	1684	751	0.454	341	321	0.8	0.8	8.776	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1399	350	240	2561	0.546	1402	1398	2.1	1.2	3.118	A
B - Grundisburgh Rd West	239	60	1398	837	0.286	240	416	0.8	0.4	6.050	A
C - A12 South	1394	348	411	2162	0.645	1404	1248	4.3	1.8	4.804	A
D - B1079 East	278	70	1379	936	0.297	280	264	0.8	0.4	5.498	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1171	293	201	2589	0.452	1173	1166	1.2	0.8	2.543	A
B - Grundisburgh Rd West	200	50	1166	970	0.206	201	348	0.4	0.3	4.680	A
C - A12 South	1167	292	343	2211	0.528	1170	1044	1.8	1.1	3.467	A
D - B1079 East	233	58	1153	1073	0.217	234	220	0.4	0.3	4.292	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.11	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.19	0.05	0.48	2.85	4.37			N/A	N/A
B - Grundisburgh Rd West	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C - A12 South	1.78	0.04	0.43	4.80	8.19			N/A	N/A
D - B1079 East	0.42	0.00	0.00	0.42	0.42			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.08	0.03	0.26	2.08	2.08			N/A	N/A
B - Grundisburgh Rd West	0.76	0.03	0.26	0.76	0.76			N/A	N/A
C - A12 South	4.15	0.03	0.30	4.15	17.16			N/A	N/A
D - B1079 East	0.81	0.03	0.26	0.81	0.81			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.10	0.03	0.26	2.10	2.10			N/A	N/A
B - Grundisburgh Rd West	0.78	0.03	0.30	1.07	3.75			N/A	N/A
C - A12 South	4.26	0.03	0.27	4.26	5.95			N/A	N/A
D - B1079 East	0.82	0.03	0.29	1.42	3.79			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.21	1.14	1.78	2.00			N/A	N/A
B - Grundisburgh Rd West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A12 South	1.84	0.06	0.84	4.60	6.81			N/A	N/A
D - B1079 East	0.43	0.00	0.00	0.43	0.43			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.07	0.78	1.30	1.75			N/A	N/A
B - Grundisburgh Rd West	0.26	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.13	0.04	0.38	2.85	5.04			N/A	N/A
D - B1079 East	0.28	0.03	0.25	0.45	0.48			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	2.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	826	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	76	100.000
C - A12 South		ONE HOUR	✓	624	100.000
D - B1079 East		ONE HOUR	✓	82	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	72	736	13
	B - Grundisburgh Rd West	22	0	40	15
	C - A12 South	557	44	2	21
	D - B1079 East	24	19	39	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	0
	B - Grundisburgh Rd West	1	0	11	0
	C - A12 South	9	2	0	0
	D - B1079 East	6	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	2.05	0.5	2.3	A	758	1137
B - Grundisburgh Rd West	0.07	3.31	0.1	0.5	A	70	105
C - A12 South	0.30	2.27	0.4	1.6	A	573	859
D - B1079 East	0.08	3.54	0.1	0.5	A	75	113

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	622	155	58	2687	0.232	621	456	0.0	0.3	1.742	A
B - Grundisburgh Rd West	57	14	457	1291	0.044	57	101	0.0	0.0	2.918	A
C - A12 South	470	117	90	2300	0.204	469	614	0.0	0.3	1.965	A
D - B1079 East	62	15	643	1276	0.048	61	36	0.0	0.1	2.963	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	743	186	70	2678	0.277	742	546	0.3	0.4	1.859	A
B - Grundisburgh Rd West	69	17	547	1240	0.055	68	121	0.0	0.1	3.073	A
C - A12 South	561	140	108	2287	0.245	561	735	0.3	0.3	2.085	A
D - B1079 East	74	18	769	1205	0.061	73	43	0.1	0.1	3.179	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	910	227	86	2666	0.341	909	668	0.4	0.5	2.049	A
B - Grundisburgh Rd West	84	21	670	1170	0.072	84	148	0.1	0.1	3.314	A
C - A12 South	687	172	132	2270	0.303	687	900	0.3	0.4	2.273	A
D - B1079 East	90	23	942	1108	0.081	90	53	0.1	0.1	3.535	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	910	227	86	2666	0.341	910	669	0.5	0.5	2.049	A
B - Grundisburgh Rd West	84	21	671	1170	0.072	84	148	0.1	0.1	3.314	A
C - A12 South	687	172	132	2270	0.303	687	900	0.4	0.4	2.273	A
D - B1079 East	90	23	942	1108	0.081	90	53	0.1	0.1	3.536	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	743	186	70	2678	0.277	743	547	0.5	0.4	1.863	A
B - Grundisburgh Rd West	69	17	548	1239	0.055	69	121	0.1	0.1	3.074	A
C - A12 South	561	140	108	2287	0.245	561	736	0.4	0.3	2.086	A
D - B1079 East	74	18	770	1205	0.061	74	43	0.1	0.1	3.181	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	622	155	59	2686	0.232	622	458	0.4	0.3	1.746	A
B - Grundisburgh Rd West	57	14	459	1290	0.045	57	102	0.1	0.0	2.922	A
C - A12 South	470	117	90	2299	0.204	470	616	0.3	0.3	1.967	A
D - B1079 East	62	15	645	1275	0.048	62	36	0.1	0.1	2.965	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Grundisburgh Rd West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Grundisburgh Rd West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - B1079 East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.25	0.52	0.52			N/A	N/A
B - Grundisburgh Rd West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.43	0.03	0.25	0.45	0.48			N/A	N/A
D - B1079 East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.31	1.45	2.35			N/A	N/A
B - Grundisburgh Rd West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.43	0.03	0.33	1.37	1.63			N/A	N/A
D - B1079 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - B1079 East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Grundisburgh Rd West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	7.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1690	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	208	100.000
C - A12 South		ONE HOUR	✓	1453	100.000
D - B1079 East		ONE HOUR	✓	196	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	299	1334	50
	B - Grundisburgh Rd West	43	0	100	65
	C - A12 South	1264	95	2	92
	D - B1079 East	80	61	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	1
	B - Grundisburgh Rd West	5	0	6	4
	C - A12 South	10	3	0	0
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	5.41	2.8	6.1	A	1551	2326
B - Grundisburgh Rd West	0.35	8.49	0.5	2.3	A	191	286
C - A12 South	0.80	8.91	3.9	14.4	A	1333	1999
D - B1079 East	0.36	9.54	0.6	2.5	A	180	270

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1272	318	194	2592	0.491	1268	1045	0.0	1.0	2.712	A
B - Grundisburgh Rd West	156	39	1083	943	0.166	156	342	0.0	0.2	4.568	A
C - A12 South	1094	273	336	2113	0.517	1089	1119	0.0	1.1	3.502	A
D - B1079 East	148	37	1308	956	0.155	147	155	0.0	0.2	4.446	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1519	380	232	2564	0.593	1517	1250	1.0	1.4	3.434	A
B - Grundisburgh Rd West	187	47	1296	821	0.228	186	409	0.2	0.3	5.670	A
C - A12 South	1306	326	401	2066	0.632	1303	1339	1.1	1.7	4.703	A
D - B1079 East	176	44	1564	804	0.220	176	185	0.2	0.3	5.732	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1861	465	284	2526	0.737	1855	1526	1.4	2.7	5.326	A
B - Grundisburgh Rd West	229	57	1582	657	0.348	228	500	0.3	0.5	8.369	A
C - A12 South	1599	400	491	2003	0.798	1591	1637	1.7	3.8	8.566	A
D - B1079 East	216	54	1913	597	0.362	215	226	0.3	0.6	9.406	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1861	465	285	2525	0.737	1861	1534	2.7	2.8	5.413	A
B - Grundisburgh Rd West	229	57	1590	652	0.351	229	501	0.5	0.5	8.493	A
C - A12 South	1599	400	492	2002	0.799	1599	1642	3.8	3.9	8.914	A
D - B1079 East	216	54	1918	593	0.364	216	227	0.6	0.6	9.537	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1519	380	234	2563	0.593	1524	1261	2.8	1.5	3.486	A
B - Grundisburgh Rd West	187	47	1307	815	0.229	188	411	0.5	0.3	5.750	A
C - A12 South	1306	326	404	2065	0.632	1314	1346	3.9	1.7	4.852	A
D - B1079 East	176	44	1572	799	0.221	178	187	0.6	0.3	5.801	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1272	318	195	2591	0.491	1274	1051	1.5	1.0	2.737	A
B - Grundisburgh Rd West	156	39	1090	939	0.167	157	344	0.3	0.2	4.607	A
C - A12 South	1094	273	337	2112	0.518	1096	1125	1.7	1.1	3.555	A
D - B1079 East	148	37	1314	952	0.155	148	156	0.3	0.2	4.478	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	1.06	0.55	1.00	1.40	1.45			N/A	N/A
D - B1079 East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.44	0.04	0.44	3.75	6.13			N/A	N/A
B - Grundisburgh Rd West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - A12 South	1.69	0.04	0.44	4.51	7.49			N/A	N/A
D - B1079 East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.74	0.03	0.27	2.74	2.74			N/A	N/A
B - Grundisburgh Rd West	0.53	0.03	0.26	0.53	0.53			N/A	N/A
C - A12 South	3.79	0.03	0.29	3.79	14.44			N/A	N/A
D - B1079 East	0.56	0.03	0.26	0.56	0.56			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.77	0.03	0.26	2.77	2.77			N/A	N/A
B - Grundisburgh Rd West	0.53	0.03	0.32	1.03	2.34			N/A	N/A
C - A12 South	3.88	0.03	0.27	3.88	4.48			N/A	N/A
D - B1079 East	0.57	0.03	0.32	1.17	2.50			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.47	0.11	1.19	2.75	3.60			N/A	N/A
B - Grundisburgh Rd West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.75	0.06	0.89	4.22	6.17			N/A	N/A
D - B1079 East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.05	0.60	1.96	2.87			N/A	N/A
B - Grundisburgh Rd West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	1.08	0.04	0.39	2.73	4.67			N/A	N/A
D - B1079 East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	40.59	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1806	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	471	100.000
C - A12 South		ONE HOUR	✓	1653	100.000
D - B1079 East		ONE HOUR	✓	401	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	386	1318	85
	B - Grundisburgh Rd West	69	0	196	206
	C - A12 South	1218	161	1	273
	D - B1079 East	165	82	154	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	9	1
	B - Grundisburgh Rd West	14	0	4	0
	C - A12 South	10	3	0	3
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	18.93	9.9	52.5	C	1657	2486
B - Grundisburgh Rd West	0.98	83.77	11.8	47.7	F	432	648
C - A12 South	0.98	44.10	21.6	96.2	E	1517	2275
D - B1079 East	0.94	76.02	8.9	39.4	F	368	552

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1360	340	506	2324	0.585	1354	1099	0.0	1.4	3.690	A
B - Grundisburgh Rd West	355	89	1253	858	0.413	352	471	0.0	0.7	7.068	A
C - A12 South	1244	311	486	2014	0.618	1238	1251	0.0	1.6	4.601	A
D - B1079 East	302	75	1437	870	0.347	300	422	0.0	0.5	6.295	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1623	406	604	2254	0.720	1619	1314	1.4	2.5	5.632	A
B - Grundisburgh Rd West	423	106	1498	717	0.590	421	563	0.7	1.4	11.992	B
C - A12 South	1486	371	581	1947	0.763	1480	1496	1.6	3.1	7.613	A
D - B1079 East	361	90	1719	699	0.516	358	505	0.5	1.0	10.503	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1988	497	714	2175	0.914	1963	1565	2.5	8.8	15.414	C
B - Grundisburgh Rd West	518	130	1786	550	0.942	493	678	1.4	7.8	49.291	E
C - A12 South	1820	455	696	1865	0.976	1767	1801	3.1	16.2	28.013	D
D - B1079 East	442	110	2077	482	0.916	420	600	1.0	6.4	47.832	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1988	497	727	2166	0.918	1984	1594	8.8	9.9	18.930	C
B - Grundisburgh Rd West	518	130	1818	532	0.975	503	687	7.8	11.8	83.771	F
C - A12 South	1820	455	707	1857	0.980	1798	1825	16.2	21.6	44.102	E
D - B1079 East	442	110	2101	467	0.945	431	610	6.4	8.9	76.018	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1623	406	654	2218	0.732	1652	1392	9.9	2.8	6.659	A
B - Grundisburgh Rd West	423	106	1582	668	0.633	463	585	11.8	1.8	20.777	C
C - A12 South	1486	371	609	1927	0.771	1558	1550	21.6	3.5	11.605	B
D - B1079 East	361	90	1768	670	0.538	391	538	8.9	1.2	14.339	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1360	340	514	2318	0.586	1365	1112	2.8	1.4	3.800	A
B - Grundisburgh Rd West	355	89	1267	850	0.417	359	476	1.8	0.7	7.392	A
C - A12 South	1244	311	491	2010	0.619	1252	1264	3.5	1.6	4.791	A
D - B1079 East	302	75	1451	862	0.350	305	428	1.2	0.5	6.492	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.40	0.53	1.29	1.85	2.02			N/A	N/A
B - Grundisburgh Rd West	0.69	0.26	0.95	1.39	1.44			N/A	N/A
C - A12 South	1.59	0.30	1.41	2.53	2.97			N/A	N/A
D - B1079 East	0.53	0.53	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.52	0.04	0.41	6.87	12.59			N/A	N/A
B - Grundisburgh Rd West	1.40	0.05	0.47	3.53	5.50			N/A	N/A
C - A12 South	3.12	0.04	0.45	8.71	15.27			N/A	N/A
D - B1079 East	1.04	0.04	0.44	2.51	3.88			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.81	0.04	0.44	24.03	47.77			N/A	N/A
B - Grundisburgh Rd West	7.83	0.11	2.79	21.00	30.41			N/A	N/A
C - A12 South	16.22	0.15	6.02	44.46	64.57			N/A	N/A
D - B1079 East	6.38	0.08	1.64	17.67	26.52			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.87	0.03	0.34	17.82	52.48			N/A	N/A
B - Grundisburgh Rd West	11.81	0.12	3.99	32.55	47.71			N/A	N/A
C - A12 South	21.59	0.10	5.11	62.52	96.20			N/A	N/A
D - B1079 East	8.93	0.08	1.83	25.51	39.39			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.80	0.05	0.47	7.80	13.10			N/A	N/A
B - Grundisburgh Rd West	1.81	0.04	0.40	4.84	8.80			N/A	N/A
C - A12 South	3.52	0.04	0.42	9.69	17.95			N/A	N/A
D - B1079 East	1.20	0.04	0.36	2.96	5.79			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.03	0.32	2.67	7.40			N/A	N/A
B - Grundisburgh Rd West	0.73	0.03	0.28	0.73	2.56			N/A	N/A
C - A12 South	1.65	0.03	0.30	1.67	7.48			N/A	N/A
D - B1079 East	0.55	0.03	0.28	0.55	1.91			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	13.61	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1616	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	409	100.000
C - A12 South		ONE HOUR	✓	1583	100.000
D - B1079 East		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	243	1242	118
	B - Grundisburgh Rd West	97	1	161	150
	C - A12 South	1293	146	3	141
	D - B1079 East	185	110	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	7	2
	B - Grundisburgh Rd West	4	0	4	2
	C - A12 South	7	5	0	1
	D - B1079 East	2	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.54	3.2	6.7	A	1483	2225
B - Grundisburgh Rd West	0.80	30.75	3.6	19.4	D	375	563
C - A12 South	0.89	16.15	7.5	38.2	C	1453	2179
D - B1079 East	0.64	15.59	1.7	7.0	C	336	504

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1217	304	342	2443	0.498	1213	1190	0.0	1.0	2.916	A
B - Grundisburgh Rd West	308	77	1226	890	0.346	306	375	0.0	0.5	6.136	A
C - A12 South	1192	298	414	2102	0.567	1187	1108	0.0	1.3	3.912	A
D - B1079 East	276	69	1248	988	0.279	274	307	0.0	0.4	5.036	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1453	363	409	2396	0.607	1451	1424	1.0	1.5	3.804	A
B - Grundisburgh Rd West	368	92	1466	753	0.488	366	448	0.5	0.9	9.266	A
C - A12 South	1423	356	495	2042	0.697	1419	1326	1.3	2.3	5.746	A
D - B1079 East	329	82	1493	839	0.393	328	367	0.4	0.6	7.037	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1780	445	494	2335	0.762	1773	1729	1.5	3.1	6.340	A
B - Grundisburgh Rd West	450	113	1782	573	0.786	441	546	0.9	3.2	25.770	D
C - A12 South	1743	436	604	1962	0.888	1724	1618	2.3	7.0	14.128	B
D - B1079 East	403	101	1822	639	0.632	399	446	0.6	1.6	14.802	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1780	445	501	2330	0.764	1780	1746	3.1	3.2	6.537	A
B - Grundisburgh Rd West	450	113	1799	563	0.800	449	550	3.2	3.6	30.746	D
C - A12 South	1743	436	608	1959	0.890	1741	1626	7.0	7.5	16.148	C
D - B1079 East	403	101	1831	633	0.637	403	450	1.6	1.7	15.593	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1453	363	420	2387	0.609	1460	1449	3.2	1.6	3.908	A
B - Grundisburgh Rd West	368	92	1491	739	0.498	378	453	3.6	1.0	10.257	B
C - A12 South	1423	356	501	2038	0.698	1443	1338	7.5	2.4	6.255	A
D - B1079 East	329	82	1506	831	0.396	334	375	1.7	0.7	7.295	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1217	304	346	2441	0.499	1219	1200	1.6	1.0	2.952	A
B - Grundisburgh Rd West	308	77	1236	885	0.348	310	377	1.0	0.5	6.283	A
C - A12 South	1192	298	417	2099	0.568	1196	1115	2.4	1.3	4.004	A
D - B1079 East	276	69	1255	983	0.281	277	310	0.7	0.4	5.103	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.52	0.52	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.30	0.56	1.20	1.67	1.85			N/A	N/A
D - B1079 East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.43	3.98	6.67			N/A	N/A
B - Grundisburgh Rd West	0.94	0.05	0.63	1.86	2.66			N/A	N/A
C - A12 South	2.25	0.04	0.42	6.15	10.87			N/A	N/A
D - B1079 East	0.64	0.06	0.68	1.36	1.45			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.12	0.03	0.28	3.12	6.25			N/A	N/A
B - Grundisburgh Rd West	3.24	0.04	0.36	7.75	17.34			N/A	N/A
C - A12 South	6.96	0.04	0.38	16.74	38.17			N/A	N/A
D - B1079 East	1.64	0.03	0.28	1.64	4.88			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.18	0.03	0.27	3.18	3.18			N/A	N/A
B - Grundisburgh Rd West	3.64	0.03	0.33	6.90	19.36			N/A	N/A
C - A12 South	7.45	0.03	0.31	7.92	34.38			N/A	N/A
D - B1079 East	1.71	0.03	0.29	1.71	7.04			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.57	0.08	1.12	3.28	4.48			N/A	N/A
B - Grundisburgh Rd West	1.01	0.04	0.43	2.45	3.84			N/A	N/A
C - A12 South	2.36	0.05	0.46	6.52	10.92			N/A	N/A
D - B1079 East	0.67	0.06	0.60	1.26	1.26			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.05	0.46	2.32	3.56			N/A	N/A
B - Grundisburgh Rd West	0.54	0.03	0.31	1.48	2.48			N/A	N/A
C - A12 South	1.33	0.03	0.33	2.79	6.82			N/A	N/A
D - B1079 East	0.39	0.03	0.34	1.22	1.43			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	8.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1567	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	340	100.000
C - A12 South		ONE HOUR	✓	1584	100.000
D - B1079 East		ONE HOUR	✓	325	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	225	1250	87
	B - Grundisburgh Rd West	84	0	115	141
	C - A12 South	1358	153	0	74
	D - B1079 East	128	114	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	2
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	3	1	0	4
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.48	2.1	4.4	A	1438	2157
B - Grundisburgh Rd West	0.57	12.75	1.3	5.2	B	312	468
C - A12 South	0.83	10.15	4.8	21.4	B	1454	2181
D - B1079 East	0.49	9.70	1.0	4.1	A	299	448

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1180	295	247	2613	0.451	1176	1181	0.0	0.8	2.501	A
B - Grundisburgh Rd West	256	64	1173	969	0.264	254	368	0.0	0.4	5.027	A
C - A12 South	1193	298	353	2218	0.538	1188	1088	0.0	1.2	3.480	A
D - B1079 East	245	61	1197	1060	0.231	244	226	0.0	0.3	4.406	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1409	352	296	2577	0.547	1407	1413	0.8	1.2	3.072	A
B - Grundisburgh Rd West	305	76	1404	838	0.365	305	441	0.4	0.6	6.742	A
C - A12 South	1424	356	423	2167	0.657	1421	1301	1.2	1.9	4.808	A
D - B1079 East	293	73	1432	921	0.318	292	271	0.3	0.5	5.718	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1725	431	361	2530	0.682	1722	1723	1.2	2.1	4.433	A
B - Grundisburgh Rd West	374	94	1712	662	0.565	371	538	0.6	1.3	12.274	B
C - A12 South	1745	436	517	2099	0.831	1734	1591	1.9	4.6	9.583	A
D - B1079 East	358	90	1752	732	0.490	356	331	0.5	0.9	9.538	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1725	431	363	2528	0.682	1725	1733	2.1	2.1	4.483	A
B - Grundisburgh Rd West	374	94	1722	656	0.570	374	540	1.3	1.3	12.745	B
C - A12 South	1745	436	519	2097	0.832	1744	1596	4.6	4.8	10.145	B
D - B1079 East	358	90	1756	729	0.491	358	332	0.9	1.0	9.696	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1409	352	299	2575	0.547	1412	1427	2.1	1.2	3.105	A
B - Grundisburgh Rd West	305	76	1418	830	0.368	308	444	1.3	0.6	6.942	A
C - A12 South	1424	356	425	2165	0.658	1436	1307	4.8	2.0	5.010	A
D - B1079 East	293	73	1438	917	0.319	295	273	1.0	0.5	5.798	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1180	295	249	2612	0.452	1181	1189	1.2	0.8	2.519	A
B - Grundisburgh Rd West	256	64	1181	965	0.265	257	370	0.6	0.4	5.093	A
C - A12 South	1193	298	355	2216	0.538	1196	1093	2.0	1.2	3.540	A
D - B1079 East	245	61	1202	1057	0.232	246	228	0.5	0.3	4.445	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.15	0.55	1.04	1.28	1.28			N/A	N/A
D - B1079 East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.05	0.48	2.87	4.43			N/A	N/A
B - Grundisburgh Rd West	0.57	0.06	0.67	1.34	1.42			N/A	N/A
C - A12 South	1.89	0.04	0.42	5.08	8.82			N/A	N/A
D - B1079 East	0.46	0.00	0.00	0.46	0.46			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.11	0.03	0.26	2.11	2.11			N/A	N/A
B - Grundisburgh Rd West	1.26	0.03	0.27	1.26	1.26			N/A	N/A
C - A12 South	4.64	0.03	0.31	4.90	21.37			N/A	N/A
D - B1079 East	0.94	0.03	0.26	0.94	0.94			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.03	0.26	2.13	2.13			N/A	N/A
B - Grundisburgh Rd West	1.30	0.03	0.29	1.30	5.21			N/A	N/A
C - A12 South	4.79	0.03	0.28	4.79	9.45			N/A	N/A
D - B1079 East	0.95	0.03	0.29	1.32	4.13			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.21	1.14	1.80	2.06			N/A	N/A
B - Grundisburgh Rd West	0.59	0.06	0.63	1.33	1.42			N/A	N/A
C - A12 South	1.95	0.05	0.73	5.03	7.71			N/A	N/A
D - B1079 East	0.47	0.04	0.40	1.23	1.37			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.07	0.77	1.31	1.76			N/A	N/A
B - Grundisburgh Rd West	0.36	0.03	0.33	1.09	1.30			N/A	N/A
C - A12 South	1.18	0.04	0.36	2.94	5.57			N/A	N/A
D - B1079 East	0.30	0.03	0.26	0.47	0.50			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	2.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	87	100.000
C - A12 South		ONE HOUR	✓	823	100.000
D - B1079 East		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	73	741	14
	B - Grundisburgh Rd West	33	0	40	15
	C - A12 South	758	42	2	21
	D - B1079 East	25	19	39	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	0
	B - Grundisburgh Rd West	0	0	11	0
	C - A12 South	10	2	0	0
	D - B1079 East	6	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	2.06	0.5	2.4	A	765	1147
B - Grundisburgh Rd West	0.09	3.77	0.1	0.5	A	80	120
C - A12 South	0.40	2.68	0.7	2.6	A	755	1133
D - B1079 East	0.08	3.55	0.1	0.5	A	76	114

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	627	157	58	2688	0.233	626	616	0.0	0.3	1.746	A
B - Grundisburgh Rd West	66	16	609	1214	0.054	65	101	0.0	0.1	3.133	A
C - A12 South	620	155	91	2279	0.272	618	618	0.0	0.4	2.165	A
D - B1079 East	62	16	647	1275	0.049	62	37	0.0	0.1	2.967	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	749	187	70	2679	0.280	749	737	0.3	0.4	1.864	A
B - Grundisburgh Rd West	78	20	729	1145	0.068	78	120	0.1	0.1	3.373	A
C - A12 South	740	185	109	2267	0.326	739	739	0.4	0.5	2.357	A
D - B1079 East	74	19	774	1204	0.062	74	44	0.1	0.1	3.187	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	917	229	86	2667	0.344	917	903	0.4	0.5	2.056	A
B - Grundisburgh Rd West	96	24	892	1051	0.091	96	147	0.1	0.1	3.769	A
C - A12 South	906	227	134	2249	0.403	905	905	0.5	0.7	2.677	A
D - B1079 East	91	23	948	1106	0.082	91	54	0.1	0.1	3.547	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	917	229	86	2667	0.344	917	903	0.5	0.5	2.056	A
B - Grundisburgh Rd West	96	24	893	1050	0.091	96	147	0.1	0.1	3.771	A
C - A12 South	906	227	134	2249	0.403	906	906	0.7	0.7	2.679	A
D - B1079 East	91	23	949	1105	0.082	91	54	0.1	0.1	3.548	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	749	187	70	2679	0.280	750	738	0.5	0.4	1.865	A
B - Grundisburgh Rd West	78	20	730	1144	0.069	79	120	0.1	0.1	3.376	A
C - A12 South	740	185	110	2267	0.326	741	740	0.7	0.5	2.360	A
D - B1079 East	74	19	775	1203	0.062	75	44	0.1	0.1	3.189	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	627	157	59	2687	0.233	628	618	0.4	0.3	1.747	A
B - Grundisburgh Rd West	66	16	611	1213	0.054	66	101	0.1	0.1	3.137	A
C - A12 South	620	155	92	2279	0.272	620	620	0.5	0.4	2.172	A
D - B1079 East	62	16	649	1274	0.049	62	37	0.1	0.1	2.972	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Grundisburgh Rd West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.48	0.00	0.00	0.48	0.48			N/A	N/A
D - B1079 East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.25	0.52	0.52			N/A	N/A
B - Grundisburgh Rd West	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.67	0.03	0.25	0.67	0.67			N/A	N/A
D - B1079 East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.31	1.44	2.40			N/A	N/A
B - Grundisburgh Rd West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A12 South	0.67	0.03	0.28	0.83	2.63			N/A	N/A
D - B1079 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Grundisburgh Rd West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.49	0.00	0.00	0.49	0.49			N/A	N/A
D - B1079 East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - B1079 East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	11.24	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1699	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	217	100.000
C - A12 South		ONE HOUR	✓	1587	100.000
D - B1079 East		ONE HOUR	✓	198	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	301	1341	50
	B - Grundisburgh Rd West	51	0	101	65
	C - A12 South	1399	94	2	92
	D - B1079 East	82	61	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	1
	B - Grundisburgh Rd West	4	0	6	4
	C - A12 South	13	3	0	0
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	5.49	2.8	6.3	A	1559	2338
B - Grundisburgh Rd West	0.44	11.81	0.8	3.8	B	199	298
C - A12 South	0.90	17.13	7.9	40.3	C	1456	2184
D - B1079 East	0.37	9.75	0.6	2.6	A	182	273

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1279	320	195	2592	0.493	1275	1153	0.0	1.0	2.725	A
B - Grundisburgh Rd West	163	41	1185	869	0.188	162	342	0.0	0.2	5.087	A
C - A12 South	1194	299	339	2059	0.580	1189	1125	0.0	1.4	4.111	A
D - B1079 East	149	37	1315	952	0.157	149	155	0.0	0.2	4.477	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1527	382	233	2564	0.596	1525	1379	1.0	1.5	3.460	A
B - Grundisburgh Rd West	195	49	1418	732	0.266	194	410	0.2	0.4	6.688	A
C - A12 South	1426	357	405	2013	0.708	1422	1346	1.4	2.4	6.050	A
D - B1079 East	178	45	1573	799	0.223	178	185	0.2	0.3	5.794	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1871	468	284	2527	0.740	1865	1675	1.5	2.8	5.398	A
B - Grundisburgh Rd West	239	60	1722	553	0.431	237	500	0.4	0.7	11.330	B
C - A12 South	1747	437	495	1951	0.895	1727	1646	2.4	7.4	14.896	B
D - B1079 East	218	55	1924	591	0.370	217	226	0.3	0.6	9.607	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1871	468	286	2525	0.741	1870	1692	2.8	2.8	5.492	A
B - Grundisburgh Rd West	239	60	1739	543	0.439	239	502	0.7	0.8	11.811	B
C - A12 South	1747	437	497	1950	0.896	1745	1651	7.4	7.9	17.133	C
D - B1079 East	218	55	1929	587	0.372	218	227	0.6	0.6	9.752	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1527	382	236	2562	0.596	1533	1403	2.8	1.5	3.514	A
B - Grundisburgh Rd West	195	49	1443	718	0.272	196	413	0.8	0.4	6.928	A
C - A12 South	1426	357	408	2012	0.709	1448	1353	7.9	2.5	6.620	A
D - B1079 East	178	45	1581	794	0.225	179	187	0.6	0.3	5.869	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1279	320	196	2591	0.494	1281	1162	1.5	1.0	2.754	A
B - Grundisburgh Rd West	163	41	1195	863	0.189	164	344	0.4	0.2	5.152	A
C - A12 South	1194	299	340	2058	0.580	1199	1131	2.5	1.4	4.210	A
D - B1079 East	149	37	1322	948	0.157	150	156	0.3	0.2	4.512	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.37	0.56	1.26	1.76	1.91			N/A	N/A
D - B1079 East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.46	0.04	0.43	3.81	6.27			N/A	N/A
B - Grundisburgh Rd West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	2.38	0.04	0.43	6.52	11.43			N/A	N/A
D - B1079 East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.79	0.03	0.27	2.79	2.93			N/A	N/A
B - Grundisburgh Rd West	0.74	0.03	0.26	0.74	0.74			N/A	N/A
C - A12 South	7.38	0.04	0.39	18.62	40.26			N/A	N/A
D - B1079 East	0.58	0.03	0.26	0.58	0.58			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.82	0.03	0.26	2.82	2.82			N/A	N/A
B - Grundisburgh Rd West	0.77	0.03	0.31	1.39	3.78			N/A	N/A
C - A12 South	7.91	0.03	0.32	9.95	38.18			N/A	N/A
D - B1079 East	0.59	0.03	0.32	1.21	2.62			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.49	0.11	1.19	2.81	3.71			N/A	N/A
B - Grundisburgh Rd West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	2.49	0.05	0.45	6.89	11.74			N/A	N/A
D - B1079 East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.05	0.57	2.00	2.94			N/A	N/A
B - Grundisburgh Rd West	0.23	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.40	0.03	0.32	2.88	7.23			N/A	N/A
D - B1079 East	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	57.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1828	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	488	100.000
C - A12 South		ONE HOUR	✓	1635	100.000
D - B1079 East		ONE HOUR	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	389	1335	87
	B - Grundisburgh Rd West	83	0	184	221
	C - A12 South	1262	114	1	258
	D - B1079 East	166	82	154	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	10	1
	B - Grundisburgh Rd West	10	0	4	0
	C - A12 South	15	4	0	3
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	19.71	10.4	56.3	C	1677	2516
B - Grundisburgh Rd West	1.09	172.62	27.9	65.5	F	448	672
C - A12 South	1.00	60.93	31.0	108.2	F	1500	2250
D - B1079 East	0.96	85.12	10.1	41.9	F	369	553

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1376	344	496	2314	0.595	1370	1143	0.0	1.5	3.791	A
B - Grundisburgh Rd West	367	92	1275	825	0.445	364	438	0.0	0.8	7.758	A
C - A12 South	1231	308	489	1944	0.633	1224	1255	0.0	1.7	4.953	A
D - B1079 East	303	76	1443	860	0.352	301	423	0.0	0.5	6.411	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1643	411	593	2246	0.732	1638	1366	1.5	2.7	5.879	A
B - Grundisburgh Rd West	439	110	1524	676	0.648	435	524	0.8	1.8	14.660	B
C - A12 South	1470	367	585	1879	0.782	1463	1500	1.7	3.4	8.516	A
D - B1079 East	361	90	1725	688	0.526	359	506	0.5	1.1	10.888	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2013	503	676	2187	0.920	1986	1608	2.7	9.4	16.135	C
B - Grundisburgh Rd West	537	134	1800	511	1.051	484	628	1.8	15.0	81.509	F
C - A12 South	1800	450	698	1801	1.000	1730	1795	3.4	21.0	34.710	D
D - B1079 East	443	111	2075	474	0.934	419	587	1.1	7.1	51.942	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2013	503	682	2183	0.922	2008	1636	9.4	10.4	19.715	C
B - Grundisburgh Rd West	537	134	1833	492	1.093	485	638	15.0	27.9	172.622	F
C - A12 South	1800	450	711	1792	1.004	1760	1817	21.0	31.0	60.932	F
D - B1079 East	443	111	2097	460	0.962	430	593	7.1	10.1	85.119	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1643	411	697	2172	0.756	1672	1487	10.4	3.2	7.582	A
B - Grundisburgh Rd West	439	110	1646	603	0.727	538	547	27.9	3.1	82.328	F
C - A12 South	1470	367	615	1858	0.791	1578	1578	31.0	4.0	17.596	C
D - B1079 East	361	90	1796	645	0.560	397	572	10.1	1.3	16.497	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1376	344	509	2305	0.597	1383	1159	3.2	1.5	3.932	A
B - Grundisburgh Rd West	367	92	1292	815	0.451	376	443	3.1	0.8	8.373	A
C - A12 South	1231	308	495	1940	0.634	1240	1271	4.0	1.8	5.207	A
D - B1079 East	303	76	1460	850	0.356	306	432	1.3	0.6	6.654	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.53	1.34	1.92	2.36			N/A	N/A
B - Grundisburgh Rd West	0.79	0.10	0.85	1.19	1.19			N/A	N/A
C - A12 South	1.70	0.23	1.45	2.84	3.58			N/A	N/A
D - B1079 East	0.54	0.54	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.66	0.04	0.42	7.32	13.27			N/A	N/A
B - Grundisburgh Rd West	1.76	0.05	0.46	4.71	7.69			N/A	N/A
C - A12 South	3.45	0.05	0.47	9.70	16.66			N/A	N/A
D - B1079 East	1.08	0.04	0.44	2.64	4.13			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.38	0.05	0.46	26.22	50.12			N/A	N/A
B - Grundisburgh Rd West	14.96	1.18	11.25	30.88	38.82			N/A	N/A
C - A12 South	21.02	0.44	12.03	51.82	70.14			N/A	N/A
D - B1079 East	7.05	0.10	2.41	18.95	27.55			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.40	0.04	0.35	20.35	56.28			N/A	N/A
B - Grundisburgh Rd West	27.92	4.55	23.02	53.67	65.53			N/A	N/A
C - A12 South	31.01	0.43	16.65	78.85	108.24			N/A	N/A
D - B1079 East	10.13	0.10	3.03	28.19	41.86			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.20	0.05	0.61	8.94	14.56			N/A	N/A
B - Grundisburgh Rd West	3.12	0.05	0.47	8.76	14.92			N/A	N/A
C - A12 South	4.02	0.04	0.42	11.08	20.70			N/A	N/A
D - B1079 East	1.32	0.04	0.36	3.33	6.41			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.03	0.31	2.69	7.71			N/A	N/A
B - Grundisburgh Rd West	0.83	0.03	0.27	0.83	1.13			N/A	N/A
C - A12 South	1.76	0.03	0.29	1.76	7.49			N/A	N/A
D - B1079 East	0.56	0.03	0.28	0.56	1.78			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	18.14	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1695	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	409	100.000
C - A12 South		ONE HOUR	✓	1596	100.000
D - B1079 East		ONE HOUR	✓	368	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	250	1312	120
	B - Grundisburgh Rd West	99	1	159	150
	C - A12 South	1330	148	3	115
	D - B1079 East	186	114	69	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	9	2
	B - Grundisburgh Rd West	4	0	4	2
	C - A12 South	10	5	0	1
	D - B1079 East	2	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	7.91	4.0	13.3	A	1556	2334
B - Grundisburgh Rd West	0.85	40.45	4.7	25.6	E	375	563
C - A12 South	0.92	22.73	10.4	57.6	C	1465	2197
D - B1079 East	0.71	21.90	2.4	11.3	C	338	507

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1276	319	321	2425	0.526	1272	1220	0.0	1.1	3.111	A
B - Grundisburgh Rd West	308	77	1234	868	0.355	306	384	0.0	0.5	6.378	A
C - A12 South	1202	300	423	2044	0.588	1196	1157	0.0	1.4	4.220	A
D - B1079 East	277	69	1304	944	0.294	276	289	0.0	0.4	5.378	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1524	381	384	2381	0.640	1522	1459	1.1	1.8	4.177	A
B - Grundisburgh Rd West	368	92	1477	726	0.506	366	460	0.5	1.0	9.935	A
C - A12 South	1435	359	506	1984	0.723	1430	1384	1.4	2.5	6.447	A
D - B1079 East	331	83	1560	786	0.421	330	346	0.4	0.7	7.877	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1867	467	461	2326	0.802	1858	1764	1.8	3.9	7.555	A
B - Grundisburgh Rd West	450	113	1787	545	0.827	439	559	1.0	4.0	31.038	D
C - A12 South	1757	439	615	1906	0.922	1730	1686	2.5	9.3	18.222	C
D - B1079 East	406	101	1901	575	0.706	400	418	0.7	2.2	19.899	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1867	467	469	2320	0.804	1866	1788	3.9	4.0	7.908	A
B - Grundisburgh Rd West	450	113	1810	531	0.848	447	564	4.0	4.7	40.452	E
C - A12 South	1757	439	621	1902	0.924	1753	1697	9.3	10.4	22.729	C
D - B1079 East	406	101	1912	568	0.714	405	423	2.2	2.4	21.903	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1524	381	399	2370	0.643	1533	1496	4.0	1.8	4.343	A
B - Grundisburgh Rd West	368	92	1513	705	0.521	382	467	4.7	1.1	11.617	B
C - A12 South	1435	359	514	1978	0.725	1466	1400	10.4	2.7	7.428	A
D - B1079 East	331	83	1577	775	0.427	338	355	2.4	0.8	8.341	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1276	319	325	2422	0.527	1279	1231	1.8	1.1	3.156	A
B - Grundisburgh Rd West	308	77	1246	861	0.357	310	387	1.1	0.6	6.554	A
C - A12 South	1202	300	426	2041	0.589	1207	1165	2.7	1.4	4.341	A
D - B1079 East	277	69	1312	938	0.296	279	292	0.8	0.4	5.469	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.41	0.54	1.31	1.86	2.03			N/A	N/A
D - B1079 East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.76	0.04	0.42	4.71	8.15			N/A	N/A
B - Grundisburgh Rd West	1.00	0.05	0.56	2.12	3.09			N/A	N/A
C - A12 South	2.55	0.04	0.43	7.00	12.42			N/A	N/A
D - B1079 East	0.72	0.06	0.64	1.49	1.54			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.90	0.03	0.29	3.90	13.32			N/A	N/A
B - Grundisburgh Rd West	3.96	0.04	0.42	10.84	20.50			N/A	N/A
C - A12 South	9.30	0.05	0.49	26.61	48.52			N/A	N/A
D - B1079 East	2.23	0.03	0.31	2.85	10.74			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.02	0.03	0.27	4.02	4.02			N/A	N/A
B - Grundisburgh Rd West	4.73	0.04	0.38	11.72	25.58			N/A	N/A
C - A12 South	10.44	0.04	0.37	23.17	57.57			N/A	N/A
D - B1079 East	2.38	0.03	0.30	2.86	11.29			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.07	1.00	4.36	6.26			N/A	N/A
B - Grundisburgh Rd West	1.12	0.04	0.41	2.81	4.70			N/A	N/A
C - A12 South	2.71	0.04	0.43	7.51	13.28			N/A	N/A
D - B1079 East	0.76	0.05	0.48	1.49	2.00			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.04	0.40	2.83	4.76			N/A	N/A
B - Grundisburgh Rd West	0.56	0.03	0.30	1.36	2.64			N/A	N/A
C - A12 South	1.45	0.03	0.31	2.49	7.40			N/A	N/A
D - B1079 East	0.42	0.03	0.33	1.35	1.54			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	8.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1602	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	344	100.000
C - A12 South		ONE HOUR	✓	1561	100.000
D - B1079 East		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	225	1283	89
	B - Grundisburgh Rd West	94	0	104	146
	C - A12 South	1343	148	0	71
	D - B1079 East	130	120	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	2
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	4	1	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	5.01	2.4	5.2	A	1470	2205
B - Grundisburgh Rd West	0.58	12.87	1.3	5.3	B	315	473
C - A12 South	0.83	10.13	4.7	20.9	B	1433	2149
D - B1079 East	0.52	10.73	1.1	4.5	B	298	447

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1206	302	240	2563	0.471	1203	1178	0.0	0.9	2.639	A
B - Grundisburgh Rd West	259	65	1161	970	0.267	257	369	0.0	0.4	5.040	A
C - A12 South	1176	294	359	2194	0.536	1171	1097	0.0	1.1	3.502	A
D - B1079 East	244	61	1213	1034	0.236	243	229	0.0	0.3	4.543	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1440	360	288	2529	0.569	1439	1410	0.9	1.3	3.294	A
B - Grundisburgh Rd West	309	77	1389	839	0.368	308	441	0.4	0.6	6.771	A
C - A12 South	1404	351	430	2143	0.655	1401	1313	1.1	1.9	4.829	A
D - B1079 East	292	73	1452	891	0.328	291	274	0.3	0.5	5.993	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1764	441	351	2484	0.710	1760	1719	1.3	2.4	4.940	A
B - Grundisburgh Rd West	379	95	1694	663	0.571	376	539	0.6	1.3	12.388	B
C - A12 South	1719	430	525	2074	0.829	1708	1605	1.9	4.6	9.539	A
D - B1079 East	357	89	1775	695	0.514	355	335	0.5	1.0	10.509	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1764	441	353	2482	0.711	1764	1730	2.4	2.4	5.009	A
B - Grundisburgh Rd West	379	95	1704	658	0.576	378	542	1.3	1.3	12.872	B
C - A12 South	1719	430	527	2073	0.830	1719	1610	4.6	4.7	10.128	B
D - B1079 East	357	89	1780	693	0.516	357	337	1.0	1.1	10.730	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1440	360	291	2527	0.570	1445	1424	2.4	1.3	3.341	A
B - Grundisburgh Rd West	309	77	1403	831	0.372	312	445	1.3	0.6	6.975	A
C - A12 South	1404	351	433	2141	0.656	1415	1320	4.7	1.9	5.031	A
D - B1079 East	292	73	1459	887	0.329	294	277	1.1	0.5	6.098	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1206	302	242	2562	0.471	1208	1186	1.3	0.9	2.664	A
B - Grundisburgh Rd West	259	65	1169	966	0.268	260	371	0.6	0.4	5.105	A
C - A12 South	1176	294	361	2193	0.536	1179	1103	1.9	1.2	3.562	A
D - B1079 East	244	61	1219	1031	0.237	245	231	0.5	0.3	4.585	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.14	0.55	1.03	1.14	1.14			N/A	N/A
D - B1079 East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.05	0.46	3.31	5.22			N/A	N/A
B - Grundisburgh Rd West	0.58	0.06	0.68	1.34	1.42			N/A	N/A
C - A12 South	1.87	0.04	0.42	5.02	8.70			N/A	N/A
D - B1079 East	0.48	0.04	0.42	1.25	1.38			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.41	0.03	0.27	2.41	2.41			N/A	N/A
B - Grundisburgh Rd West	1.29	0.03	0.27	1.29	1.47			N/A	N/A
C - A12 South	4.56	0.03	0.31	4.71	20.87			N/A	N/A
D - B1079 East	1.03	0.03	0.26	1.03	1.03			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.43	0.03	0.26	2.43	2.43			N/A	N/A
B - Grundisburgh Rd West	1.33	0.03	0.29	1.33	5.29			N/A	N/A
C - A12 South	4.71	0.03	0.28	4.71	9.12			N/A	N/A
D - B1079 East	1.05	0.03	0.29	1.34	4.51			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.14	1.17	2.19	2.82			N/A	N/A
B - Grundisburgh Rd West	0.60	0.06	0.64	1.34	1.43			N/A	N/A
C - A12 South	1.93	0.06	0.73	4.96	7.59			N/A	N/A
D - B1079 East	0.50	0.05	0.45	1.28	1.39			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.06	0.70	1.69	2.25			N/A	N/A
B - Grundisburgh Rd West	0.37	0.03	0.33	1.11	1.31			N/A	N/A
C - A12 South	1.17	0.04	0.37	2.92	5.50			N/A	N/A
D - B1079 East	0.31	0.03	0.28	0.50	0.97			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	2.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	911	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	94	100.000
C - A12 South		ONE HOUR	✓	764	100.000
D - B1079 East		ONE HOUR	✓	93	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	79	811	16
	B - Grundisburgh Rd West	35	0	43	17
	C - A12 South	590	49	2	123
	D - B1079 East	26	21	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	6	4
	B - Grundisburgh Rd West	1	0	8	3
	C - A12 South	10	0	0	0
	D - B1079 East	10	0	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.27	0.6	2.8	A	836	1254
B - Grundisburgh Rd West	0.09	3.60	0.1	0.5	A	86	130
C - A12 South	0.37	2.51	0.6	2.7	A	701	1052
D - B1079 East	0.10	3.78	0.1	0.5	A	85	128

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	686	171	139	2633	0.261	685	492	0.0	0.4	1.848	A
B - Grundisburgh Rd West	71	18	560	1253	0.057	71	112	0.0	0.1	3.045	A
C - A12 South	575	144	98	2306	0.249	574	678	0.0	0.3	2.078	A
D - B1079 East	70	17	707	1239	0.056	70	117	0.0	0.1	3.079	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	819	205	166	2613	0.314	819	589	0.4	0.5	2.006	A
B - Grundisburgh Rd West	85	21	670	1190	0.071	85	134	0.1	0.1	3.257	A
C - A12 South	687	172	117	2292	0.300	686	811	0.3	0.4	2.242	A
D - B1079 East	83	21	845	1161	0.072	83	139	0.1	0.1	3.340	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1003	251	203	2586	0.388	1003	721	0.5	0.6	2.272	A
B - Grundisburgh Rd West	104	26	821	1103	0.094	104	164	0.1	0.1	3.600	A
C - A12 South	841	210	144	2273	0.370	841	993	0.4	0.6	2.512	A
D - B1079 East	102	26	1035	1055	0.097	102	171	0.1	0.1	3.778	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1003	251	203	2586	0.388	1003	722	0.6	0.6	2.274	A
B - Grundisburgh Rd West	104	26	821	1103	0.094	104	164	0.1	0.1	3.601	A
C - A12 South	841	210	144	2273	0.370	841	994	0.6	0.6	2.514	A
D - B1079 East	102	26	1036	1054	0.097	102	171	0.1	0.1	3.780	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	819	205	166	2613	0.314	820	590	0.6	0.5	2.008	A
B - Grundisburgh Rd West	85	21	671	1189	0.071	85	134	0.1	0.1	3.261	A
C - A12 South	687	172	118	2292	0.300	687	812	0.6	0.4	2.246	A
D - B1079 East	83	21	846	1160	0.072	84	140	0.1	0.1	3.345	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	686	171	139	2632	0.261	686	494	0.5	0.4	1.849	A
B - Grundisburgh Rd West	71	18	562	1252	0.057	71	112	0.1	0.1	3.048	A
C - A12 South	575	144	99	2305	0.250	576	680	0.4	0.3	2.081	A
D - B1079 East	70	17	709	1237	0.056	70	117	0.1	0.1	3.082	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - B1079 East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Grundisburgh Rd West	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - B1079 East	0.08	0.03	0.25	0.46	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.03	0.25	0.63	0.63			N/A	N/A
B - Grundisburgh Rd West	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.59	0.03	0.25	0.59	0.59			N/A	N/A
D - B1079 East	0.11	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.03	0.29	1.12	2.75			N/A	N/A
B - Grundisburgh Rd West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A12 South	0.59	0.03	0.29	1.28	2.71			N/A	N/A
D - B1079 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Grundisburgh Rd West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - B1079 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - B1079 East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	13.18	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1615	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	244	100.000
C - A12 South		ONE HOUR	✓	1658	100.000
D - B1079 East		ONE HOUR	✓	240	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	308	1246	54
	B - Grundisburgh Rd West	56	0	120	68
	C - A12 South	1325	76	2	255
	D - B1079 East	86	81	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	5	6	0
	B - Grundisburgh Rd West	7	0	4	3
	C - A12 South	10	2	0	0
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	6.02	2.9	6.2	A	1482	2223
B - Grundisburgh Rd West	0.52	14.29	1.0	5.0	B	224	336
C - A12 South	0.92	20.31	9.7	52.4	C	1521	2282
D - B1079 East	0.42	9.83	0.7	3.5	A	220	331

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	333	2488	0.489	1212	1104	0.0	0.9	2.813	A
B - Grundisburgh Rd West	184	46	1255	853	0.215	182	349	0.0	0.3	5.359	A
C - A12 South	1248	312	362	2113	0.591	1242	1081	0.0	1.4	4.110	A
D - B1079 East	181	45	1263	982	0.184	180	282	0.0	0.2	4.487	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	399	2441	0.595	1450	1320	0.9	1.5	3.625	A
B - Grundisburgh Rd West	219	55	1501	713	0.307	218	418	0.3	0.4	7.271	A
C - A12 South	1490	373	433	2062	0.723	1486	1294	1.4	2.5	6.201	A
D - B1079 East	216	54	1511	834	0.259	216	337	0.2	0.3	5.814	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1778	445	484	2379	0.747	1772	1601	1.5	2.9	5.879	A
B - Grundisburgh Rd West	268	67	1819	532	0.505	266	510	0.4	1.0	13.436	B
C - A12 South	1825	456	529	1993	0.916	1800	1581	2.5	8.9	16.835	C
D - B1079 East	265	66	1847	635	0.417	263	410	0.3	0.7	9.655	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1778	445	489	2376	0.748	1778	1619	2.9	2.9	6.020	A
B - Grundisburgh Rd West	268	67	1840	520	0.516	268	512	1.0	1.0	14.291	B
C - A12 South	1825	456	531	1991	0.917	1822	1587	8.9	9.7	20.312	C
D - B1079 East	265	66	1853	631	0.419	265	414	0.7	0.7	9.825	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	406	2435	0.596	1458	1348	2.9	1.5	3.701	A
B - Grundisburgh Rd West	219	55	1533	695	0.315	221	421	1.0	0.5	7.642	A
C - A12 South	1490	373	436	2060	0.723	1518	1302	9.7	2.7	6.979	A
D - B1079 East	216	54	1520	829	0.261	217	344	0.7	0.4	5.903	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	336	2486	0.489	1218	1113	1.5	1.0	2.845	A
B - Grundisburgh Rd West	184	46	1265	847	0.217	184	351	0.5	0.3	5.439	A
C - A12 South	1248	312	364	2111	0.591	1253	1087	2.7	1.5	4.216	A
D - B1079 East	181	45	1270	978	0.185	181	284	0.4	0.2	4.525	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.43	0.55	1.32	1.86	2.03			N/A	N/A
D - B1079 East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.04	0.44	3.79	6.23			N/A	N/A
B - Grundisburgh Rd West	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C - A12 South	2.55	0.04	0.43	6.99	12.46			N/A	N/A
D - B1079 East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.89	0.03	0.27	2.89	4.23			N/A	N/A
B - Grundisburgh Rd West	0.99	0.03	0.26	0.99	0.99			N/A	N/A
C - A12 South	8.86	0.05	0.46	24.73	47.25			N/A	N/A
D - B1079 East	0.70	0.03	0.26	0.70	0.70			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.93	0.03	0.26	2.93	2.93			N/A	N/A
B - Grundisburgh Rd West	1.04	0.03	0.30	1.46	5.04			N/A	N/A
C - A12 South	9.72	0.04	0.35	18.66	52.40			N/A	N/A
D - B1079 East	0.71	0.03	0.31	1.27	3.47			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.49	0.09	1.15	2.89	3.87			N/A	N/A
B - Grundisburgh Rd West	0.47	0.04	0.40	1.23	1.37			N/A	N/A
C - A12 South	2.68	0.04	0.44	7.43	13.00			N/A	N/A
D - B1079 East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.05	0.49	2.06	3.06			N/A	N/A
B - Grundisburgh Rd West	0.28	0.03	0.27	0.48	0.81			N/A	N/A
C - A12 South	1.46	0.03	0.32	2.69	7.55			N/A	N/A
D - B1079 East	0.23	0.03	0.25	0.45	0.48			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	173.85	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1783	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	615	100.000
C - A12 South		ONE HOUR	✓	1831	100.000
D - B1079 East		ONE HOUR	✓	476	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	417	1229	120
	B - Grundisburgh Rd West	104	0	232	279
	C - A12 South	1274	138	1	418
	D - B1079 East	175	122	179	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	10	1
	B - Grundisburgh Rd West	11	0	3	0
	C - A12 South	10	1	0	2
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	25.97	13.3	73.1	D	1636	2454
B - Grundisburgh Rd West	1.33	658.54	106.0	156.3	F	564	846
C - A12 South	1.11	175.92	111.6	188.3	F	1680	2520
D - B1079 East	1.02	116.29	17.5	54.9	F	437	655

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1342	336	693	2184	0.615	1336	1173	0.0	1.6	4.217	A
B - Grundisburgh Rd West	463	116	1409	776	0.596	457	507	0.0	1.4	11.089	B
C - A12 South	1378	345	546	1980	0.696	1369	1229	0.0	2.2	5.813	A
D - B1079 East	358	90	1419	878	0.408	356	610	0.0	0.7	6.862	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1603	401	818	2095	0.765	1596	1396	1.6	3.1	7.125	A
B - Grundisburgh Rd West	553	138	1679	620	0.892	535	605	1.4	5.9	36.695	E
C - A12 South	1646	411	653	1904	0.864	1632	1464	2.2	5.8	12.596	B
D - B1079 East	428	107	1692	712	0.601	425	723	0.7	1.5	12.411	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1963	491	836	2083	0.943	1929	1536	3.1	11.6	20.080	C
B - Grundisburgh Rd West	677	169	1862	514	1.316	510	712	5.9	47.6	206.341	F
C - A12 South	2016	504	773	1819	1.108	1801	1707	5.8	59.5	74.173	F
D - B1079 East	524	131	1993	528	0.993	487	773	1.5	10.7	62.841	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1963	491	836	2083	0.943	1956	1544	11.6	13.3	25.969	D
B - Grundisburgh Rd West	677	169	1872	509	1.331	508	721	47.6	89.8	506.643	F
C - A12 South	2016	504	785	1810	1.114	1808	1729	59.5	111.6	175.916	F
D - B1079 East	524	131	2017	512	1.023	497	775	10.7	17.5	116.294	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1603	401	829	2087	0.768	1642	1565	13.3	3.4	8.759	A
B - Grundisburgh Rd West	553	138	1907	488	1.132	488	649	89.8	106.0	658.538	F
C - A12 South	1646	411	705	1867	0.881	1851	1503	111.6	60.4	168.370	F
D - B1079 East	428	107	1717	696	0.615	491	755	17.5	1.7	23.077	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1342	336	900	2038	0.659	1348	1374	3.4	2.0	5.261	A
B - Grundisburgh Rd West	463	116	1634	645	0.717	639	529	106.0	61.9	475.135	F
C - A12 South	1378	345	553	1975	0.698	1610	1308	60.4	2.4	19.026	C
D - B1079 East	358	90	1499	831	0.432	362	749	1.7	0.8	7.742	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.39	1.42	2.39	2.86			N/A	N/A
B - Grundisburgh Rd West	1.43	0.03	0.32	2.66	7.39			N/A	N/A
C - A12 South	2.24	0.10	1.42	4.97	6.83			N/A	N/A
D - B1079 East	0.68	0.11	0.85	1.37	1.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.15	0.05	0.46	8.80	15.24			N/A	N/A
B - Grundisburgh Rd West	5.89	0.07	1.47	16.69	25.95			N/A	N/A
C - A12 South	5.78	0.06	1.32	16.50	26.08			N/A	N/A
D - B1079 East	1.46	0.04	0.44	3.79	6.15			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.65	0.06	1.42	34.19	57.33			N/A	N/A
B - Grundisburgh Rd West	47.59	21.82	44.85	71.14	80.07			N/A	N/A
C - A12 South	59.55	21.70	54.77	96.43	111.12			N/A	N/A
D - B1079 East	10.70	0.34	6.27	25.43	34.03			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.29	0.04	0.43	35.04	73.08			N/A	N/A
B - Grundisburgh Rd West	89.81	52.58	87.02	122.43	133.95			N/A	N/A
C - A12 South	111.58	>199	>199	>199	>199			N/A	N/A
D - B1079 East	17.47	0.59	10.81	41.31	54.86			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.04	0.43	9.53	17.33			N/A	N/A
B - Grundisburgh Rd West	106.01	63.43	102.99	143.26	156.32			N/A	N/A
C - A12 South	60.40	33.23	58.06	84.28	92.90			N/A	N/A
D - B1079 East	1.67	0.03	0.34	3.85	8.69			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.03	0.33	3.96	10.35			N/A	N/A
B - Grundisburgh Rd West	61.93	27.39	58.26	94.14	106.44			N/A	N/A
C - A12 South	2.39	0.03	0.28	2.39	6.75			N/A	N/A
D - B1079 East	0.77	0.03	0.27	0.77	2.10			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	24.78	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1647	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	484	100.000
C - A12 South		ONE HOUR	✓	1630	100.000
D - B1079 East		ONE HOUR	✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	315	1179	140
	B - Grundisburgh Rd West	112	1	194	177
	C - A12 South	1243	208	3	176
	D - B1079 East	205	114	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	8	2
	B - Grundisburgh Rd West	4	0	3	2
	C - A12 South	7	3	0	1
	D - B1079 East	2	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	8.00	3.9	12.9	A	1512	2268
B - Grundisburgh Rd West	0.94	66.90	9.4	43.4	F	444	666
C - A12 South	0.95	30.43	14.3	76.2	D	1496	2244
D - B1079 East	0.73	21.87	2.6	12.3	C	373	559

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	413	2395	0.518	1236	1178	0.0	1.1	3.096	A
B - Grundisburgh Rd West	364	91	1229	891	0.409	362	478	0.0	0.7	6.770	A
C - A12 South	1227	307	486	2056	0.597	1221	1097	0.0	1.5	4.284	A
D - B1079 East	306	76	1279	972	0.315	304	370	0.0	0.5	5.379	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	493	2337	0.634	1478	1409	1.1	1.7	4.180	A
B - Grundisburgh Rd West	435	109	1470	753	0.578	433	572	0.7	1.3	11.140	B
C - A12 South	1465	366	581	1986	0.738	1460	1313	1.5	2.7	6.782	A
D - B1079 East	365	91	1530	819	0.446	364	442	0.5	0.8	7.887	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	453	586	2271	0.799	1806	1695	1.7	3.8	7.602	A
B - Grundisburgh Rd West	533	133	1771	581	0.918	511	694	1.3	6.8	42.679	E
C - A12 South	1795	449	707	1894	0.948	1758	1595	2.7	12.0	22.167	C
D - B1079 East	447	112	1861	617	0.725	441	531	0.8	2.4	19.735	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	453	599	2262	0.802	1813	1722	3.8	3.9	8.001	A
B - Grundisburgh Rd West	533	133	1798	565	0.943	523	700	6.8	9.4	66.899	F
C - A12 South	1795	449	713	1889	0.950	1786	1607	12.0	14.3	30.432	D
D - B1079 East	447	112	1873	610	0.734	447	539	2.4	2.6	21.869	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	525	2314	0.640	1490	1460	3.9	1.8	4.410	A
B - Grundisburgh Rd West	435	109	1518	726	0.600	466	583	9.4	1.6	15.481	C
C - A12 South	1465	366	590	1979	0.740	1511	1336	14.3	2.9	8.392	A
D - B1079 East	365	91	1554	805	0.454	372	461	2.6	0.8	8.458	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	419	2390	0.519	1243	1190	1.8	1.1	3.147	A
B - Grundisburgh Rd West	364	91	1241	884	0.412	368	482	1.6	0.7	7.017	A
C - A12 South	1227	307	490	2053	0.598	1233	1106	2.9	1.5	4.421	A
D - B1079 East	306	76	1288	966	0.317	307	374	0.8	0.5	5.476	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.68	0.44	0.97	1.39	1.45			N/A	N/A
C - A12 South	1.46	0.47	1.34	1.98	2.56			N/A	N/A
D - B1079 East	0.46	0.00	0.00	0.46	0.46			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.04	0.42	4.58	7.86			N/A	N/A
B - Grundisburgh Rd West	1.33	0.05	0.48	3.32	5.12			N/A	N/A
C - A12 South	2.74	0.04	0.43	7.57	13.51			N/A	N/A
D - B1079 East	0.79	0.06	0.65	1.38	1.84			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.81	0.03	0.29	3.81	12.88			N/A	N/A
B - Grundisburgh Rd West	6.80	0.08	1.56	19.08	29.03			N/A	N/A
C - A12 South	11.99	0.07	1.64	35.02	56.40			N/A	N/A
D - B1079 East	2.44	0.03	0.31	3.61	12.22			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.94	0.03	0.27	3.94	3.94			N/A	N/A
B - Grundisburgh Rd West	9.36	0.07	1.34	27.18	43.41			N/A	N/A
C - A12 South	14.25	0.05	0.49	40.34	76.24			N/A	N/A
D - B1079 East	2.61	0.03	0.30	2.99	12.29			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.07	1.03	4.23	6.01			N/A	N/A
B - Grundisburgh Rd West	1.55	0.04	0.38	4.01	7.57			N/A	N/A
C - A12 South	2.94	0.04	0.42	8.05	14.84			N/A	N/A
D - B1079 East	0.85	0.05	0.48	1.75	2.55			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.04	0.40	2.73	4.58			N/A	N/A
B - Grundisburgh Rd West	0.71	0.03	0.28	0.92	2.83			N/A	N/A
C - A12 South	1.50	0.03	0.30	1.97	7.29			N/A	N/A
D - B1079 East	0.47	0.03	0.33	1.43	1.80			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	9.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1754	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	405	100.000
C - A12 South		ONE HOUR	✓	1563	100.000
D - B1079 East		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	349	1286	114
	B - Grundisburgh Rd West	104	0	131	170
	C - A12 South	1275	185	0	104
	D - B1079 East	138	89	103	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	2
	B - Grundisburgh Rd West	3	0	0	0
	C - A12 South	3	0	0	4
	D - B1079 East	0	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.54	3.5	7.7	A	1610	2414
B - Grundisburgh Rd West	0.65	14.88	1.8	6.7	B	371	557
C - A12 South	0.85	11.77	5.4	26.5	B	1435	2152
D - B1079 East	0.58	13.92	1.4	5.9	B	302	454

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1321	330	303	2585	0.511	1316	1141	0.0	1.0	2.827	A
B - Grundisburgh Rd West	305	76	1141	987	0.309	303	466	0.0	0.4	5.246	A
C - A12 South	1177	294	435	2174	0.541	1172	1141	0.0	1.2	3.577	A
D - B1079 East	248	62	1329	985	0.252	247	291	0.0	0.3	4.865	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1577	394	363	2541	0.620	1575	1365	1.0	1.6	3.713	A
B - Grundisburgh Rd West	364	91	1365	861	0.423	363	558	0.4	0.7	7.207	A
C - A12 South	1406	351	520	2111	0.666	1402	1364	1.2	2.0	5.056	A
D - B1079 East	296	74	1589	832	0.356	295	348	0.3	0.5	6.694	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1931	483	442	2483	0.778	1924	1662	1.6	3.4	6.359	A
B - Grundisburgh Rd West	446	111	1662	693	0.643	442	681	0.7	1.7	14.081	B
C - A12 South	1721	430	635	2027	0.849	1708	1666	2.0	5.2	10.886	B
D - B1079 East	363	91	1942	625	0.580	360	424	0.5	1.3	13.393	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1931	483	445	2481	0.779	1931	1674	3.4	3.5	6.541	A
B - Grundisburgh Rd West	446	111	1674	687	0.649	445	685	1.7	1.8	14.882	B
C - A12 South	1721	430	638	2024	0.850	1721	1674	5.2	5.4	11.767	B
D - B1079 East	363	91	1949	621	0.584	363	427	1.3	1.4	13.919	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1577	394	368	2538	0.621	1584	1381	3.5	1.7	3.804	A
B - Grundisburgh Rd West	364	91	1381	852	0.427	368	563	1.8	0.8	7.505	A
C - A12 South	1406	351	525	2108	0.667	1419	1374	5.4	2.0	5.327	A
D - B1079 East	296	74	1600	826	0.359	299	352	1.4	0.6	6.879	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1321	330	306	2583	0.511	1323	1149	1.7	1.1	2.860	A
B - Grundisburgh Rd West	305	76	1149	983	0.310	306	469	0.8	0.5	5.329	A
C - A12 South	1177	294	438	2172	0.542	1180	1147	2.0	1.2	3.640	A
D - B1079 East	248	62	1336	981	0.253	249	293	0.6	0.3	4.922	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C - A12 South	1.17	0.56	1.06	1.17	1.56			N/A	N/A
D - B1079 East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.04	0.42	4.31	7.40			N/A	N/A
B - Grundisburgh Rd West	0.72	0.07	0.74	1.18	1.18			N/A	N/A
C - A12 South	1.96	0.04	0.42	5.29	9.24			N/A	N/A
D - B1079 East	0.55	0.06	0.59	1.32	1.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.39	0.03	0.28	3.39	7.73			N/A	N/A
B - Grundisburgh Rd West	1.72	0.03	0.28	1.72	5.33			N/A	N/A
C - A12 South	5.22	0.03	0.32	7.95	26.49			N/A	N/A
D - B1079 East	1.33	0.03	0.27	1.33	1.97			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.46	0.03	0.27	3.46	3.46			N/A	N/A
B - Grundisburgh Rd West	1.80	0.03	0.29	1.80	6.70			N/A	N/A
C - A12 South	5.44	0.03	0.29	5.44	15.66			N/A	N/A
D - B1079 East	1.38	0.03	0.29	1.38	5.87			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.08	1.11	3.63	4.96			N/A	N/A
B - Grundisburgh Rd West	0.76	0.06	0.68	1.11	1.65			N/A	N/A
C - A12 South	2.04	0.05	0.56	5.42	8.51			N/A	N/A
D - B1079 East	0.57	0.05	0.55	1.32	1.42			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.04	0.44	2.54	3.92			N/A	N/A
B - Grundisburgh Rd West	0.45	0.04	0.36	1.10	1.10			N/A	N/A
C - A12 South	1.19	0.03	0.35	2.88	5.88			N/A	N/A
D - B1079 East	0.34	0.03	0.32	1.05	1.29			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	2.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	912	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	94	100.000
C - A12 South		ONE HOUR	✓	765	100.000
D - B1079 East		ONE HOUR	✓	93	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	79	812	16
	B - Grundisburgh Rd West	35	0	43	17
	C - A12 South	591	49	2	123
	D - B1079 East	26	21	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	6	4
	B - Grundisburgh Rd West	1	0	8	3
	C - A12 South	10	0	0	0
	D - B1079 East	10	0	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.28	0.6	2.8	A	837	1256
B - Grundisburgh Rd West	0.09	3.60	0.1	0.5	A	86	130
C - A12 South	0.37	2.52	0.6	2.7	A	702	1053
D - B1079 East	0.10	3.78	0.1	0.5	A	85	128

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	687	172	139	2633	0.261	685	493	0.0	0.4	1.848	A
B - Grundisburgh Rd West	71	18	561	1252	0.057	71	112	0.0	0.1	3.046	A
C - A12 South	576	144	98	2306	0.250	575	679	0.0	0.3	2.079	A
D - B1079 East	70	17	707	1238	0.056	70	117	0.0	0.1	3.080	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	820	205	166	2613	0.314	820	590	0.4	0.5	2.007	A
B - Grundisburgh Rd West	85	21	671	1189	0.071	85	134	0.1	0.1	3.258	A
C - A12 South	688	172	117	2292	0.300	687	812	0.3	0.4	2.243	A
D - B1079 East	83	21	846	1160	0.072	83	139	0.1	0.1	3.341	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	203	2586	0.388	1004	722	0.5	0.6	2.273	A
B - Grundisburgh Rd West	104	26	822	1103	0.094	104	164	0.1	0.1	3.602	A
C - A12 South	842	211	144	2273	0.371	842	994	0.4	0.6	2.513	A
D - B1079 East	102	26	1036	1054	0.097	102	171	0.1	0.1	3.780	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	203	2586	0.388	1004	723	0.6	0.6	2.275	A
B - Grundisburgh Rd West	104	26	822	1102	0.094	104	164	0.1	0.1	3.604	A
C - A12 South	842	211	144	2273	0.371	842	995	0.6	0.6	2.515	A
D - B1079 East	102	26	1037	1054	0.097	102	171	0.1	0.1	3.782	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	820	205	166	2613	0.314	821	591	0.6	0.5	2.009	A
B - Grundisburgh Rd West	85	21	672	1189	0.071	85	134	0.1	0.1	3.260	A
C - A12 South	688	172	118	2292	0.300	688	813	0.6	0.4	2.245	A
D - B1079 East	83	21	847	1160	0.072	84	140	0.1	0.1	3.346	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	687	172	139	2632	0.261	687	495	0.5	0.4	1.852	A
B - Grundisburgh Rd West	71	18	563	1252	0.057	71	112	0.1	0.1	3.049	A
C - A12 South	576	144	99	2306	0.250	576	681	0.4	0.3	2.083	A
D - B1079 East	70	17	709	1237	0.056	70	117	0.1	0.1	3.083	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - B1079 East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Grundisburgh Rd West	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - B1079 East	0.08	0.03	0.25	0.46	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.03	0.25	0.63	0.63			N/A	N/A
B - Grundisburgh Rd West	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.59	0.03	0.25	0.59	0.59			N/A	N/A
D - B1079 East	0.11	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.03	0.29	1.11	2.75			N/A	N/A
B - Grundisburgh Rd West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A12 South	0.59	0.03	0.29	1.27	2.72			N/A	N/A
D - B1079 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - Grundisburgh Rd West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - B1079 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B - Grundisburgh Rd West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - B1079 East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	13.24	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1615	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	244	100.000
C - A12 South		ONE HOUR	✓	1658	100.000
D - B1079 East		ONE HOUR	✓	240	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	308	1246	54
	B - Grundisburgh Rd West	56	0	120	68
	C - A12 South	1332	79	2	245
	D - B1079 East	86	81	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	5	6	0
	B - Grundisburgh Rd West	5	0	4	3
	C - A12 South	10	2	0	0
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.94	2.9	6.2	A	1482	2223
B - Grundisburgh Rd West	0.51	14.07	1.0	5.0	B	224	335
C - A12 South	0.92	20.54	9.8	53.2	C	1521	2282
D - B1079 East	0.42	9.83	0.7	3.5	A	220	331

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	326	2493	0.488	1212	1109	0.0	0.9	2.802	A
B - Grundisburgh Rd West	184	46	1253	859	0.214	182	351	0.0	0.3	5.314	A
C - A12 South	1248	312	362	2110	0.591	1242	1081	0.0	1.4	4.119	A
D - B1079 East	181	45	1263	982	0.184	180	275	0.0	0.2	4.487	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	390	2447	0.593	1450	1327	0.9	1.4	3.602	A
B - Grundisburgh Rd West	219	55	1498	718	0.305	218	420	0.3	0.4	7.200	A
C - A12 South	1490	373	433	2059	0.724	1486	1294	1.4	2.6	6.224	A
D - B1079 East	216	54	1511	834	0.259	216	329	0.2	0.3	5.814	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1778	445	473	2387	0.745	1772	1608	1.4	2.9	5.807	A
B - Grundisburgh Rd West	268	67	1815	536	0.501	266	513	0.4	1.0	13.243	B
C - A12 South	1825	456	529	1990	0.917	1799	1581	2.6	8.9	16.976	C
D - B1079 East	265	66	1847	634	0.417	263	399	0.3	0.7	9.656	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1778	445	478	2383	0.746	1778	1627	2.9	2.9	5.942	A
B - Grundisburgh Rd West	268	67	1837	524	0.513	268	516	1.0	1.0	14.073	B
C - A12 South	1825	456	531	1989	0.918	1821	1587	8.9	9.8	20.541	C
D - B1079 East	265	66	1853	631	0.419	265	403	0.7	0.7	9.825	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	397	2442	0.595	1457	1355	2.9	1.5	3.679	A
B - Grundisburgh Rd West	219	55	1530	699	0.313	221	424	1.0	0.5	7.568	A
C - A12 South	1490	373	436	2057	0.724	1519	1302	9.8	2.7	7.020	A
D - B1079 East	216	54	1520	829	0.261	217	334	0.7	0.4	5.903	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	329	2491	0.488	1218	1119	1.5	1.0	2.831	A
B - Grundisburgh Rd West	184	46	1263	853	0.215	184	353	0.5	0.3	5.394	A
C - A12 South	1248	312	364	2109	0.592	1253	1087	2.7	1.5	4.230	A
D - B1079 East	181	45	1270	978	0.185	181	277	0.4	0.2	4.523	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.43	0.55	1.33	1.87	2.06			N/A	N/A
D - B1079 East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.44	0.04	0.44	3.76	6.16			N/A	N/A
B - Grundisburgh Rd West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C - A12 South	2.56	0.04	0.43	7.02	12.51			N/A	N/A
D - B1079 East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.85	0.03	0.27	2.85	3.94			N/A	N/A
B - Grundisburgh Rd West	0.97	0.03	0.26	0.97	0.97			N/A	N/A
C - A12 South	8.94	0.05	0.46	25.04	47.54			N/A	N/A
D - B1079 East	0.70	0.03	0.26	0.70	0.70			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.90	0.03	0.26	2.90	2.90			N/A	N/A
B - Grundisburgh Rd West	1.03	0.03	0.30	1.45	4.97			N/A	N/A
C - A12 South	9.83	0.04	0.35	19.23	53.18			N/A	N/A
D - B1079 East	0.71	0.03	0.31	1.27	3.47			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.48	0.10	1.15	2.86	3.81			N/A	N/A
B - Grundisburgh Rd West	0.46	0.04	0.39	1.22	1.36			N/A	N/A
C - A12 South	2.69	0.04	0.44	7.46	13.09			N/A	N/A
D - B1079 East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.05	0.49	2.02	3.00			N/A	N/A
B - Grundisburgh Rd West	0.28	0.03	0.27	0.48	0.71			N/A	N/A
C - A12 South	1.47	0.03	0.32	2.68	7.56			N/A	N/A
D - B1079 East	0.23	0.03	0.25	0.45	0.48			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	185.59	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1777	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	620	100.000
C - A12 South		ONE HOUR	✓	1829	100.000
D - B1079 East		ONE HOUR	✓	476	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	416	1224	120
	B - Grundisburgh Rd West	104	0	239	277
	C - A12 South	1280	113	1	435
	D - B1079 East	175	122	179	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	10	1
	B - Grundisburgh Rd West	11	0	3	0
	C - A12 South	11	2	0	2
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	25.86	13.2	72.5	D	1630	2446
B - Grundisburgh Rd West	1.38	747.69	120.8	173.6	F	569	853
C - A12 South	1.11	176.66	111.9	188.6	F	1678	2517
D - B1079 East	1.02	111.09	16.5	54.0	F	437	655

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1338	334	710	2171	0.616	1331	1177	0.0	1.6	4.259	A
B - Grundisburgh Rd West	467	117	1426	766	0.609	461	487	0.0	1.5	11.568	B
C - A12 South	1377	344	546	1978	0.696	1368	1230	0.0	2.2	5.823	A
D - B1079 East	358	90	1420	877	0.409	356	621	0.0	0.7	6.872	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1597	399	835	2082	0.767	1591	1401	1.6	3.2	7.231	A
B - Grundisburgh Rd West	557	139	1700	608	0.917	536	582	1.5	6.9	41.657	E
C - A12 South	1644	411	652	1902	0.864	1630	1464	2.2	5.8	12.622	B
D - B1079 East	428	107	1691	712	0.601	425	735	0.7	1.5	12.412	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1956	489	843	2076	0.942	1923	1539	3.2	11.6	20.089	C
B - Grundisburgh Rd West	683	171	1884	501	1.362	498	686	6.9	53.1	234.420	F
C - A12 South	2014	503	772	1816	1.109	1798	1702	5.8	59.7	74.423	F
D - B1079 East	524	131	1986	531	0.987	489	780	1.5	10.3	61.016	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1956	489	842	2077	0.942	1950	1547	11.6	13.2	25.859	D
B - Grundisburgh Rd West	683	171	1894	495	1.379	495	696	53.1	100.0	578.999	F
C - A12 South	2014	503	786	1807	1.114	1805	1724	59.7	111.9	176.656	F
D - B1079 East	524	131	2010	516	1.016	499	782	10.3	16.5	111.094	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1597	399	836	2081	0.767	1636	1568	13.2	3.4	8.758	A
B - Grundisburgh Rd West	557	139	1930	474	1.175	474	622	100.0	120.8	747.695	F
C - A12 South	1644	411	702	1867	0.881	1850	1495	111.9	60.5	168.848	F
D - B1079 East	428	107	1710	700	0.612	488	763	16.5	1.6	21.793	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1338	334	906	2032	0.658	1344	1376	3.4	2.0	5.270	A
B - Grundisburgh Rd West	467	117	1655	633	0.737	628	507	120.8	80.6	579.179	F
C - A12 South	1377	344	552	1973	0.698	1609	1305	60.5	2.4	19.146	C
D - B1079 East	358	90	1496	832	0.431	362	754	1.6	0.8	7.708	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.59	0.40	1.42	2.41	2.87			N/A	N/A
B - Grundisburgh Rd West	1.51	0.03	0.29	1.51	6.65			N/A	N/A
C - A12 South	2.24	0.10	1.42	4.98	6.84			N/A	N/A
D - B1079 East	0.68	0.12	0.86	1.38	1.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.18	0.05	0.46	8.91	15.35			N/A	N/A
B - Grundisburgh Rd West	6.89	0.07	1.11	19.69	30.84			N/A	N/A
C - A12 South	5.78	0.06	1.32	16.51	26.10			N/A	N/A
D - B1079 East	1.46	0.04	0.45	3.78	6.08			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.60	0.06	1.40	34.02	57.14			N/A	N/A
B - Grundisburgh Rd West	53.08	25.01	50.21	78.69	88.34			N/A	N/A
C - A12 South	59.69	21.83	54.92	96.54	111.20			N/A	N/A
D - B1079 East	10.31	0.29	5.79	24.89	33.60			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.19	0.04	0.43	34.60	72.54			N/A	N/A
B - Grundisburgh Rd West	100.02	60.94	97.29	133.97	145.81			N/A	N/A
C - A12 South	111.93	>199	>199	>199	>199			N/A	N/A
D - B1079 East	16.55	0.42	9.68	40.13	53.98			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.42	0.04	0.43	9.49	17.34			N/A	N/A
B - Grundisburgh Rd West	120.82	75.54	117.85	160.07	173.64			N/A	N/A
C - A12 South	60.47	33.25	58.12	84.37	93.00			N/A	N/A
D - B1079 East	1.65	0.03	0.34	3.80	8.55			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.03	0.33	3.92	10.32			N/A	N/A
B - Grundisburgh Rd West	80.57	38.23	76.47	119.69	134.33			N/A	N/A
C - A12 South	2.39	0.03	0.28	2.39	6.75			N/A	N/A
D - B1079 East	0.77	0.03	0.28	0.77	2.18			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	25.26	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1647	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	485	100.000
C - A12 South		ONE HOUR	✓	1632	100.000
D - B1079 East		ONE HOUR	✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	316	1178	140
	B - Grundisburgh Rd West	112	1	195	177
	C - A12 South	1247	206	3	176
	D - B1079 East	205	114	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	8	2
	B - Grundisburgh Rd West	4	0	3	2
	C - A12 South	7	3	0	1
	D - B1079 East	2	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	8.03	4.0	13.0	A	1512	2268
B - Grundisburgh Rd West	0.95	68.96	9.8	44.4	F	445	668
C - A12 South	0.95	30.96	14.5	77.1	D	1498	2246
D - B1079 East	0.73	22.01	2.6	12.4	C	373	559

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	413	2393	0.518	1236	1181	0.0	1.1	3.101	A
B - Grundisburgh Rd West	365	91	1232	889	0.411	362	477	0.0	0.7	6.797	A
C - A12 South	1229	307	486	2056	0.598	1223	1097	0.0	1.5	4.293	A
D - B1079 East	306	76	1280	971	0.315	304	370	0.0	0.5	5.385	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	494	2335	0.634	1478	1413	1.1	1.7	4.190	A
B - Grundisburgh Rd West	436	109	1473	751	0.580	433	571	0.7	1.3	11.234	B
C - A12 South	1467	367	582	1985	0.739	1462	1313	1.5	2.8	6.811	A
D - B1079 East	365	91	1531	818	0.447	364	442	0.5	0.8	7.905	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	453	587	2269	0.799	1805	1699	1.7	3.8	7.627	A
B - Grundisburgh Rd West	534	134	1775	579	0.923	511	693	1.3	7.0	43.740	E
C - A12 South	1797	449	708	1893	0.949	1759	1595	2.8	12.2	22.419	C
D - B1079 East	447	112	1862	616	0.726	441	531	0.8	2.5	19.835	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1814	453	599	2261	0.802	1813	1726	3.8	4.0	8.029	A
B - Grundisburgh Rd West	534	134	1802	563	0.949	523	699	7.0	9.8	68.963	F
C - A12 South	1797	449	714	1889	0.951	1787	1606	12.2	14.5	30.960	D
D - B1079 East	447	112	1874	609	0.735	447	539	2.5	2.6	22.007	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1481	370	527	2312	0.641	1490	1464	4.0	1.8	4.424	A
B - Grundisburgh Rd West	436	109	1523	723	0.603	469	582	9.8	1.6	15.902	C
C - A12 South	1467	367	591	1979	0.741	1513	1337	14.5	3.0	8.472	A
D - B1079 East	365	91	1555	803	0.455	372	462	2.6	0.8	8.488	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1240	310	419	2388	0.519	1243	1193	1.8	1.1	3.150	A
B - Grundisburgh Rd West	365	91	1244	883	0.414	369	481	1.6	0.7	7.049	A
C - A12 South	1229	307	491	2053	0.599	1234	1106	3.0	1.5	4.432	A
D - B1079 East	306	76	1289	965	0.317	307	374	0.8	0.5	5.483	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.69	0.40	0.97	1.39	1.45			N/A	N/A
C - A12 South	1.47	0.46	1.34	1.99	2.58			N/A	N/A
D - B1079 East	0.46	0.00	0.00	0.46	0.46			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.04	0.42	4.59	7.88			N/A	N/A
B - Grundisburgh Rd West	1.34	0.05	0.47	3.37	5.22			N/A	N/A
C - A12 South	2.75	0.04	0.43	7.62	13.58			N/A	N/A
D - B1079 East	0.79	0.06	0.65	1.39	1.85			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.82	0.03	0.29	3.82	13.00			N/A	N/A
B - Grundisburgh Rd West	7.02	0.08	1.77	19.57	29.46			N/A	N/A
C - A12 South	12.17	0.07	1.78	35.55	56.94			N/A	N/A
D - B1079 East	2.45	0.03	0.31	3.68	12.33			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.96	0.03	0.27	3.96	3.96			N/A	N/A
B - Grundisburgh Rd West	9.78	0.08	1.71	28.26	44.42			N/A	N/A
C - A12 South	14.53	0.05	0.56	41.33	77.13			N/A	N/A
D - B1079 East	2.63	0.03	0.30	3.04	12.40			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.07	1.03	4.25	6.05			N/A	N/A
B - Grundisburgh Rd West	1.58	0.04	0.38	4.07	7.71			N/A	N/A
C - A12 South	2.96	0.04	0.41	8.10	14.94			N/A	N/A
D - B1079 East	0.85	0.05	0.48	1.76	2.57			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.04	0.40	2.74	4.60			N/A	N/A
B - Grundisburgh Rd West	0.71	0.03	0.28	0.88	2.79			N/A	N/A
C - A12 South	1.51	0.03	0.30	1.95	7.29			N/A	N/A
D - B1079 East	0.47	0.03	0.33	1.43	1.81			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout	A, D, C, B	10.10	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1752	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	409	100.000
C - A12 South		ONE HOUR	✓	1566	100.000
D - B1079 East		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	351	1282	114
	B - Grundisburgh Rd West	104	0	134	171
	C - A12 South	1278	185	0	104
	D - B1079 East	138	89	103	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	2
	B - Grundisburgh Rd West	3	0	0	0
	C - A12 South	3	0	0	4
	D - B1079 East	0	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.55	3.5	7.8	A	1608	2412
B - Grundisburgh Rd West	0.66	15.27	1.9	7.0	C	375	563
C - A12 South	0.85	11.95	5.5	27.2	B	1437	2156
D - B1079 East	0.58	13.95	1.4	5.9	B	302	454

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1319	330	306	2583	0.511	1315	1143	0.0	1.0	2.829	A
B - Grundisburgh Rd West	308	77	1143	986	0.312	306	468	0.0	0.4	5.279	A
C - A12 South	1179	295	436	2173	0.543	1175	1140	0.0	1.2	3.589	A
D - B1079 East	248	62	1329	985	0.252	247	292	0.0	0.3	4.868	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1575	394	366	2539	0.620	1573	1367	1.0	1.6	3.717	A
B - Grundisburgh Rd West	368	92	1367	860	0.427	366	560	0.4	0.7	7.280	A
C - A12 South	1408	352	522	2110	0.667	1405	1364	1.2	2.0	5.082	A
D - B1079 East	296	74	1590	832	0.356	295	349	0.3	0.5	6.701	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1929	482	446	2480	0.778	1922	1665	1.6	3.4	6.368	A
B - Grundisburgh Rd West	450	113	1665	692	0.651	446	683	0.7	1.8	14.401	B
C - A12 South	1725	431	637	2025	0.852	1711	1665	2.0	5.3	11.031	B
D - B1079 East	363	91	1943	625	0.581	360	425	0.5	1.3	13.422	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1929	482	450	2477	0.779	1929	1678	3.4	3.5	6.554	A
B - Grundisburgh Rd West	450	113	1678	685	0.657	450	687	1.8	1.9	15.265	C
C - A12 South	1725	431	641	2023	0.853	1724	1672	5.3	5.5	11.951	B
D - B1079 East	363	91	1951	620	0.585	363	428	1.3	1.4	13.954	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1575	394	372	2535	0.621	1582	1384	3.5	1.7	3.806	A
B - Grundisburgh Rd West	368	92	1384	850	0.432	372	565	1.9	0.8	7.593	A
C - A12 South	1408	352	527	2107	0.668	1422	1374	5.5	2.1	5.365	A
D - B1079 East	296	74	1601	825	0.359	299	353	1.4	0.6	6.887	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1319	330	309	2581	0.511	1321	1151	1.7	1.1	2.862	A
B - Grundisburgh Rd West	308	77	1151	982	0.314	309	471	0.8	0.5	5.363	A
C - A12 South	1179	295	439	2171	0.543	1183	1146	2.1	1.2	3.656	A
D - B1079 East	248	62	1337	981	0.253	249	294	0.6	0.3	4.925	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.55	1.00	1.40	1.45			N/A	N/A
B - Grundisburgh Rd West	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C - A12 South	1.18	0.56	1.07	1.19	1.59			N/A	N/A
D - B1079 East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.04	0.42	4.30	7.40			N/A	N/A
B - Grundisburgh Rd West	0.74	0.07	0.74	1.33	1.33			N/A	N/A
C - A12 South	1.97	0.04	0.42	5.33	9.33			N/A	N/A
D - B1079 East	0.55	0.06	0.60	1.32	1.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.39	0.03	0.28	3.39	7.76			N/A	N/A
B - Grundisburgh Rd West	1.78	0.03	0.28	1.78	5.90			N/A	N/A
C - A12 South	5.30	0.03	0.32	8.37	27.17			N/A	N/A
D - B1079 East	1.34	0.03	0.27	1.34	1.99			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.46	0.03	0.27	3.46	3.46			N/A	N/A
B - Grundisburgh Rd West	1.86	0.03	0.29	1.86	6.98			N/A	N/A
C - A12 South	5.54	0.03	0.29	5.54	16.48			N/A	N/A
D - B1079 East	1.38	0.03	0.29	1.38	5.88			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.08	1.11	3.63	4.96			N/A	N/A
B - Grundisburgh Rd West	0.77	0.06	0.67	1.23	1.73			N/A	N/A
C - A12 South	2.05	0.05	0.54	5.47	8.62			N/A	N/A
D - B1079 East	0.57	0.05	0.55	1.32	1.42			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.04	0.44	2.54	3.92			N/A	N/A
B - Grundisburgh Rd West	0.46	0.04	0.36	1.24	1.24			N/A	N/A
C - A12 South	1.20	0.03	0.35	2.88	5.94			N/A	N/A
D - B1079 East	0.34	0.03	0.32	1.06	1.29			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 2020.07.27_J28_Model_CV_Adjusted v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J28\Model
Report generation date: 18/12/2020 10:54:23

»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base Year																								
A - A12 North	0.4	1.4	2.39	0.26	A	1.4	1.7	4.78	0.58	A	5.1	25.5	13.66	0.84	B	1.5	2.0	5.20	0.61	A	1.0	1.5	4.01	0.51	A
B - A12 South West	0.4	1.3	2.28	0.29	A	2.2	4.6	5.39	0.69	A	3.6	11.2	7.86	0.79	A	3.8	12.1	7.85	0.79	A	3.4	8.3	6.91	0.78	A
C - A1152 East	0.2	0.5	2.65	0.19	A	1.2	1.5	5.53	0.55	A	2.9	10.9	11.61	0.75	B	1.4	1.6	6.39	0.59	A	1.1	1.4	5.00	0.53	A
	2023 Reference Case																								
A - A12 North	0.4	1.5	2.43	0.28	A	1.6	2.2	5.34	0.62	A	6.4	32.7	17.11	0.87	C	1.8	2.7	5.99	0.65	A	1.3	1.5	4.73	0.57	A
B - A12 South West	0.4	1.8	2.33	0.31	A	2.8	6.1	6.41	0.74	A	5.0	23.1	10.46	0.84	B	5.0	22.7	10.03	0.84	B	4.5	18.2	8.83	0.82	A
C - A1152 East	0.3	0.9	2.72	0.21	A	1.4	1.5	6.06	0.58	A	3.6	16.5	13.96	0.79	B	1.7	2.0	7.16	0.63	A	1.4	1.5	5.76	0.58	A
	2023 Early Years																								
A - A12 North	0.4	1.2	2.45	0.28	A	1.7	2.4	5.44	0.63	A	6.8	34.1	18.18	0.88	C	2.2	3.6	6.91	0.69	A	1.7	2.5	5.78	0.64	A
B - A12 South West	0.6	2.7	2.60	0.37	A	6.4	32.9	12.95	0.87	B	8.2	41.9	16.84	0.90	C	6.2	31.5	12.32	0.87	B	4.9	21.7	9.59	0.84	A
C - A1152 East	0.3	1.0	2.74	0.21	A	1.5	1.7	6.36	0.60	A	3.9	18.5	14.96	0.80	B	1.8	2.2	7.67	0.65	A	1.5	1.7	6.40	0.60	A
	2028 Reference Case																								
A - A12 North	0.4	1.4	2.49	0.29	A	1.8	2.6	5.71	0.64	A	8.4	45.5	22.25	0.91	C	2.2	3.7	6.77	0.69	A	1.6	2.0	5.26	0.61	A
B - A12 South West	0.5	2.0	2.37	0.32	A	3.5	9.7	7.47	0.78	A	6.9	35.7	13.90	0.88	B	6.3	31.7	12.18	0.87	B	5.3	24.5	10.16	0.85	B
C - A1152 East	0.3	1.0	2.76	0.21	A	1.5	1.7	6.45	0.61	A	3.9	18.2	15.03	0.80	C	2.2	4.0	8.63	0.69	A	1.6	1.8	6.48	0.61	A
	2028 Peak Construction																								
A - A12 North	0.4	1.5	2.51	0.29	A	1.9	2.9	6.08	0.66	A	10.4	57.0	27.09	0.93	D	3.1	10.0	9.06	0.76	A	1.8	2.6	5.83	0.64	A
B - A12 South West	0.7	2.2	2.81	0.43	A	6.4	33.1	13.00	0.87	B	11.9	65.8	23.69	0.93	C	9.0	45.7	17.50	0.91	C	5.5	26.1	10.61	0.85	B
C - A1152 East	0.3	1.1	2.77	0.21	A	1.5	1.7	6.50	0.60	A	4.4	21.8	17.16	0.82	C	2.4	6.3	9.81	0.71	A	1.8	2.1	7.08	0.64	A
	2034 Reference Case																								
A - A12 North	0.4	1.4	2.43	0.26	A	1.4	1.8	5.14	0.59	A	6.7	33.3	18.67	0.88	C	1.7	2.6	5.56	0.64	A	1.3	1.6	4.55	0.57	A
B - A12 South West	0.5	2.5	2.50	0.35	A	4.6	19.2	9.42	0.82	A	8.6	43.8	16.52	0.90	C	6.2	31.6	12.26	0.87	B	4.5	17.8	8.77	0.82	A
C - A1152 East	0.4	1.8	3.12	0.31	A	1.7	2.0	6.74	0.63	A	3.3	14.4	12.96	0.78	B	2.9	10.7	10.71	0.75	B	3.3	13.3	10.85	0.77	B
	2034 Operational Led																								
A - A12 North	0.4	1.4	2.44	0.26	A	1.4	1.8	5.16	0.59	A	6.7	33.6	18.77	0.88	C	1.8	2.7	5.61	0.64	A	1.3	1.5	4.51	0.57	A
B - A12 South West	0.5	2.5	2.48	0.35	A	4.8	21.4	9.95	0.83	A	8.6	44.0	16.54	0.90	C	6.3	32.2	12.43	0.87	B	4.5	18.1	8.82	0.82	A
C - A1152 East	0.4	1.8	3.12	0.31	A	1.8	2.3	6.96	0.64	A	3.2	13.3	12.54	0.77	B	2.9	10.6	10.70	0.75	B	3.4	13.8	10.96	0.78	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

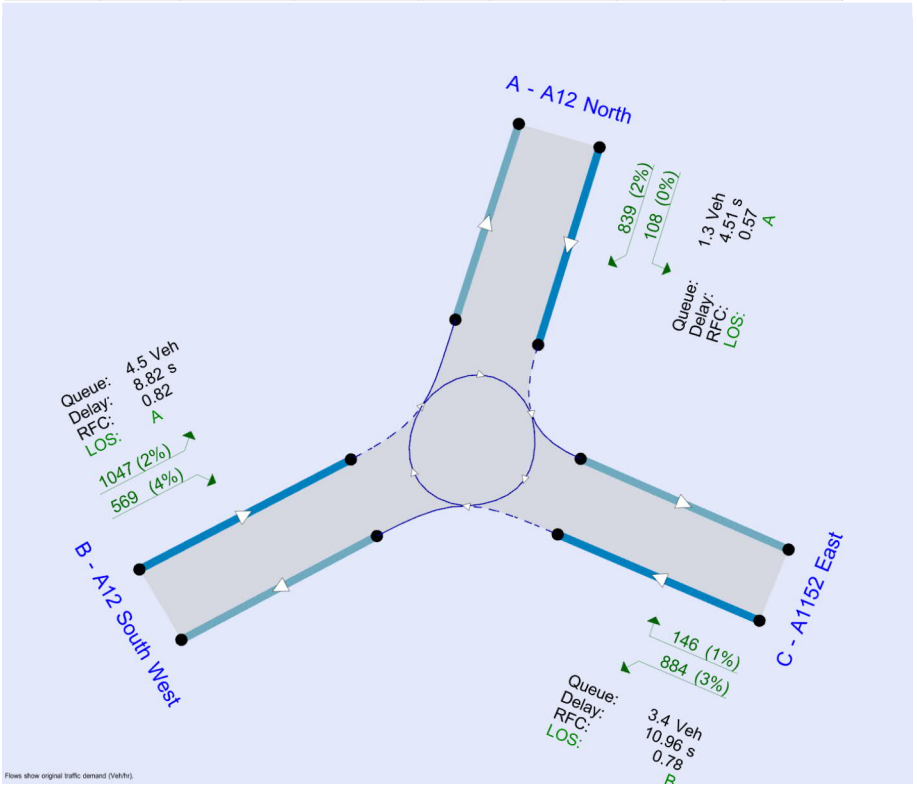
File summary

File Description

Title	A12 / A1152 Woods Lane
Location	52° 6'21.15"N, 1°18'34.71"E
Site number	28
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	

							✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	2.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A12 South West	
C	A1152 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	3.70	8.20	71.5	22.2	64.9	24.0	
B - A12 South West	7.70	8.10	0.9	20.6	64.9	9.0	
C - A1152 East	3.10	8.40	25.9	31.8	64.9	38.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	50
B - A12 South West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-100
C - A1152 East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	200

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.638	2364
B - A12 South West	0.691	2460
C - A1152 East	0.559	2091

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	483	100.000
B - A12 South West		ONE HOUR	✓	574	100.000
C - A1152 East		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	456	27
	B - A12 South West	355	23	196
	C - A1152 East	37	257	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	8	7
	B - A12 South West	10	26	7
	C - A1152 East	11	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.26	2.39	0.4	1.4	A	443	665
B - A12 South West	0.29	2.28	0.4	1.3	A	527	790
C - A1152 East	0.19	2.65	0.2	0.5	A	270	405

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	364	91	165	2089	0.174	363	294	0.0	0.2	2.084	A
B - A12 South West	432	108	28	2219	0.195	431	553	0.0	0.2	2.013	A
C - A1152 East	221	55	360	1776	0.125	221	168	0.0	0.1	2.314	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	434	109	197	2068	0.210	434	352	0.2	0.3	2.202	A
B - A12 South West	516	129	33	2215	0.233	516	661	0.2	0.3	2.118	A
C - A1152 East	264	66	430	1736	0.152	264	200	0.1	0.2	2.446	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	532	133	241	2040	0.261	531	431	0.3	0.4	2.386	A
B - A12 South West	632	158	41	2210	0.286	632	810	0.3	0.4	2.281	A
C - A1152 East	324	81	527	1680	0.193	323	245	0.2	0.2	2.654	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	532	133	241	2040	0.261	532	432	0.4	0.4	2.386	A
B - A12 South West	632	158	41	2210	0.286	632	810	0.4	0.4	2.281	A
C - A1152 East	324	81	527	1680	0.193	324	246	0.2	0.2	2.654	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	434	109	197	2068	0.210	435	353	0.4	0.3	2.203	A
B - A12 South West	516	129	33	2215	0.233	516	662	0.4	0.3	2.119	A
C - A1152 East	264	66	431	1735	0.152	265	201	0.2	0.2	2.449	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	364	91	165	2089	0.174	364	295	0.3	0.2	2.086	A
B - A12 South West	432	108	28	2219	0.195	432	554	0.3	0.2	2.017	A
C - A1152 East	221	55	361	1776	0.125	221	168	0.2	0.1	2.316	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B - A12 South West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A1152 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.26	0.00	0.00	0.26	0.26			N/A	N/A
B - A12 South West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A1152 East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.03	0.25	0.45	0.48			N/A	N/A
B - A12 South West	0.40	0.03	0.25	0.45	0.48			N/A	N/A
C - A1152 East	0.24	0.03	0.25	0.46	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.35	0.03	0.33	1.16	1.39			N/A	N/A
B - A12 South West	0.40	0.03	0.33	1.29	1.29			N/A	N/A
C - A1152 East	0.24	0.03	0.26	0.46	0.49			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B - A12 South West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A1152 East	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B - A12 South West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A1152 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	5.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	954	100.000
B - A12 South West		ONE HOUR	✓	1375	100.000
C - A1152 East		ONE HOUR	✓	723	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	888	66
	B - A12 South West	745	45	585
	C - A1152 East	118	605	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	5
	B - A12 South West	10	13	6
	C - A1152 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.58	4.78	1.4	1.7	A	875	1313
B - A12 South West	0.69	5.39	2.2	4.6	A	1262	1893
C - A1152 East	0.55	5.53	1.2	1.5	A	663	995

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	718	180	473	1947	0.369	716	647	0.0	0.6	2.918	A
B - A12 South West	1035	259	89	2209	0.469	1032	1154	0.0	0.9	3.049	A
C - A1152 East	544	136	700	1634	0.333	542	488	0.0	0.5	3.292	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	858	214	566	1887	0.455	857	775	0.6	0.8	3.491	A
B - A12 South West	1236	309	106	2198	0.562	1235	1381	0.9	1.3	3.731	A
C - A1152 East	650	162	838	1555	0.418	649	584	0.5	0.7	3.971	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1050	263	692	1805	0.582	1048	948	0.8	1.4	4.746	A
B - A12 South West	1514	378	130	2182	0.694	1510	1690	1.3	2.2	5.329	A
C - A1152 East	796	199	1025	1448	0.550	794	715	0.7	1.2	5.491	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1050	263	694	1804	0.582	1050	950	1.4	1.4	4.779	A
B - A12 South West	1514	378	130	2182	0.694	1514	1693	2.2	2.2	5.387	A
C - A1152 East	796	199	1027	1446	0.550	796	717	1.2	1.2	5.534	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	858	214	568	1885	0.455	860	778	1.4	0.8	3.517	A
B - A12 South West	1236	309	106	2197	0.563	1240	1386	2.2	1.3	3.777	A
C - A1152 East	650	162	841	1553	0.418	652	587	1.2	0.7	4.004	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	718	180	475	1946	0.369	719	651	0.8	0.6	2.938	A
B - A12 South West	1035	259	89	2209	0.469	1037	1160	1.3	0.9	3.075	A
C - A1152 East	544	136	703	1632	0.334	545	491	0.7	0.5	3.316	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	0.88	0.55	1.00	1.40	1.45			N/A	N/A
C - A1152 East	0.50	0.00	0.00	0.50	0.50			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.07	0.78	1.27	1.73			N/A	N/A
B - A12 South West	1.27	0.05	0.51	3.02	4.63			N/A	N/A
C - A1152 East	0.71	0.08	0.79	1.40	1.47			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.03	0.26	1.38	1.38			N/A	N/A
B - A12 South West	2.22	0.03	0.27	2.22	2.22			N/A	N/A
C - A1152 East	1.21	0.03	0.26	1.21	1.21			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.03	0.26	1.39	1.39			N/A	N/A
B - A12 South West	2.24	0.03	0.26	2.24	2.24			N/A	N/A
C - A1152 East	1.22	0.03	0.27	1.22	1.37			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.37	0.97	1.41	1.46			N/A	N/A
B - A12 South West	1.30	0.13	1.15	2.07	2.74			N/A	N/A
C - A1152 East	0.72	0.23	0.94	1.39	1.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.06	0.67	1.34	1.42			N/A	N/A
B - A12 South West	0.89	0.06	0.71	1.64	2.12			N/A	N/A
C - A1152 East	0.50	0.05	0.46	1.28	1.39			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	10.71	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1262	100.000
B - A12 South West		ONE HOUR	✓	1529	100.000
C - A1152 East		ONE HOUR	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1113	148
	B - A12 South West	701	67	761
	C - A1152 East	159	677	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	5
	B - A12 South West	10	16	7
	C - A1152 East	6	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	13.66	5.1	25.5	B	1158	1737
B - A12 South West	0.79	7.86	3.6	11.2	A	1403	2105
C - A1152 East	0.75	11.61	2.9	10.9	B	768	1152

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	950	238	622	1840	0.516	946	646	0.0	1.1	4.008	A
B - A12 South West	1151	288	121	2178	0.528	1147	1392	0.0	1.1	3.475	A
C - A1152 East	630	158	885	1459	0.432	627	682	0.0	0.8	4.313	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	744	1760	0.645	1132	773	1.1	1.8	5.702	A
B - A12 South West	1375	344	144	2163	0.636	1372	1665	1.1	1.7	4.541	A
C - A1152 East	752	188	1059	1363	0.552	751	817	0.8	1.2	5.862	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1389	347	909	1652	0.841	1377	943	1.8	4.9	12.558	B
B - A12 South West	1683	421	176	2141	0.786	1676	2028	1.7	3.5	7.621	A
C - A1152 East	922	230	1289	1236	0.746	915	997	1.2	2.8	11.014	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1389	347	913	1650	0.842	1389	948	4.9	5.1	13.664	B
B - A12 South West	1683	421	177	2141	0.786	1683	2043	3.5	3.6	7.858	A
C - A1152 East	922	230	1299	1230	0.749	921	1002	2.8	2.9	11.615	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1135	284	749	1757	0.646	1147	779	5.1	1.9	6.032	A
B - A12 South West	1375	344	146	2161	0.636	1382	1686	3.6	1.8	4.662	A
C - A1152 East	752	188	1073	1355	0.555	759	823	2.9	1.3	6.107	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	950	238	626	1837	0.517	953	650	1.9	1.1	4.086	A
B - A12 South West	1151	288	122	2178	0.529	1154	1403	1.8	1.1	3.523	A
C - A1152 East	630	158	892	1455	0.433	632	687	1.3	0.8	4.386	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.55	1.01	1.42	1.47			N/A	N/A
B - A12 South West	1.11	0.55	1.00	1.40	1.45			N/A	N/A
C - A1152 East	0.75	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.04	0.44	4.78	7.96			N/A	N/A
B - A12 South West	1.72	0.04	0.44	4.59	7.58			N/A	N/A
C - A1152 East	1.22	0.05	0.61	2.80	4.09			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.86	0.03	0.33	8.41	25.47			N/A	N/A
B - A12 South West	3.54	0.03	0.29	3.54	11.18			N/A	N/A
C - A1152 East	2.80	0.03	0.29	2.80	10.94			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.09	0.03	0.29	5.09	17.18			N/A	N/A
B - A12 South West	3.61	0.03	0.27	3.61	3.61			N/A	N/A
C - A1152 East	2.90	0.03	0.28	2.90	6.09			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.05	0.49	4.89	7.76			N/A	N/A
B - A12 South West	1.77	0.07	1.00	4.16	5.95			N/A	N/A
C - A1152 East	1.27	0.06	0.81	2.77	3.90			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.03	0.34	2.56	5.33			N/A	N/A
B - A12 South West	1.13	0.04	0.42	2.82	4.61			N/A	N/A
C - A1152 East	0.77	0.04	0.38	1.79	2.93			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	6.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	972	100.000
B - A12 South West		ONE HOUR	✓	1597	100.000
C - A1152 East		ONE HOUR	✓	741	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	863	107
	B - A12 South West	943	96	558
	C - A1152 East	129	607	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	3
	B - A12 South West	6	8	6
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.61	5.20	1.5	2.0	A	892	1338
B - A12 South West	0.79	7.85	3.8	12.1	A	1465	2198
C - A1152 East	0.59	6.39	1.4	1.6	A	680	1020

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	732	183	494	1910	0.383	729	805	0.0	0.6	3.042	A
B - A12 South West	1202	301	102	2248	0.535	1198	1175	0.0	1.1	3.415	A
C - A1152 East	558	139	721	1570	0.355	556	503	0.0	0.5	3.543	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	874	218	591	1848	0.473	873	964	0.6	0.9	3.688	A
B - A12 South West	1436	359	122	2234	0.643	1433	1406	1.1	1.8	4.479	A
C - A1152 East	666	167	863	1490	0.447	665	601	0.5	0.8	4.361	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1070	268	722	1764	0.607	1068	1178	0.9	1.5	5.151	A
B - A12 South West	1758	440	149	2216	0.794	1751	1719	1.8	3.7	7.613	A
C - A1152 East	816	204	1055	1381	0.591	813	735	0.8	1.4	6.316	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1070	268	725	1762	0.607	1070	1182	1.5	1.5	5.202	A
B - A12 South West	1758	440	150	2216	0.794	1758	1724	3.7	3.8	7.853	A
C - A1152 East	816	204	1058	1379	0.591	816	738	1.4	1.4	6.387	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	874	218	596	1845	0.474	876	971	1.5	0.9	3.727	A
B - A12 South West	1436	359	123	2234	0.643	1443	1413	3.8	1.8	4.598	A
C - A1152 East	666	167	867	1487	0.448	669	605	1.4	0.8	4.411	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	732	183	497	1908	0.383	733	810	0.9	0.6	3.065	A
B - A12 South West	1202	301	103	2247	0.535	1205	1181	1.8	1.2	3.461	A
C - A1152 East	558	139	725	1568	0.356	559	505	0.8	0.6	3.574	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.62	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.14	0.55	1.00	1.40	1.45			N/A	N/A
C - A1152 East	0.55	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.07	0.77	1.56	1.95			N/A	N/A
B - A12 South West	1.77	0.04	0.44	4.76	7.97			N/A	N/A
C - A1152 East	0.80	0.07	0.79	1.04	1.58			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.52	0.03	0.26	1.52	1.52			N/A	N/A
B - A12 South West	3.69	0.03	0.29	3.69	12.11			N/A	N/A
C - A1152 East	1.42	0.03	0.26	1.42	1.42			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.03	0.26	1.53	1.53			N/A	N/A
B - A12 South West	3.77	0.03	0.27	3.77	3.77			N/A	N/A
C - A1152 East	1.43	0.03	0.27	1.43	1.43			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.25	0.98	1.17	1.17			N/A	N/A
B - A12 South West	1.82	0.07	0.99	4.36	6.27			N/A	N/A
C - A1152 East	0.82	0.16	0.92	1.42	1.48			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.63	0.06	0.67	1.36	1.44			N/A	N/A
B - A12 South West	1.16	0.04	0.42	2.91	4.82			N/A	N/A
C - A1152 East	0.56	0.05	0.51	1.32	1.42			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	5.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - A12 South West		ONE HOUR	✓	1629	100.000
C - A1152 East		ONE HOUR	✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	757	74
	B - A12 South West	924	90	615
	C - A1152 East	131	594	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	3	1
	B - A12 South West	2	2	1
	C - A1152 East	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.51	4.01	1.0	1.5	A	764	1147
B - A12 South West	0.78	6.91	3.4	8.3	A	1495	2242
C - A1152 East	0.53	5.00	1.1	1.4	A	670	1005

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	627	157	533	1972	0.318	625	793	0.0	0.5	2.670	A
B - A12 South West	1226	307	104	2346	0.523	1222	1081	0.0	1.1	3.190	A
C - A1152 East	550	137	637	1691	0.325	548	521	0.0	0.5	3.142	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	749	187	637	1906	0.393	748	949	0.5	0.6	3.108	A
B - A12 South West	1464	366	124	2332	0.628	1462	1294	1.1	1.7	4.126	A
C - A1152 East	656	164	762	1621	0.405	655	623	0.5	0.7	3.724	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	917	229	779	1816	0.505	916	1160	0.6	1.0	3.990	A
B - A12 South West	1794	448	152	2314	0.775	1787	1583	1.7	3.3	6.749	A
C - A1152 East	804	201	933	1525	0.527	802	761	0.7	1.1	4.966	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	917	229	782	1815	0.505	917	1164	1.0	1.0	4.010	A
B - A12 South West	1794	448	152	2313	0.775	1793	1587	3.3	3.4	6.914	A
C - A1152 East	804	201	935	1524	0.527	804	764	1.1	1.1	4.996	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	749	187	641	1903	0.393	750	954	1.0	0.7	3.127	A
B - A12 South West	1464	366	124	2332	0.628	1471	1299	3.4	1.7	4.214	A
C - A1152 East	656	164	765	1620	0.405	658	627	1.1	0.7	3.752	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	627	157	536	1970	0.318	628	797	0.7	0.5	2.685	A
B - A12 South West	1226	307	104	2346	0.523	1229	1086	1.7	1.1	3.231	A
C - A1152 East	550	137	640	1690	0.325	550	523	0.7	0.5	3.163	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 South West	1.09	0.55	1.00	1.40	1.45			N/A	N/A
C - A1152 East	0.48	0.00	0.00	0.48	0.48			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.08	0.78	1.36	1.43			N/A	N/A
B - A12 South West	1.67	0.04	0.44	4.44	7.39			N/A	N/A
C - A1152 East	0.68	0.08	0.79	1.37	1.44			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.03	0.26	1.01	1.01			N/A	N/A
B - A12 South West	3.34	0.03	0.28	3.34	8.27			N/A	N/A
C - A1152 East	1.10	0.03	0.26	1.10	1.10			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.03	0.27	1.02	1.30			N/A	N/A
B - A12 South West	3.39	0.03	0.27	3.39	3.39			N/A	N/A
C - A1152 East	1.11	0.03	0.27	1.11	1.40			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.65	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.71	0.08	1.09	3.82	5.34			N/A	N/A
C - A1152 East	0.69	0.33	0.96	1.39	1.45			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.47	0.00	0.00	0.47	0.47			N/A	N/A
B - A12 South West	1.10	0.04	0.45	2.69	4.19			N/A	N/A
C - A1152 East	0.48	0.04	0.43	1.26	1.38			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	2.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	513	100.000
B - A12 South West		ONE HOUR	✓	631	100.000
C - A1152 East		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	484	29
	B - A12 South West	402	23	206
	C - A1152 East	40	277	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	8	26	6
	C - A1152 East	9	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.28	2.43	0.4	1.5	A	470	706
B - A12 South West	0.31	2.33	0.4	1.8	A	579	869
C - A1152 East	0.21	2.72	0.3	0.9	A	290	436

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	386	96	172	2096	0.184	385	332	0.0	0.2	2.103	A
B - A12 South West	475	119	30	2248	0.212	474	588	0.0	0.3	2.029	A
C - A1152 East	238	60	380	1774	0.134	238	177	0.0	0.2	2.342	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	461	115	206	2074	0.222	461	397	0.2	0.3	2.230	A
B - A12 South West	568	142	36	2243	0.253	567	704	0.3	0.3	2.147	A
C - A1152 East	285	71	455	1731	0.164	284	211	0.2	0.2	2.488	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	564	141	252	2044	0.276	564	486	0.3	0.4	2.432	A
B - A12 South West	695	174	44	2238	0.311	695	862	0.3	0.4	2.333	A
C - A1152 East	348	87	557	1672	0.208	348	259	0.2	0.3	2.719	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	564	141	252	2044	0.276	564	487	0.4	0.4	2.432	A
B - A12 South West	695	174	44	2238	0.311	695	862	0.4	0.4	2.333	A
C - A1152 East	348	87	558	1672	0.208	348	259	0.3	0.3	2.719	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	461	115	206	2074	0.222	461	398	0.4	0.3	2.233	A
B - A12 South West	568	142	36	2243	0.253	568	705	0.4	0.3	2.150	A
C - A1152 East	285	71	456	1731	0.164	285	212	0.3	0.2	2.489	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	386	96	173	2096	0.184	386	333	0.3	0.2	2.107	A
B - A12 South West	475	119	30	2248	0.212	476	590	0.3	0.3	2.031	A
C - A1152 East	238	60	382	1773	0.134	238	177	0.2	0.2	2.347	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B - A12 South West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A1152 East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.28	0.00	0.00	0.28	0.28			N/A	N/A
B - A12 South West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.03	0.25	0.45	0.48			N/A	N/A
B - A12 South West	0.45	0.03	0.25	0.45	0.48			N/A	N/A
C - A1152 East	0.26	0.03	0.25	0.45	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.03	0.33	1.24	1.50			N/A	N/A
B - A12 South West	0.45	0.03	0.32	1.39	1.78			N/A	N/A
C - A1152 East	0.26	0.03	0.27	0.49	0.94			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.29	0.00	0.00	0.29	0.29			N/A	N/A
B - A12 South West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B - A12 South West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A1152 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	6.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	996	100.000
B - A12 South West		ONE HOUR	✓	1461	100.000
C - A1152 East		ONE HOUR	✓	754	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	919	78
	B - A12 South West	804	45	612
	C - A1152 East	124	630	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	11	13	6
	C - A1152 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.62	5.34	1.6	2.2	A	914	1371
B - A12 South West	0.74	6.41	2.8	6.1	A	1341	2011
C - A1152 East	0.58	6.06	1.4	1.5	A	692	1038

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	750	188	493	1920	0.391	748	696	0.0	0.6	3.064	A
B - A12 South West	1100	275	93	2198	0.501	1096	1196	0.0	1.0	3.255	A
C - A1152 East	568	142	723	1620	0.350	566	517	0.0	0.5	3.407	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	896	224	590	1857	0.482	895	833	0.6	0.9	3.734	A
B - A12 South West	1314	328	111	2186	0.601	1312	1431	1.0	1.5	4.108	A
C - A1152 East	678	169	865	1537	0.441	677	619	0.5	0.8	4.179	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1097	274	721	1772	0.619	1094	1018	0.9	1.6	5.287	A
B - A12 South West	1609	402	136	2170	0.741	1604	1751	1.5	2.8	6.302	A
C - A1152 East	830	208	1058	1426	0.582	828	757	0.8	1.4	5.998	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1097	274	723	1771	0.619	1097	1022	1.6	1.6	5.341	A
B - A12 South West	1609	402	136	2170	0.742	1609	1755	2.8	2.8	6.415	A
C - A1152 East	830	208	1061	1424	0.583	830	759	1.4	1.4	6.060	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	896	224	593	1855	0.483	898	837	1.6	0.9	3.775	A
B - A12 South West	1314	328	111	2186	0.601	1319	1438	2.8	1.5	4.179	A
C - A1152 East	678	169	869	1535	0.442	680	622	1.4	0.8	4.223	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	750	188	495	1918	0.391	751	700	0.9	0.6	3.090	A
B - A12 South West	1100	275	93	2198	0.501	1102	1202	1.5	1.0	3.294	A
C - A1152 East	568	142	727	1618	0.351	569	520	0.8	0.5	3.437	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.64	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	0.99	0.55	1.00	1.40	1.45			N/A	N/A
C - A1152 East	0.54	0.54	1.00	1.40	1.45			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.06	0.76	1.69	2.21			N/A	N/A
B - A12 South West	1.49	0.05	0.47	3.83	6.07			N/A	N/A
C - A1152 East	0.78	0.08	0.79	1.48	1.48			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.03	0.26	1.60	1.60			N/A	N/A
B - A12 South West	2.79	0.03	0.27	2.79	4.59			N/A	N/A
C - A1152 East	1.37	0.03	0.26	1.37	1.37			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.03	0.26	1.61	1.61			N/A	N/A
B - A12 South West	2.83	0.03	0.26	2.83	2.83			N/A	N/A
C - A1152 East	1.39	0.03	0.27	1.39	1.39			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.21	0.99	1.48	1.48			N/A	N/A
B - A12 South West	1.52	0.09	1.13	3.02	4.10			N/A	N/A
C - A1152 East	0.80	0.18	0.93	1.40	1.46			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.65	0.06	0.66	1.38	1.46			N/A	N/A
B - A12 South West	1.01	0.05	0.49	2.23	3.32			N/A	N/A
C - A1152 East	0.54	0.05	0.51	1.31	1.41			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	13.49	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1278	100.000
B - A12 South West		ONE HOUR	✓	1619	100.000
C - A1152 East		ONE HOUR	✓	876	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1124	153
	B - A12 South West	757	67	795
	C - A1152 East	175	700	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	5
	B - A12 South West	11	16	7
	C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	17.11	6.4	32.7	C	1172	1758
B - A12 South West	0.84	10.46	5.0	23.1	B	1486	2228
C - A1152 East	0.79	13.96	3.6	16.5	B	804	1206

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	962	240	647	1807	0.532	957	700	0.0	1.1	4.217	A
B - A12 South West	1219	305	133	2166	0.563	1214	1417	0.0	1.3	3.762	A
C - A1152 East	660	165	893	1454	0.454	656	711	0.0	0.8	4.496	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1148	287	774	1725	0.666	1145	837	1.1	2.0	6.176	A
B - A12 South West	1455	364	159	2148	0.677	1452	1695	1.3	2.1	5.147	A
C - A1152 East	788	197	1068	1356	0.581	785	851	0.8	1.4	6.287	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1407	352	944	1615	0.871	1391	1021	2.0	6.0	15.063	C
B - A12 South West	1783	446	193	2125	0.839	1771	2060	2.1	4.9	9.864	A
C - A1152 East	965	241	1298	1227	0.786	956	1037	1.4	3.4	12.897	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1407	352	949	1612	0.873	1405	1027	6.0	6.4	17.106	C
B - A12 South West	1783	446	195	2124	0.839	1782	2079	4.9	5.0	10.457	B
C - A1152 East	965	241	1311	1220	0.791	964	1044	3.4	3.6	13.960	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1148	287	782	1720	0.668	1166	846	6.4	2.1	6.697	A
B - A12 South West	1455	364	161	2147	0.678	1467	1722	5.0	2.1	5.381	A
C - A1152 East	788	197	1087	1345	0.585	796	860	3.6	1.4	6.657	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	962	240	651	1804	0.533	965	705	2.1	1.2	4.313	A
B - A12 South West	1219	305	134	2165	0.563	1222	1429	2.1	1.3	3.833	A
C - A1152 East	660	165	900	1450	0.455	662	716	1.4	0.8	4.582	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.55	1.05	1.48	1.48			N/A	N/A
B - A12 South West	1.27	0.56	1.12	1.50	1.75			N/A	N/A
C - A1152 East	0.82	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.95	0.04	0.44	5.30	8.98			N/A	N/A
B - A12 South West	2.06	0.04	0.43	5.63	9.66			N/A	N/A
C - A1152 East	1.36	0.05	0.50	3.36	5.08			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.97	0.04	0.37	13.94	32.67			N/A	N/A
B - A12 South West	4.87	0.03	0.31	5.77	23.12			N/A	N/A
C - A1152 East	3.44	0.03	0.31	4.22	16.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.38	0.03	0.31	6.38	28.91			N/A	N/A
B - A12 South West	5.03	0.03	0.28	5.03	10.71			N/A	N/A
C - A1152 East	3.62	0.03	0.28	3.62	10.94			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.05	0.05	0.45	5.58	9.26			N/A	N/A
B - A12 South West	2.14	0.05	0.70	5.66	8.75			N/A	N/A
C - A1152 East	1.44	0.05	0.64	3.49	5.18			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.03	0.32	2.44	5.84			N/A	N/A
B - A12 South West	1.30	0.04	0.37	3.30	6.26			N/A	N/A
C - A1152 East	0.84	0.04	0.35	1.98	3.75			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	8.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1005	100.000
B - A12 South West		ONE HOUR	✓	1680	100.000
C - A1152 East		ONE HOUR	✓	782	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	889	115
	B - A12 South West	966	96	618
	C - A1152 East	137	640	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	8	3
	B - A12 South West	7	8	5
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	5.99	1.8	2.7	A	923	1384
B - A12 South West	0.84	10.03	5.0	22.7	B	1542	2313
C - A1152 East	0.63	7.16	1.7	2.0	A	718	1076

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	757	189	539	1867	0.405	754	829	0.0	0.7	3.227	A
B - A12 South West	1265	316	108	2240	0.565	1260	1218	0.0	1.3	3.651	A
C - A1152 East	589	147	740	1561	0.377	586	553	0.0	0.6	3.683	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	904	226	645	1800	0.502	903	992	0.7	1.0	4.005	A
B - A12 South West	1510	378	130	2226	0.678	1507	1458	1.3	2.1	4.986	A
C - A1152 East	703	176	886	1478	0.476	702	662	0.6	0.9	4.632	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1107	277	786	1711	0.647	1104	1211	1.0	1.8	5.900	A
B - A12 South West	1850	462	158	2207	0.838	1839	1782	2.1	4.9	9.500	A
C - A1152 East	861	215	1083	1365	0.631	858	807	0.9	1.7	7.053	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1107	277	791	1708	0.648	1107	1217	1.8	1.8	5.986	A
B - A12 South West	1850	462	159	2206	0.838	1849	1788	4.9	5.0	10.035	B
C - A1152 East	861	215	1086	1363	0.632	861	812	1.7	1.7	7.164	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	904	226	651	1796	0.503	907	1001	1.8	1.0	4.064	A
B - A12 South West	1510	378	130	2226	0.679	1522	1466	5.0	2.1	5.198	A
C - A1152 East	703	176	890	1475	0.477	706	668	1.7	0.9	4.698	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	757	189	542	1865	0.406	758	835	1.0	0.7	3.260	A
B - A12 South West	1265	316	109	2240	0.565	1268	1225	2.1	1.3	3.716	A
C - A1152 East	589	147	744	1559	0.378	590	557	0.9	0.6	3.721	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.68	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.28	0.56	1.13	1.53	1.77			N/A	N/A
C - A1152 East	0.60	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.06	0.73	1.92	2.74			N/A	N/A
B - A12 South West	2.08	0.04	0.43	5.65	9.78			N/A	N/A
C - A1152 East	0.90	0.07	0.78	1.58	1.96			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.03	0.27	1.80	1.80			N/A	N/A
B - A12 South West	4.87	0.03	0.31	5.38	22.69			N/A	N/A
C - A1152 East	1.67	0.03	0.27	1.67	1.67			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.03	0.26	1.82	1.82			N/A	N/A
B - A12 South West	5.02	0.03	0.28	5.02	9.79			N/A	N/A
C - A1152 East	1.69	0.03	0.27	1.69	1.69			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.15	1.01	1.49	1.81			N/A	N/A
B - A12 South West	2.15	0.05	0.73	5.66	8.70			N/A	N/A
C - A1152 East	0.92	0.12	0.94	1.23	1.66			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.69	0.06	0.62	1.40	1.40			N/A	N/A
B - A12 South West	1.31	0.04	0.37	3.34	6.28			N/A	N/A
C - A1152 East	0.61	0.05	0.50	1.07	1.07			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	7.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	906	100.000
B - A12 South West		ONE HOUR	✓	1710	100.000
C - A1152 East		ONE HOUR	✓	778	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	821	84
	B - A12 South West	955	90	665
	C - A1152 East	142	631	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	1
	B - A12 South West	3	2	1
	C - A1152 East	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.57	4.73	1.3	1.5	A	832	1248
B - A12 South West	0.82	8.83	4.5	18.2	A	1569	2354
C - A1152 East	0.58	5.76	1.4	1.5	A	714	1071

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	682	171	570	1925	0.355	680	824	0.0	0.5	2.887	A
B - A12 South West	1287	322	112	2324	0.554	1282	1157	0.0	1.2	3.441	A
C - A1152 East	586	147	685	1664	0.352	584	565	0.0	0.5	3.325	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	815	204	682	1855	0.439	814	986	0.5	0.8	3.455	A
B - A12 South West	1537	384	134	2309	0.666	1534	1385	1.2	2.0	4.628	A
C - A1152 East	700	175	820	1587	0.441	699	676	0.5	0.8	4.047	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	998	249	833	1761	0.567	996	1204	0.8	1.3	4.694	A
B - A12 South West	1883	471	164	2289	0.823	1873	1694	2.0	4.4	8.459	A
C - A1152 East	857	214	1003	1483	0.578	855	826	0.8	1.3	5.710	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	998	249	837	1758	0.568	998	1209	1.3	1.3	4.734	A
B - A12 South West	1883	471	164	2289	0.823	1882	1698	4.4	4.5	8.830	A
C - A1152 East	857	214	1005	1482	0.578	857	830	1.3	1.4	5.763	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	815	204	688	1851	0.440	817	994	1.3	0.8	3.488	A
B - A12 South West	1537	384	134	2309	0.666	1547	1391	4.5	2.0	4.788	A
C - A1152 East	700	175	823	1585	0.441	702	682	1.4	0.8	4.085	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	682	171	574	1923	0.355	683	829	0.8	0.6	2.908	A
B - A12 South West	1287	322	112	2324	0.554	1290	1163	2.0	1.3	3.496	A
C - A1152 East	586	147	688	1662	0.353	587	569	0.8	0.5	3.353	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.23	0.56	1.07	1.23	1.61			N/A	N/A
C - A1152 East	0.54	0.54	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.07	0.78	1.48	1.49			N/A	N/A
B - A12 South West	1.96	0.04	0.42	5.31	9.20			N/A	N/A
C - A1152 East	0.78	0.08	0.79	1.48	1.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.03	0.26	1.29	1.29			N/A	N/A
B - A12 South West	4.40	0.03	0.30	4.40	18.18			N/A	N/A
C - A1152 East	1.35	0.03	0.26	1.35	1.35			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.03	0.27	1.30	1.30			N/A	N/A
B - A12 South West	4.52	0.03	0.27	4.52	5.75			N/A	N/A
C - A1152 East	1.36	0.03	0.27	1.36	1.36			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.41	0.97	1.40	1.45			N/A	N/A
B - A12 South West	2.02	0.06	0.86	5.15	7.72			N/A	N/A
C - A1152 East	0.80	0.21	0.94	1.40	1.46			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.06	0.62	1.32	1.41			N/A	N/A
B - A12 South West	1.25	0.04	0.39	3.21	5.71			N/A	N/A
C - A1152 East	0.55	0.05	0.54	1.31	1.41			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	2.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	524	100.000
B - A12 South West		ONE HOUR	✓	740	100.000
C - A1152 East		ONE HOUR	✓	320	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	495	29
	B - A12 South West	511	23	206
	C - A1152 East	41	278	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	11	26	6
	C - A1152 East	9	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.28	2.45	0.4	1.2	A	481	721
B - A12 South West	0.37	2.60	0.6	2.7	A	679	1019
C - A1152 East	0.21	2.74	0.3	1.0	A	293	440

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	394	99	172	2099	0.188	393	415	0.0	0.2	2.109	A
B - A12 South West	557	139	31	2211	0.252	556	598	0.0	0.3	2.173	A
C - A1152 East	241	60	389	1770	0.136	240	177	0.0	0.2	2.351	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	471	118	206	2078	0.227	471	496	0.2	0.3	2.240	A
B - A12 South West	666	166	37	2207	0.302	665	715	0.3	0.4	2.335	A
C - A1152 East	287	72	465	1726	0.166	287	212	0.2	0.2	2.501	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	577	144	252	2048	0.282	576	608	0.3	0.4	2.447	A
B - A12 South West	815	204	45	2201	0.370	815	876	0.4	0.6	2.595	A
C - A1152 East	352	88	570	1666	0.211	352	259	0.2	0.3	2.738	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	577	144	252	2048	0.282	577	608	0.4	0.4	2.447	A
B - A12 South West	815	204	45	2201	0.370	815	876	0.6	0.6	2.597	A
C - A1152 East	352	88	570	1666	0.211	352	259	0.3	0.3	2.738	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	471	118	206	2077	0.227	471	497	0.4	0.3	2.241	A
B - A12 South West	666	166	37	2207	0.302	666	716	0.6	0.4	2.339	A
C - A1152 East	287	72	466	1726	0.166	288	212	0.3	0.2	2.504	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	394	99	173	2099	0.188	395	416	0.3	0.2	2.112	A
B - A12 South West	557	139	31	2211	0.252	558	600	0.4	0.3	2.179	A
C - A1152 East	241	60	390	1769	0.136	241	177	0.2	0.2	2.354	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B - A12 South West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A1152 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.29	0.00	0.00	0.29	0.29			N/A	N/A
B - A12 South West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.03	0.25	0.45	0.48			N/A	N/A
B - A12 South West	0.59	0.03	0.25	0.59	0.59			N/A	N/A
C - A1152 East	0.27	0.03	0.25	0.45	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.03	0.33	1.18	1.18			N/A	N/A
B - A12 South West	0.59	0.03	0.29	1.25	2.70			N/A	N/A
C - A1152 East	0.27	0.03	0.28	0.51	1.00			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.29	0.00	0.00	0.29	0.29			N/A	N/A
B - A12 South West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B - A12 South West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A1152 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	9.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1007	100.000
B - A12 South West		ONE HOUR	✓	1677	100.000
C - A1152 East		ONE HOUR	✓	771	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	933	74
	B - A12 South West	1020	45	612
	C - A1152 East	127	644	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	14	13	6
	C - A1152 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.63	5.44	1.7	2.4	A	924	1386
B - A12 South West	0.87	12.95	6.4	32.9	B	1539	2308
C - A1152 East	0.60	6.36	1.5	1.7	A	708	1062

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	758	189	492	1919	0.395	755	860	0.0	0.6	3.088	A
B - A12 South West	1262	316	95	2149	0.588	1257	1217	0.0	1.4	4.012	A
C - A1152 East	581	145	734	1614	0.360	579	514	0.0	0.6	3.469	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	905	226	589	1856	0.488	904	1028	0.6	0.9	3.774	A
B - A12 South West	1507	377	114	2137	0.706	1504	1456	1.4	2.3	5.653	A
C - A1152 East	693	173	878	1530	0.453	692	615	0.6	0.8	4.290	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1108	277	717	1773	0.625	1106	1253	0.9	1.6	5.367	A
B - A12 South West	1846	462	139	2120	0.871	1831	1781	2.3	6.1	11.868	B
C - A1152 East	849	212	1074	1417	0.599	847	749	0.8	1.5	6.282	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1108	277	723	1770	0.626	1108	1262	1.6	1.7	5.438	A
B - A12 South West	1846	462	140	2120	0.871	1845	1786	6.1	6.4	12.950	B
C - A1152 East	849	212	1076	1415	0.600	849	755	1.5	1.5	6.356	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	905	226	597	1851	0.489	908	1041	1.7	1.0	3.825	A
B - A12 South West	1507	377	115	2136	0.706	1523	1464	6.4	2.4	6.019	A
C - A1152 East	693	173	882	1528	0.454	696	622	1.5	0.8	4.341	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	758	189	496	1916	0.395	759	866	1.0	0.7	3.113	A
B - A12 South West	1262	316	96	2148	0.588	1266	1223	2.4	1.4	4.100	A
C - A1152 East	581	145	737	1612	0.360	582	518	0.8	0.6	3.498	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.65	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.41	0.58	1.30	1.76	1.90			N/A	N/A
C - A1152 East	0.56	0.55	1.00	1.40	1.45			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.06	0.76	1.76	2.38			N/A	N/A
B - A12 South West	2.35	0.04	0.43	6.44	11.17			N/A	N/A
C - A1152 East	0.82	0.07	0.79	1.21	1.69			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.03	0.26	1.64	1.64			N/A	N/A
B - A12 South West	6.12	0.03	0.34	11.80	32.87			N/A	N/A
C - A1152 East	1.47	0.03	0.26	1.47	1.47			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.03	0.26	1.66	1.66			N/A	N/A
B - A12 South West	6.40	0.03	0.29	6.40	22.70			N/A	N/A
C - A1152 East	1.49	0.03	0.27	1.49	1.49			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.20	0.99	1.13	1.58			N/A	N/A
B - A12 South West	2.45	0.05	0.49	6.72	10.92			N/A	N/A
C - A1152 East	0.84	0.16	0.93	1.43	1.50			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.66	0.06	0.66	1.39	1.48			N/A	N/A
B - A12 South West	1.44	0.03	0.35	3.46	7.36			N/A	N/A
C - A1152 East	0.57	0.05	0.52	1.33	1.43			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	16.85	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1281	100.000
B - A12 South West		ONE HOUR	✓	1681	100.000
C - A1152 East		ONE HOUR	✓	884	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1127	153
	B - A12 South West	828	67	786
	C - A1152 East	183	700	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	8	5
	B - A12 South West	18	16	7
	C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	18.18	6.8	34.1	C	1175	1763
B - A12 South West	0.90	16.84	8.2	41.9	C	1543	2314
C - A1152 East	0.80	14.96	3.9	18.5	B	811	1216

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	964	241	640	1793	0.538	960	758	0.0	1.2	4.299	A
B - A12 South West	1266	316	138	2099	0.603	1260	1419	0.0	1.5	4.260	A
C - A1152 East	665	166	895	1448	0.460	662	704	0.0	0.8	4.562	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1151	288	766	1712	0.672	1148	907	1.2	2.0	6.339	A
B - A12 South West	1511	378	166	2082	0.726	1507	1698	1.5	2.6	6.219	A
C - A1152 East	794	199	1071	1348	0.589	792	843	0.8	1.4	6.447	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1410	353	930	1607	0.877	1393	1102	2.0	6.3	15.706	C
B - A12 South West	1851	463	201	2058	0.899	1831	2062	2.6	7.7	14.652	B
C - A1152 East	973	243	1300	1219	0.798	964	1023	1.4	3.7	13.662	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1410	353	939	1601	0.881	1408	1113	6.3	6.8	18.182	C
B - A12 South West	1851	463	203	2057	0.900	1849	2083	7.7	8.2	16.836	C
C - A1152 East	973	243	1314	1211	0.804	972	1034	3.7	3.9	14.956	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1151	288	779	1704	0.676	1170	922	6.8	2.1	6.970	A
B - A12 South West	1511	378	168	2080	0.727	1533	1727	8.2	2.7	6.842	A
C - A1152 East	794	199	1091	1337	0.594	804	858	3.9	1.5	6.875	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	964	241	645	1789	0.539	968	765	2.1	1.2	4.406	A
B - A12 South West	1266	316	140	2098	0.603	1270	1431	2.7	1.5	4.373	A
C - A1152 East	665	166	903	1443	0.461	668	710	1.5	0.9	4.656	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.55	1.07	1.21	1.61			N/A	N/A
B - A12 South West	1.50	0.58	1.41	1.88	2.02			N/A	N/A
C - A1152 East	0.84	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.04	0.44	5.47	9.28			N/A	N/A
B - A12 South West	2.59	0.04	0.44	7.13	12.43			N/A	N/A
C - A1152 East	1.41	0.05	0.49	3.53	5.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.25	0.04	0.38	15.25	34.12			N/A	N/A
B - A12 South West	7.68	0.04	0.40	19.45	41.92			N/A	N/A
C - A1152 East	3.68	0.03	0.32	5.41	18.47			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.77	0.03	0.32	8.09	32.25			N/A	N/A
B - A12 South West	8.24	0.03	0.32	10.43	39.82			N/A	N/A
C - A1152 East	3.90	0.03	0.29	3.90	13.21			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.05	0.45	5.81	9.74			N/A	N/A
B - A12 South West	2.73	0.05	0.46	7.59	12.90			N/A	N/A
C - A1152 East	1.49	0.05	0.57	3.71	5.64			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.03	0.32	2.43	6.00			N/A	N/A
B - A12 South West	1.54	0.03	0.33	3.28	7.99			N/A	N/A
C - A1152 East	0.86	0.03	0.35	2.00	3.95			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	9.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1039	100.000
B - A12 South West		ONE HOUR	✓	1705	100.000
C - A1152 East		ONE HOUR	✓	783	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	911	126
	B - A12 South West	994	96	615
	C - A1152 East	137	641	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	11	2
	B - A12 South West	10	8	5
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	6.91	2.2	3.6	A	953	1430
B - A12 South West	0.87	12.32	6.2	31.5	B	1565	2347
C - A1152 East	0.65	7.67	1.8	2.2	A	718	1078

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	782	196	537	1818	0.430	779	850	0.0	0.8	3.455	A
B - A12 South West	1284	321	108	2199	0.584	1278	1236	0.0	1.4	3.885	A
C - A1152 East	589	147	757	1539	0.383	587	559	0.0	0.6	3.771	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	934	234	642	1753	0.533	933	1017	0.8	1.1	4.377	A
B - A12 South West	1533	383	130	2185	0.702	1529	1479	1.4	2.3	5.457	A
C - A1152 East	704	176	906	1452	0.485	703	669	0.6	0.9	4.798	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1144	286	782	1668	0.686	1140	1239	1.1	2.1	6.772	A
B - A12 South West	1878	469	158	2166	0.867	1863	1807	2.3	5.9	11.357	B
C - A1152 East	862	216	1107	1333	0.647	859	816	0.9	1.8	7.531	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1144	286	788	1664	0.687	1144	1248	2.1	2.2	6.915	A
B - A12 South West	1878	469	159	2166	0.867	1877	1814	5.9	6.2	12.323	B
C - A1152 East	862	216	1111	1331	0.648	862	821	1.8	1.8	7.674	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	934	234	650	1749	0.534	938	1029	2.2	1.2	4.463	A
B - A12 South West	1533	383	130	2185	0.702	1548	1489	6.2	2.4	5.787	A
C - A1152 East	704	176	912	1448	0.486	707	677	1.8	1.0	4.882	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	782	196	541	1816	0.431	784	856	1.2	0.8	3.493	A
B - A12 South West	1284	321	109	2199	0.584	1288	1243	2.4	1.4	3.967	A
C - A1152 East	589	147	761	1537	0.384	591	563	1.0	0.6	3.810	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.39	0.58	1.28	1.74	1.88			N/A	N/A
C - A1152 East	0.62	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.06	0.66	2.49	3.59			N/A	N/A
B - A12 South West	2.30	0.04	0.43	6.31	11.01			N/A	N/A
C - A1152 East	0.93	0.06	0.77	1.70	2.23			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.03	0.27	2.13	2.35			N/A	N/A
B - A12 South West	5.94	0.03	0.34	10.69	31.47			N/A	N/A
C - A1152 East	1.79	0.03	0.27	1.79	1.79			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.17	0.03	0.27	2.17	2.17			N/A	N/A
B - A12 South West	6.20	0.03	0.29	6.20	20.37			N/A	N/A
C - A1152 East	1.82	0.03	0.27	1.82	1.82			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.10	1.03	1.90	2.52			N/A	N/A
B - A12 South West	2.40	0.05	0.50	6.57	10.59			N/A	N/A
C - A1152 East	0.96	0.10	0.94	1.45	1.81			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.05	0.51	1.43	1.92			N/A	N/A
B - A12 South West	1.42	0.03	0.35	3.45	7.19			N/A	N/A
C - A1152 East	0.63	0.05	0.48	1.40	1.40			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	7.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	990	100.000
B - A12 South West		ONE HOUR	✓	1728	100.000
C - A1152 East		ONE HOUR	✓	775	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	900	88
	B - A12 South West	972	90	665
	C - A1152 East	142	628	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	1
	B - A12 South West	4	2	1
	C - A1152 East	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	5.78	1.7	2.5	A	909	1363
B - A12 South West	0.84	9.59	4.9	21.7	A	1585	2378
C - A1152 East	0.60	6.40	1.5	1.7	A	711	1067

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	746	186	570	1875	0.398	743	837	0.0	0.7	3.172	A
B - A12 South West	1301	325	112	2311	0.563	1295	1213	0.0	1.3	3.528	A
C - A1152 East	583	146	744	1619	0.360	581	569	0.0	0.6	3.461	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	890	223	682	1807	0.493	889	1002	0.7	1.0	3.915	A
B - A12 South West	1553	388	134	2296	0.676	1550	1452	1.3	2.1	4.805	A
C - A1152 East	697	174	891	1533	0.454	696	680	0.6	0.8	4.291	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	832	1716	0.635	1087	1223	1.0	1.7	5.698	A
B - A12 South West	1902	476	164	2276	0.836	1891	1776	2.1	4.8	9.105	A
C - A1152 East	853	213	1089	1417	0.602	851	830	0.8	1.5	6.323	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	837	1713	0.636	1090	1229	1.7	1.7	5.775	A
B - A12 South West	1902	476	164	2276	0.836	1901	1781	4.8	4.9	9.585	A
C - A1152 East	853	213	1092	1415	0.603	853	835	1.5	1.5	6.399	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	890	223	688	1804	0.494	893	1011	1.7	1.0	3.967	A
B - A12 South West	1553	388	135	2296	0.677	1564	1460	4.9	2.1	4.997	A
C - A1152 East	697	174	895	1531	0.455	699	686	1.5	0.8	4.343	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	746	186	574	1873	0.398	747	843	1.0	0.7	3.201	A
B - A12 South West	1301	325	113	2310	0.563	1304	1220	2.1	1.3	3.590	A
C - A1152 East	583	146	748	1617	0.361	584	572	0.8	0.6	3.490	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.66	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.28	0.56	1.13	1.50	1.75			N/A	N/A
C - A1152 East	0.56	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.06	0.74	1.82	2.52			N/A	N/A
B - A12 South West	2.06	0.04	0.42	5.58	9.73			N/A	N/A
C - A1152 East	0.83	0.07	0.78	1.25	1.71			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.03	0.26	1.71	1.71			N/A	N/A
B - A12 South West	4.80	0.03	0.31	4.80	21.71			N/A	N/A
C - A1152 East	1.49	0.03	0.26	1.49	1.49			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.03	0.26	1.73	1.73			N/A	N/A
B - A12 South West	4.94	0.03	0.28	4.94	8.59			N/A	N/A
C - A1152 East	1.50	0.03	0.27	1.50	1.50			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.17	1.00	1.32	1.69			N/A	N/A
B - A12 South West	2.13	0.06	0.77	5.57	8.51			N/A	N/A
C - A1152 East	0.84	0.15	0.93	1.02	1.02			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.66	0.06	0.63	1.11	1.11			N/A	N/A
B - A12 South West	1.30	0.04	0.37	3.33	6.17			N/A	N/A
C - A1152 East	0.57	0.05	0.51	1.33	1.43			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	2.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	537	100.000
B - A12 South West		ONE HOUR	✓	655	100.000
C - A1152 East		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	507	30
	B - A12 South West	414	23	218
	C - A1152 East	40	281	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	8	26	6
	C - A1152 East	9	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.29	2.49	0.4	1.4	A	493	739
B - A12 South West	0.32	2.37	0.5	2.0	A	601	902
C - A1152 East	0.21	2.76	0.3	1.0	A	295	442

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	404	101	181	2092	0.193	403	341	0.0	0.2	2.130	A
B - A12 South West	493	123	30	2251	0.219	492	609	0.0	0.3	2.046	A
C - A1152 East	242	60	398	1766	0.137	241	187	0.0	0.2	2.359	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	483	121	217	2069	0.233	483	408	0.2	0.3	2.268	A
B - A12 South West	589	147	36	2247	0.262	589	728	0.3	0.4	2.171	A
C - A1152 East	289	72	476	1721	0.168	288	223	0.2	0.2	2.513	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	591	148	265	2038	0.290	591	500	0.3	0.4	2.488	A
B - A12 South West	722	180	44	2241	0.322	721	892	0.4	0.5	2.368	A
C - A1152 East	354	88	583	1659	0.213	353	273	0.2	0.3	2.756	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	591	148	265	2038	0.290	591	500	0.4	0.4	2.488	A
B - A12 South West	722	180	44	2241	0.322	722	892	0.5	0.5	2.368	A
C - A1152 East	354	88	583	1659	0.213	354	274	0.3	0.3	2.756	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	483	121	217	2069	0.233	483	409	0.4	0.3	2.270	A
B - A12 South West	589	147	36	2247	0.262	590	729	0.5	0.4	2.174	A
C - A1152 East	289	72	477	1720	0.168	289	224	0.3	0.2	2.514	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	404	101	182	2092	0.193	405	342	0.3	0.2	2.133	A
B - A12 South West	493	123	30	2251	0.219	494	611	0.4	0.3	2.048	A
C - A1152 East	242	60	399	1765	0.137	242	187	0.2	0.2	2.365	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B - A12 South West	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C - A1152 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - A12 South West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.03	0.25	0.45	0.48			N/A	N/A
B - A12 South West	0.47	0.03	0.25	0.47	0.48			N/A	N/A
C - A1152 East	0.27	0.03	0.25	0.45	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.03	0.33	1.31	1.40			N/A	N/A
B - A12 South West	0.47	0.03	0.31	1.42	1.96			N/A	N/A
C - A1152 East	0.27	0.03	0.28	0.58	1.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A12 South West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B - A12 South West	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C - A1152 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	6.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1016	100.000
B - A12 South West		ONE HOUR	✓	1540	100.000
C - A1152 East		ONE HOUR	✓	778	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	935	80
	B - A12 South West	852	45	643
	C - A1152 East	125	653	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	3
	B - A12 South West	10	13	6
	C - A1152 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	5.71	1.8	2.6	A	932	1398
B - A12 South West	0.78	7.47	3.5	9.7	A	1413	2120
C - A1152 East	0.61	6.45	1.5	1.7	A	714	1071

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	765	191	516	1905	0.401	762	733	0.0	0.7	3.144	A
B - A12 South West	1159	290	94	2205	0.526	1155	1226	0.0	1.1	3.414	A
C - A1152 East	586	146	736	1613	0.363	584	543	0.0	0.6	3.488	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	913	228	618	1839	0.496	912	877	0.7	1.0	3.877	A
B - A12 South West	1384	346	112	2193	0.631	1382	1467	1.1	1.7	4.424	A
C - A1152 East	700	175	880	1530	0.457	698	649	0.6	0.8	4.326	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1118	280	755	1751	0.639	1115	1071	1.0	1.7	5.637	A
B - A12 South West	1696	424	137	2177	0.779	1689	1794	1.7	3.4	7.275	A
C - A1152 East	857	214	1076	1416	0.605	854	793	0.8	1.5	6.376	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1118	280	758	1749	0.639	1118	1075	1.7	1.8	5.706	A
B - A12 South West	1696	424	137	2177	0.779	1695	1799	3.4	3.5	7.472	A
C - A1152 East	857	214	1079	1414	0.606	857	796	1.5	1.5	6.454	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	913	228	622	1837	0.497	916	882	1.8	1.0	3.924	A
B - A12 South West	1384	346	113	2193	0.631	1391	1474	3.5	1.7	4.529	A
C - A1152 East	700	175	884	1527	0.458	702	653	1.5	0.9	4.379	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	765	191	519	1903	0.402	766	737	1.0	0.7	3.171	A
B - A12 South West	1159	290	94	2205	0.526	1162	1232	1.7	1.1	3.458	A
C - A1152 East	586	146	739	1611	0.364	587	546	0.9	0.6	3.517	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.67	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.10	0.55	1.00	1.40	1.45			N/A	N/A
C - A1152 East	0.57	0.55	1.00	1.40	1.45			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.06	0.74	1.86	2.62			N/A	N/A
B - A12 South West	1.69	0.04	0.44	4.50	7.41			N/A	N/A
C - A1152 East	0.84	0.07	0.79	1.30	1.75			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.03	0.26	1.74	1.74			N/A	N/A
B - A12 South West	3.40	0.03	0.28	3.40	9.69			N/A	N/A
C - A1152 East	1.51	0.03	0.26	1.51	1.51			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.76	0.03	0.26	1.76	1.76			N/A	N/A
B - A12 South West	3.46	0.03	0.27	3.46	3.46			N/A	N/A
C - A1152 East	1.52	0.03	0.27	1.52	1.52			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.17	1.00	1.37	1.73			N/A	N/A
B - A12 South West	1.74	0.07	1.04	3.96	5.66			N/A	N/A
C - A1152 East	0.85	0.15	0.93	1.16	1.16			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.68	0.06	0.64	1.19	1.19			N/A	N/A
B - A12 South West	1.12	0.04	0.43	2.76	4.41			N/A	N/A
C - A1152 East	0.57	0.05	0.52	1.33	1.44			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	16.94	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1316	100.000
B - A12 South West		ONE HOUR	✓	1690	100.000
C - A1152 East		ONE HOUR	✓	873	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1162	153
	B - A12 South West	805	67	818
	C - A1152 East	195	677	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	5
	B - A12 South West	10	16	7
	C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	22.25	8.4	45.5	C	1208	1812
B - A12 South West	0.88	13.90	6.9	35.7	B	1551	2326
C - A1152 East	0.80	15.03	3.9	18.2	C	801	1202

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	991	248	664	1803	0.550	986	750	0.0	1.2	4.384	A
B - A12 South West	1272	318	147	2161	0.589	1267	1428	0.0	1.4	4.003	A
C - A1152 East	657	164	922	1437	0.458	654	728	0.0	0.8	4.581	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1183	296	794	1718	0.689	1180	898	1.2	2.2	6.637	A
B - A12 South West	1519	380	176	2141	0.709	1515	1709	1.4	2.4	5.716	A
C - A1152 East	785	196	1102	1336	0.587	783	871	0.8	1.4	6.478	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	966	1606	0.902	1428	1092	2.2	7.6	18.301	C
B - A12 South West	1861	465	215	2116	0.879	1844	2072	2.4	6.5	12.542	B
C - A1152 East	961	240	1334	1207	0.796	952	1060	1.4	3.6	13.668	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	974	1601	0.905	1446	1101	7.6	8.4	22.254	C
B - A12 South West	1861	465	217	2115	0.880	1859	2095	6.5	6.9	13.897	B
C - A1152 East	961	240	1351	1198	0.803	960	1069	3.6	3.9	15.033	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1183	296	805	1711	0.692	1208	910	8.4	2.3	7.495	A
B - A12 South West	1519	380	179	2139	0.710	1537	1744	6.9	2.5	6.141	A
C - A1152 East	785	196	1128	1322	0.594	794	885	3.9	1.5	6.945	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	991	248	669	1799	0.551	995	756	2.3	1.2	4.501	A
B - A12 South West	1272	318	149	2160	0.589	1276	1441	2.5	1.4	4.094	A
C - A1152 East	657	164	930	1432	0.459	660	734	1.5	0.9	4.678	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.55	1.13	1.54	1.78			N/A	N/A
B - A12 South West	1.42	0.58	1.31	1.78	1.92			N/A	N/A
C - A1152 East	0.84	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.16	0.04	0.43	5.90	10.18			N/A	N/A
B - A12 South West	2.39	0.04	0.43	6.57	11.48			N/A	N/A
C - A1152 East	1.40	0.05	0.50	3.49	5.34			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.62	0.04	0.44	21.11	40.67			N/A	N/A
B - A12 South West	6.54	0.04	0.35	13.91	35.71			N/A	N/A
C - A1152 East	3.64	0.03	0.32	5.27	18.18			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.45	0.03	0.35	16.22	45.50			N/A	N/A
B - A12 South West	6.89	0.03	0.30	6.89	27.44			N/A	N/A
C - A1152 East	3.87	0.03	0.29	3.87	13.18			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.30	0.04	0.43	6.29	10.97			N/A	N/A
B - A12 South West	2.50	0.05	0.48	6.88	11.33			N/A	N/A
C - A1152 East	1.49	0.05	0.59	3.69	5.59			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.03	0.31	2.17	6.31			N/A	N/A
B - A12 South West	1.45	0.03	0.34	3.36	7.45			N/A	N/A
C - A1152 East	0.86	0.03	0.35	1.99	3.91			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	9.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1071	100.000
B - A12 South West		ONE HOUR	✓	1738	100.000
C - A1152 East		ONE HOUR	✓	828	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	939	130
	B - A12 South West	1020	96	622
	C - A1152 East	142	682	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	2
	B - A12 South West	7	8	5
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	6.77	2.2	3.7	A	983	1474
B - A12 South West	0.87	12.18	6.3	31.7	B	1595	2392
C - A1152 East	0.69	8.63	2.2	4.0	A	760	1140

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	806	202	542	1871	0.431	803	872	0.0	0.8	3.361	A
B - A12 South West	1308	327	111	2240	0.584	1303	1287	0.0	1.4	3.819	A
C - A1152 East	623	156	778	1535	0.406	621	568	0.0	0.7	3.925	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	963	241	649	1804	0.534	961	1043	0.8	1.1	4.265	A
B - A12 South West	1562	391	133	2226	0.702	1559	1540	1.4	2.3	5.368	A
C - A1152 East	744	186	931	1448	0.514	743	679	0.7	1.0	5.095	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1179	295	790	1714	0.688	1175	1271	1.1	2.2	6.626	A
B - A12 South West	1914	478	163	2206	0.868	1899	1882	2.3	6.0	11.225	B
C - A1152 East	912	228	1137	1331	0.685	908	828	1.0	2.1	8.424	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1179	295	796	1711	0.689	1179	1280	2.2	2.2	6.766	A
B - A12 South West	1914	478	164	2205	0.868	1913	1890	6.0	6.3	12.185	B
C - A1152 East	912	228	1141	1328	0.686	912	833	2.1	2.2	8.634	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	963	241	657	1799	0.535	967	1055	2.2	1.2	4.350	A
B - A12 South West	1562	391	134	2225	0.702	1578	1551	6.3	2.4	5.690	A
C - A1152 East	744	186	937	1445	0.515	749	687	2.2	1.1	5.206	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	806	202	546	1868	0.431	808	878	1.2	0.8	3.398	A
B - A12 South West	1308	327	112	2240	0.584	1312	1295	2.4	1.4	3.897	A
C - A1152 East	623	156	782	1532	0.407	625	572	1.1	0.7	3.975	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.39	0.58	1.28	1.74	1.89			N/A	N/A
C - A1152 East	0.68	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.05	0.64	2.53	3.66			N/A	N/A
B - A12 South West	2.31	0.04	0.42	6.33	11.12			N/A	N/A
C - A1152 East	1.05	0.06	0.72	2.07	2.94			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.03	0.27	2.15	2.26			N/A	N/A
B - A12 South West	5.99	0.03	0.33	10.70	31.67			N/A	N/A
C - A1152 East	2.12	0.03	0.27	2.12	4.00			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.19	0.03	0.27	2.19	2.19			N/A	N/A
B - A12 South West	6.25	0.03	0.29	6.25	20.39			N/A	N/A
C - A1152 East	2.15	0.03	0.27	2.15	2.27			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.11	1.04	1.90	2.52			N/A	N/A
B - A12 South West	2.41	0.05	0.50	6.58	10.60			N/A	N/A
C - A1152 East	1.08	0.08	0.94	1.85	2.47			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.05	0.52	1.43	1.92			N/A	N/A
B - A12 South West	1.42	0.03	0.35	3.45	7.20			N/A	N/A
C - A1152 East	0.69	0.04	0.45	1.33	1.90			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	7.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	973	100.000
B - A12 South West		ONE HOUR	✓	1757	100.000
C - A1152 East		ONE HOUR	✓	804	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	885	86
	B - A12 South West	999	90	668
	C - A1152 East	146	653	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	1
	B - A12 South West	3	2	1
	C - A1152 East	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.61	5.26	1.6	2.0	A	893	1339
B - A12 South West	0.85	10.16	5.3	24.5	B	1613	2419
C - A1152 East	0.61	6.48	1.6	1.8	A	738	1107

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	733	183	572	1922	0.381	730	860	0.0	0.6	3.013	A
B - A12 South West	1323	331	115	2323	0.569	1318	1222	0.0	1.3	3.561	A
C - A1152 East	605	151	733	1636	0.370	603	569	0.0	0.6	3.477	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	875	219	685	1852	0.472	874	1029	0.6	0.9	3.676	A
B - A12 South West	1580	395	137	2308	0.685	1577	1462	1.3	2.1	4.899	A
C - A1152 East	723	181	877	1554	0.465	722	681	0.6	0.9	4.320	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1071	268	835	1758	0.609	1069	1255	0.9	1.5	5.200	A
B - A12 South West	1935	484	168	2287	0.846	1923	1788	2.1	5.1	9.576	A
C - A1152 East	885	221	1073	1442	0.614	882	831	0.9	1.6	6.396	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1071	268	840	1755	0.610	1071	1262	1.5	1.6	5.262	A
B - A12 South West	1935	484	168	2287	0.846	1934	1793	5.1	5.3	10.157	B
C - A1152 East	885	221	1076	1441	0.614	885	836	1.6	1.6	6.476	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	875	219	692	1848	0.473	877	1039	1.6	0.9	3.720	A
B - A12 South West	1580	395	138	2308	0.685	1592	1469	5.3	2.2	5.119	A
C - A1152 East	723	181	881	1552	0.466	726	687	1.6	0.9	4.374	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	733	183	576	1920	0.382	734	866	0.9	0.6	3.039	A
B - A12 South West	1323	331	115	2323	0.570	1327	1228	2.2	1.3	3.624	A
C - A1152 East	605	151	737	1634	0.370	606	573	0.9	0.6	3.509	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.31	0.57	1.17	1.62	1.81			N/A	N/A
C - A1152 East	0.58	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.07	0.76	1.57	1.96			N/A	N/A
B - A12 South West	2.13	0.04	0.42	5.80	10.21			N/A	N/A
C - A1152 East	0.86	0.07	0.78	1.44	1.85			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.54	0.03	0.26	1.54	1.54			N/A	N/A
B - A12 South West	5.14	0.03	0.31	6.18	24.50			N/A	N/A
C - A1152 East	1.56	0.03	0.26	1.56	1.56			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.55	0.03	0.26	1.55	1.55			N/A	N/A
B - A12 South West	5.31	0.03	0.28	5.31	11.29			N/A	N/A
C - A1152 East	1.58	0.03	0.27	1.58	1.58			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.24	0.97	1.20	1.20			N/A	N/A
B - A12 South West	2.21	0.05	0.70	5.86	9.09			N/A	N/A
C - A1152 East	0.88	0.15	0.94	1.39	1.39			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.62	0.06	0.65	1.35	1.44			N/A	N/A
B - A12 South West	1.34	0.04	0.36	3.39	6.49			N/A	N/A
C - A1152 East	0.59	0.05	0.53	1.35	1.45			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	2.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	544	100.000
B - A12 South West		ONE HOUR	✓	868	100.000
C - A1152 East		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	513	31
	B - A12 South West	627	23	219
	C - A1152 East	41	281	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	6
	B - A12 South West	9	26	6
	C - A1152 East	9	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.29	2.51	0.4	1.5	A	499	748
B - A12 South West	0.43	2.81	0.7	2.2	A	797	1195
C - A1152 East	0.21	2.77	0.3	1.1	A	295	442

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	409	102	181	2090	0.196	408	501	0.0	0.2	2.140	A
B - A12 South West	654	163	30	2244	0.291	652	613	0.0	0.4	2.259	A
C - A1152 East	242	60	403	1763	0.137	241	187	0.0	0.2	2.364	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	489	122	217	2067	0.236	488	599	0.2	0.3	2.281	A
B - A12 South West	781	195	36	2240	0.348	780	734	0.4	0.5	2.465	A
C - A1152 East	289	72	482	1717	0.168	289	224	0.2	0.2	2.519	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	599	150	266	2035	0.294	598	734	0.3	0.4	2.505	A
B - A12 South West	956	239	45	2235	0.428	955	899	0.5	0.7	2.812	A
C - A1152 East	354	88	590	1655	0.214	353	274	0.2	0.3	2.765	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	599	150	266	2035	0.294	599	735	0.4	0.4	2.505	A
B - A12 South West	956	239	45	2234	0.428	956	899	0.7	0.7	2.815	A
C - A1152 East	354	88	590	1655	0.214	354	274	0.3	0.3	2.766	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	489	122	217	2066	0.237	489	600	0.4	0.3	2.282	A
B - A12 South West	781	195	36	2240	0.348	781	735	0.7	0.5	2.468	A
C - A1152 East	289	72	482	1717	0.168	289	224	0.3	0.2	2.523	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	409	102	182	2089	0.196	410	503	0.3	0.2	2.144	A
B - A12 South West	654	163	31	2244	0.291	654	615	0.5	0.4	2.266	A
C - A1152 East	242	60	404	1762	0.137	242	188	0.2	0.2	2.369	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B - A12 South West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C - A1152 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A12 South West	0.53	0.06	0.68	1.34	1.42			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.03	0.25	0.45	0.48			N/A	N/A
B - A12 South West	0.74	0.03	0.25	0.74	0.74			N/A	N/A
C - A1152 East	0.27	0.03	0.25	0.45	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.03	0.33	1.33	1.49			N/A	N/A
B - A12 South West	0.75	0.03	0.28	0.75	2.19			N/A	N/A
C - A1152 East	0.27	0.03	0.28	0.61	1.06			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A12 South West	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C - A1152 East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B - A12 South West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C - A1152 East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	9.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1040	100.000
B - A12 South West		ONE HOUR	✓	1683	100.000
C - A1152 East		ONE HOUR	✓	764	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	960	81
	B - A12 South West	995	45	644
	C - A1152 East	125	638	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	3
	B - A12 South West	14	13	6
	C - A1152 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.66	6.08	1.9	2.9	A	955	1432
B - A12 South West	0.87	13.00	6.4	33.1	B	1545	2317
C - A1152 East	0.60	6.50	1.5	1.7	A	701	1051

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	783	196	516	1892	0.414	780	839	0.0	0.7	3.230	A
B - A12 South West	1267	317	94	2154	0.588	1262	1232	0.0	1.4	4.008	A
C - A1152 East	575	144	754	1599	0.359	573	543	0.0	0.6	3.499	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	935	234	617	1827	0.512	934	1004	0.7	1.0	4.024	A
B - A12 South West	1513	378	112	2143	0.706	1509	1475	1.4	2.4	5.653	A
C - A1152 East	686	172	902	1513	0.454	685	649	0.6	0.8	4.345	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1145	286	752	1741	0.658	1142	1224	1.0	1.9	5.978	A
B - A12 South West	1853	463	137	2126	0.872	1838	1803	2.4	6.2	11.901	B
C - A1152 East	841	210	1103	1396	0.602	838	791	0.8	1.5	6.423	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1145	286	758	1737	0.659	1145	1232	1.9	1.9	6.079	A
B - A12 South West	1853	463	138	2126	0.872	1852	1809	6.2	6.4	12.998	B
C - A1152 East	841	210	1106	1394	0.603	841	797	1.5	1.5	6.504	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	935	234	626	1822	0.513	939	1017	1.9	1.1	4.092	A
B - A12 South West	1513	378	113	2142	0.706	1529	1483	6.4	2.5	6.021	A
C - A1152 East	686	172	907	1510	0.455	689	657	1.5	0.8	4.399	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	783	196	520	1890	0.414	785	846	1.1	0.7	3.261	A
B - A12 South West	1267	317	94	2154	0.588	1271	1239	2.5	1.4	4.096	A
C - A1152 East	575	144	758	1597	0.360	576	547	0.8	0.6	3.529	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.70	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.41	0.58	1.31	1.76	1.90			N/A	N/A
C - A1152 East	0.56	0.55	1.00	1.40	1.45			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.06	0.71	2.07	2.95			N/A	N/A
B - A12 South West	2.36	0.04	0.43	6.46	11.22			N/A	N/A
C - A1152 East	0.82	0.07	0.79	1.23	1.70			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.89	0.03	0.27	1.89	1.89			N/A	N/A
B - A12 South West	6.16	0.03	0.34	11.97	33.14			N/A	N/A
C - A1152 East	1.49	0.03	0.26	1.49	1.49			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.03	0.26	1.91	1.91			N/A	N/A
B - A12 South West	6.44	0.03	0.29	6.44	23.06			N/A	N/A
C - A1152 East	1.50	0.03	0.27	1.50	1.50			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.14	1.03	1.62	1.90			N/A	N/A
B - A12 South West	2.46	0.05	0.49	6.75	10.97			N/A	N/A
C - A1152 East	0.84	0.15	0.93	1.05	1.05			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.71	0.06	0.61	1.49	1.57			N/A	N/A
B - A12 South West	1.44	0.03	0.34	3.46	7.39			N/A	N/A
C - A1152 East	0.57	0.05	0.51	1.33	1.43			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	23.38	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1333	100.000
B - A12 South West		ONE HOUR	✓	1748	100.000
C - A1152 East		ONE HOUR	✓	880	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1178	154
	B - A12 South West	869	67	812
	C - A1152 East	196	684	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	8	5
	B - A12 South West	16	16	7
	C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	27.09	10.4	57.0	D	1223	1835
B - A12 South West	0.93	23.69	11.9	65.8	C	1604	2406
C - A1152 East	0.82	17.16	4.4	21.8	C	808	1212

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	659	1782	0.563	999	799	0.0	1.3	4.568	A
B - A12 South West	1316	329	148	2106	0.625	1309	1445	0.0	1.6	4.486	A
C - A1152 East	663	166	933	1419	0.467	659	724	0.0	0.9	4.719	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1198	300	788	1699	0.705	1194	955	1.3	2.3	7.075	A
B - A12 South West	1571	393	177	2087	0.753	1566	1728	1.6	3.0	6.846	A
C - A1152 East	791	198	1116	1316	0.601	789	866	0.9	1.5	6.802	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	953	1593	0.921	1441	1156	2.3	9.0	20.881	C
B - A12 South West	1925	481	215	2062	0.933	1894	2091	3.0	10.6	18.779	C
C - A1152 East	969	242	1348	1186	0.817	959	1047	1.5	4.1	15.198	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	966	1585	0.926	1462	1171	9.0	10.4	27.093	D
B - A12 South West	1925	481	217	2061	0.934	1919	2118	10.6	11.9	23.689	C
C - A1152 East	969	242	1367	1175	0.825	968	1061	4.1	4.4	17.159	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1198	300	808	1686	0.711	1230	978	10.4	2.5	8.410	A
B - A12 South West	1571	393	180	2085	0.754	1606	1772	11.9	3.2	8.048	A
C - A1152 East	791	198	1149	1297	0.610	803	889	4.4	1.6	7.441	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	665	1778	0.565	1009	806	2.5	1.3	4.711	A
B - A12 South West	1316	329	149	2105	0.625	1322	1459	3.2	1.7	4.632	A
C - A1152 East	663	166	943	1413	0.469	666	731	1.6	0.9	4.833	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.54	1.19	1.70	1.88			N/A	N/A
B - A12 South West	1.64	0.55	1.03	2.32	2.77			N/A	N/A
C - A1152 East	0.87	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.33	0.04	0.44	6.42	11.04			N/A	N/A
B - A12 South West	2.96	0.04	0.45	8.25	14.37			N/A	N/A
C - A1152 East	1.48	0.05	0.49	3.76	5.83			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.95	0.05	0.77	25.99	45.54			N/A	N/A
B - A12 South West	10.56	0.05	0.91	30.77	53.92			N/A	N/A
C - A1152 East	4.10	0.03	0.33	7.64	21.77			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.36	0.04	0.40	25.60	57.02			N/A	N/A
B - A12 South West	11.90	0.04	0.39	28.77	65.79			N/A	N/A
C - A1152 East	4.43	0.03	0.30	4.43	17.96			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.04	0.42	6.95	12.43			N/A	N/A
B - A12 South West	3.16	0.04	0.44	8.81	15.72			N/A	N/A
C - A1152 East	1.60	0.05	0.49	4.06	6.36			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.03	0.31	1.97	6.54			N/A	N/A
B - A12 South West	1.69	0.03	0.32	2.98	8.74			N/A	N/A
C - A1152 East	0.89	0.03	0.33	2.00	4.29			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	13.24	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1161	100.000
B - A12 South West		ONE HOUR	✓	1777	100.000
C - A1152 East		ONE HOUR	✓	806	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	1041	118
	B - A12 South West	1064	96	617
	C - A1152 East	142	659	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	10	2
	B - A12 South West	11	8	5
	C - A1152 East	3	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	9.06	3.1	10.0	A	1065	1597
B - A12 South West	0.91	17.50	9.0	45.7	C	1631	2446
C - A1152 East	0.71	9.81	2.4	6.3	A	740	1109

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	874	218	538	1829	0.478	870	906	0.0	0.9	3.739	A
B - A12 South West	1338	335	112	2188	0.612	1332	1346	0.0	1.6	4.174	A
C - A1152 East	607	152	854	1487	0.408	604	554	0.0	0.7	4.064	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1043	261	644	1764	0.591	1041	1083	0.9	1.4	4.965	A
B - A12 South West	1598	399	134	2174	0.735	1593	1611	1.6	2.7	6.152	A
C - A1152 East	724	181	1022	1389	0.522	723	663	0.7	1.1	5.391	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1278	319	782	1679	0.761	1271	1316	1.4	3.1	8.690	A
B - A12 South West	1957	489	163	2154	0.908	1934	1966	2.7	8.4	15.019	C
C - A1152 East	887	222	1247	1257	0.706	882	806	1.1	2.3	9.476	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1278	319	790	1674	0.763	1277	1329	3.1	3.1	9.056	A
B - A12 South West	1957	489	164	2154	0.909	1954	1976	8.4	9.0	17.500	C
C - A1152 East	887	222	1254	1254	0.708	887	814	2.3	2.4	9.808	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1043	261	656	1757	0.594	1050	1102	3.1	1.5	5.140	A
B - A12 South West	1598	399	135	2173	0.735	1623	1626	9.0	2.9	6.821	A
C - A1152 East	724	181	1031	1383	0.524	730	674	2.4	1.1	5.548	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	874	218	543	1827	0.478	876	913	1.5	0.9	3.797	A
B - A12 South West	1338	335	113	2188	0.612	1343	1355	2.9	1.6	4.287	A
C - A1152 East	607	152	860	1484	0.409	608	559	1.1	0.7	4.120	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.56	0.57	1.46	1.95	2.41			N/A	N/A
C - A1152 East	0.68	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.05	0.48	3.62	5.62			N/A	N/A
B - A12 South West	2.71	0.04	0.43	7.50	13.20			N/A	N/A
C - A1152 East	1.08	0.06	0.69	2.26	3.21			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.06	0.03	0.29	3.06	10.03			N/A	N/A
B - A12 South West	8.37	0.04	0.42	22.13	45.65			N/A	N/A
C - A1152 East	2.32	0.03	0.28	2.32	6.29			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.15	0.03	0.27	3.15	3.39			N/A	N/A
B - A12 South West	9.03	0.03	0.33	13.41	45.56			N/A	N/A
C - A1152 East	2.37	0.03	0.27	2.37	3.53			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.48	0.07	0.94	3.29	4.65			N/A	N/A
B - A12 South West	2.85	0.05	0.45	7.93	13.64			N/A	N/A
C - A1152 East	1.11	0.07	0.89	2.01	2.82			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.04	0.41	2.20	3.59			N/A	N/A
B - A12 South West	1.59	0.03	0.33	3.31	8.32			N/A	N/A
C - A1152 East	0.70	0.04	0.42	1.48	2.18			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	8.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	997	100.000
B - A12 South West		ONE HOUR	✓	1754	100.000
C - A1152 East		ONE HOUR	✓	818	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	908	87
	B - A12 South West	1009	90	655
	C - A1152 East	147	666	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	1
	B - A12 South West	5	2	1
	C - A1152 East	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	5.83	1.8	2.6	A	915	1372
B - A12 South West	0.85	10.61	5.5	26.1	B	1610	2415
C - A1152 East	0.64	7.08	1.8	2.1	A	750	1125

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	751	188	562	1875	0.400	748	868	0.0	0.7	3.190	A
B - A12 South West	1321	330	115	2304	0.573	1315	1248	0.0	1.3	3.621	A
C - A1152 East	616	154	750	1614	0.381	613	560	0.0	0.6	3.586	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	896	224	673	1808	0.496	895	1039	0.7	1.0	3.938	A
B - A12 South West	1577	394	138	2289	0.689	1574	1494	1.3	2.2	5.007	A
C - A1152 East	735	184	898	1528	0.481	734	670	0.6	0.9	4.527	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1098	274	820	1718	0.639	1095	1267	1.0	1.7	5.744	A
B - A12 South West	1931	483	169	2268	0.851	1919	1826	2.2	5.3	9.950	A
C - A1152 East	900	225	1098	1410	0.638	897	817	0.9	1.7	6.966	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1098	274	826	1715	0.640	1098	1275	1.7	1.8	5.828	A
B - A12 South West	1931	483	169	2268	0.852	1931	1832	5.3	5.5	10.607	B
C - A1152 East	900	225	1101	1409	0.639	900	822	1.7	1.8	7.078	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	896	224	680	1803	0.497	899	1049	1.8	1.0	3.995	A
B - A12 South West	1577	394	139	2289	0.689	1590	1502	5.5	2.3	5.248	A
C - A1152 East	735	184	903	1525	0.482	738	676	1.8	0.9	4.595	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	751	188	566	1872	0.401	752	874	1.0	0.7	3.216	A
B - A12 South West	1321	330	116	2304	0.573	1324	1255	2.3	1.4	3.689	A
C - A1152 East	616	154	755	1612	0.382	617	564	0.9	0.6	3.620	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.66	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.33	0.57	1.20	1.65	1.83			N/A	N/A
C - A1152 East	0.61	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.06	0.74	1.85	2.59			N/A	N/A
B - A12 South West	2.18	0.04	0.42	5.92	10.45			N/A	N/A
C - A1152 East	0.92	0.06	0.77	1.67	2.13			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.03	0.26	1.74	1.74			N/A	N/A
B - A12 South West	5.34	0.03	0.32	7.15	26.13			N/A	N/A
C - A1152 East	1.73	0.03	0.27	1.73	1.73			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.76	0.03	0.26	1.76	1.76			N/A	N/A
B - A12 South West	5.52	0.03	0.28	5.52	13.23			N/A	N/A
C - A1152 East	1.75	0.03	0.27	1.75	1.75			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.16	1.00	1.38	1.73			N/A	N/A
B - A12 South West	2.26	0.05	0.65	6.03	9.47			N/A	N/A
C - A1152 East	0.94	0.12	0.95	1.33	1.72			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.67	0.06	0.63	1.22	1.22			N/A	N/A
B - A12 South West	1.36	0.04	0.36	3.40	6.65			N/A	N/A
C - A1152 East	0.62	0.05	0.50	1.21	1.21			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	482	100.000
B - A12 South West		ONE HOUR	✓	703	100.000
C - A1152 East		ONE HOUR	✓	470	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	450	32
	B - A12 South West	424	23	255
	C - A1152 East	48	422	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	6
	B - A12 South West	8	26	10
	C - A1152 East	8	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.26	2.43	0.4	1.4	A	442	663
B - A12 South West	0.35	2.50	0.5	2.5	A	645	967
C - A1152 East	0.31	3.12	0.4	1.8	A	431	647

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	363	91	209	2074	0.175	362	355	0.0	0.2	2.101	A
B - A12 South West	529	132	36	2226	0.238	528	672	0.0	0.3	2.119	A
C - A1152 East	354	88	355	1764	0.201	353	216	0.0	0.2	2.550	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	433	108	250	2047	0.212	433	425	0.2	0.3	2.230	A
B - A12 South West	632	158	43	2221	0.284	632	804	0.3	0.4	2.264	A
C - A1152 East	422	106	425	1724	0.245	422	258	0.2	0.3	2.764	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	530	133	306	2010	0.264	530	520	0.3	0.4	2.433	A
B - A12 South West	774	193	53	2214	0.349	773	984	0.4	0.5	2.498	A
C - A1152 East	517	129	520	1670	0.310	517	316	0.3	0.4	3.119	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	530	133	307	2009	0.264	530	520	0.4	0.4	2.433	A
B - A12 South West	774	193	53	2214	0.349	774	985	0.5	0.5	2.498	A
C - A1152 East	517	129	521	1670	0.310	517	317	0.4	0.4	3.122	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	433	108	251	2047	0.212	433	425	0.4	0.3	2.231	A
B - A12 South West	632	158	43	2221	0.285	632	805	0.5	0.4	2.268	A
C - A1152 East	422	106	425	1724	0.245	423	259	0.4	0.3	2.769	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	363	91	210	2074	0.175	363	356	0.3	0.2	2.104	A
B - A12 South West	529	132	36	2226	0.238	530	674	0.4	0.3	2.122	A
C - A1152 East	354	88	356	1763	0.201	354	217	0.3	0.3	2.555	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B - A12 South West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A1152 East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B - A12 South West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A1152 East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.03	0.25	0.45	0.48			N/A	N/A
B - A12 South West	0.53	0.03	0.25	0.53	0.53			N/A	N/A
C - A1152 East	0.45	0.03	0.25	0.45	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.03	0.33	1.18	1.41			N/A	N/A
B - A12 South West	0.54	0.03	0.30	1.39	2.49			N/A	N/A
C - A1152 East	0.45	0.03	0.32	1.39	1.80			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B - A12 South West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A1152 East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B - A12 South West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A1152 East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	7.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	923	100.000
B - A12 South West		ONE HOUR	✓	1619	100.000
C - A1152 East		ONE HOUR	✓	820	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	841	81
	B - A12 South West	864	45	711
	C - A1152 East	147	673	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	3
	B - A12 South West	8	13	8
	C - A1152 East	3	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.59	5.14	1.4	1.8	A	847	1270
B - A12 South West	0.82	9.42	4.6	19.2	A	1486	2229
C - A1152 East	0.63	6.74	1.7	2.0	A	752	1128

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	695	174	567	1892	0.367	692	758	0.0	0.6	2.996	A
B - A12 South West	1219	305	110	2197	0.555	1214	1169	0.0	1.2	3.645	A
C - A1152 East	617	154	665	1608	0.384	615	594	0.0	0.6	3.614	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	829	207	678	1818	0.456	828	907	0.6	0.8	3.635	A
B - A12 South West	1456	364	132	2183	0.667	1453	1399	1.2	2.0	4.912	A
C - A1152 East	737	184	795	1536	0.480	736	711	0.6	0.9	4.492	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1016	254	827	1718	0.591	1013	1107	0.8	1.4	5.088	A
B - A12 South West	1783	446	161	2164	0.824	1773	1711	2.0	4.4	9.000	A
C - A1152 East	902	226	973	1438	0.628	900	868	0.9	1.7	6.653	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1016	254	832	1716	0.592	1016	1113	1.4	1.4	5.143	A
B - A12 South West	1783	446	162	2163	0.824	1783	1716	4.4	4.6	9.424	A
C - A1152 East	902	226	975	1436	0.628	902	872	1.7	1.7	6.741	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	829	207	684	1814	0.457	832	914	1.4	0.8	3.673	A
B - A12 South West	1456	364	133	2182	0.667	1466	1406	4.6	2.0	5.092	A
C - A1152 East	737	184	799	1534	0.480	740	717	1.7	0.9	4.549	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	695	174	570	1889	0.368	696	763	0.8	0.6	3.020	A
B - A12 South West	1219	305	111	2197	0.555	1222	1176	2.0	1.3	3.705	A
C - A1152 East	617	154	668	1606	0.384	618	598	0.9	0.6	3.646	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.24	0.56	1.07	1.24	1.61			N/A	N/A
C - A1152 East	0.62	0.55	1.00	1.40	1.45			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.07	0.78	1.32	1.76			N/A	N/A
B - A12 South West	1.97	0.04	0.43	5.35	9.13			N/A	N/A
C - A1152 East	0.91	0.07	0.79	1.62	1.99			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.03	0.26	1.43	1.43			N/A	N/A
B - A12 South West	4.44	0.03	0.30	4.44	19.24			N/A	N/A
C - A1152 East	1.65	0.03	0.27	1.65	1.65			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.44	0.03	0.27	1.44	1.44			N/A	N/A
B - A12 South West	4.56	0.03	0.28	4.56	6.92			N/A	N/A
C - A1152 East	1.67	0.03	0.27	1.67	1.67			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.28	0.96	1.41	1.47			N/A	N/A
B - A12 South West	2.04	0.06	0.81	5.24	7.90			N/A	N/A
C - A1152 East	0.93	0.13	0.95	1.23	1.66			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.06	0.63	1.33	1.42			N/A	N/A
B - A12 South West	1.26	0.04	0.38	3.22	5.82			N/A	N/A
C - A1152 East	0.63	0.05	0.55	1.04	1.04			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	16.36	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1226	100.000
B - A12 South West		ONE HOUR	✓	1790	100.000
C - A1152 East		ONE HOUR	✓	869	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1042	184
	B - A12 South West	818	67	905
	C - A1152 East	93	775	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	8	16	9
	C - A1152 East	10	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	18.67	6.7	33.3	C	1125	1688
B - A12 South West	0.90	16.52	8.6	43.8	C	1643	2464
C - A1152 East	0.78	12.96	3.3	14.4	B	798	1196

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	923	231	729	1763	0.524	919	684	0.0	1.1	4.243	A
B - A12 South West	1348	337	71	2204	0.611	1341	1411	0.0	1.6	4.143	A
C - A1152 East	654	164	831	1440	0.454	651	817	0.0	0.8	4.542	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1102	276	872	1668	0.661	1099	818	1.1	1.9	6.291	A
B - A12 South West	1609	402	85	2194	0.733	1605	1688	1.6	2.7	6.057	A
C - A1152 East	781	195	994	1353	0.577	779	977	0.8	1.3	6.250	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1350	338	1060	1543	0.875	1333	994	1.9	6.1	16.028	C
B - A12 South West	1971	493	104	2181	0.903	1950	2052	2.7	8.0	14.357	B
C - A1152 East	957	239	1207	1240	0.772	950	1187	1.3	3.2	12.101	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1350	338	1070	1536	0.879	1348	1003	6.1	6.7	18.666	C
B - A12 South West	1971	493	105	2181	0.904	1969	2071	8.0	8.6	16.516	C
C - A1152 East	957	239	1220	1233	0.776	956	1198	3.2	3.3	12.958	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1102	276	887	1658	0.665	1121	831	6.7	2.0	6.923	A
B - A12 South West	1609	402	87	2194	0.734	1632	1717	8.6	2.8	6.663	A
C - A1152 East	781	195	1014	1343	0.582	789	994	3.3	1.4	6.591	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	923	231	735	1759	0.525	927	689	2.0	1.1	4.344	A
B - A12 South West	1348	337	72	2204	0.612	1353	1423	2.8	1.6	4.253	A
C - A1152 East	654	164	839	1436	0.456	657	824	1.4	0.8	4.631	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.55	1.04	1.32	1.32			N/A	N/A
B - A12 South West	1.55	0.58	1.47	1.94	2.36			N/A	N/A
C - A1152 East	0.82	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.04	0.43	5.16	8.77			N/A	N/A
B - A12 South West	2.68	0.04	0.43	7.43	13.07			N/A	N/A
C - A1152 East	1.34	0.05	0.56	3.24	4.87			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.12	0.04	0.38	14.96	33.33			N/A	N/A
B - A12 South West	8.02	0.04	0.40	20.45	43.84			N/A	N/A
C - A1152 East	3.20	0.03	0.30	3.20	14.40			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.65	0.03	0.32	8.27	31.99			N/A	N/A
B - A12 South West	8.60	0.03	0.32	11.08	41.78			N/A	N/A
C - A1152 East	3.35	0.03	0.28	3.35	8.66			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.03	0.04	0.45	5.51	9.20			N/A	N/A
B - A12 South West	2.82	0.05	0.46	7.87	13.41			N/A	N/A
C - A1152 East	1.42	0.06	0.72	3.35	4.88			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.03	0.32	2.24	5.67			N/A	N/A
B - A12 South West	1.59	0.03	0.33	3.41	8.31			N/A	N/A
C - A1152 East	0.84	0.04	0.37	1.99	3.62			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	10.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1037	100.000
B - A12 South West		ONE HOUR	✓	1722	100.000
C - A1152 East		ONE HOUR	✓	914	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	901	135
	B - A12 South West	1101	96	526
	C - A1152 East	158	751	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	2
	B - A12 South West	5	8	9
	C - A1152 East	3	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	5.56	1.7	2.6	A	952	1428
B - A12 South West	0.87	12.26	6.2	31.6	B	1581	2371
C - A1152 East	0.75	10.71	2.9	10.7	B	838	1258

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	781	195	470	1935	0.404	778	945	0.0	0.7	3.106	A
B - A12 South West	1297	324	124	2225	0.583	1291	1310	0.0	1.4	3.834	A
C - A1152 East	688	172	749	1535	0.448	685	499	0.0	0.8	4.219	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	933	233	562	1874	0.498	931	1131	0.7	1.0	3.814	A
B - A12 South West	1548	387	148	2209	0.701	1545	1568	1.4	2.3	5.392	A
C - A1152 East	821	205	896	1453	0.565	820	597	0.8	1.3	5.662	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1142	286	685	1793	0.637	1139	1378	1.0	1.7	5.481	A
B - A12 South West	1897	474	181	2187	0.867	1882	1915	2.3	6.0	11.288	B
C - A1152 East	1006	252	1096	1343	0.749	1000	728	1.3	2.9	10.302	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1142	286	689	1790	0.638	1142	1388	1.7	1.7	5.556	A
B - A12 South West	1897	474	182	2186	0.867	1895	1923	6.0	6.2	12.263	B
C - A1152 East	1006	252	1099	1341	0.750	1006	732	2.9	2.9	10.706	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	933	233	569	1869	0.499	936	1145	1.7	1.0	3.868	A
B - A12 South West	1548	387	150	2208	0.701	1564	1579	6.2	2.4	5.719	A
C - A1152 East	821	205	901	1451	0.566	828	603	2.9	1.3	5.839	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	781	195	473	1933	0.404	782	952	1.0	0.7	3.132	A
B - A12 South West	1297	324	125	2224	0.583	1301	1318	2.4	1.4	3.915	A
C - A1152 East	688	172	753	1533	0.449	690	502	1.3	0.8	4.282	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.67	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.38	0.57	1.27	1.74	1.88			N/A	N/A
C - A1152 East	0.81	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.06	0.74	1.87	2.65			N/A	N/A
B - A12 South West	2.30	0.04	0.43	6.30	11.04			N/A	N/A
C - A1152 East	1.28	0.05	0.58	2.99	4.54			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.03	0.26	1.73	1.73			N/A	N/A
B - A12 South West	5.97	0.03	0.34	10.71	31.59			N/A	N/A
C - A1152 East	2.86	0.03	0.29	2.86	10.66			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.03	0.26	1.75	1.75			N/A	N/A
B - A12 South West	6.23	0.03	0.29	6.23	20.45			N/A	N/A
C - A1152 East	2.93	0.03	0.27	2.93	4.96			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.18	1.01	1.37	1.72			N/A	N/A
B - A12 South West	2.40	0.05	0.50	6.56	10.56			N/A	N/A
C - A1152 East	1.32	0.06	0.83	2.89	4.11			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.68	0.06	0.66	1.17	1.17			N/A	N/A
B - A12 South West	1.41	0.03	0.35	3.43	7.17			N/A	N/A
C - A1152 East	0.82	0.04	0.39	1.90	3.14			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	8.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	954	100.000
B - A12 South West		ONE HOUR	✓	1704	100.000
C - A1152 East		ONE HOUR	✓	1029	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	845	107
	B - A12 South West	1043	90	571
	C - A1152 East	144	880	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	2	0
	B - A12 South West	2	2	4
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.57	4.55	1.3	1.6	A	876	1314
B - A12 South West	0.82	8.77	4.5	17.8	A	1564	2345
C - A1152 East	0.77	10.85	3.3	13.3	B	944	1417

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	718	180	500	1992	0.361	716	891	0.0	0.6	2.816	A
B - A12 South West	1283	321	113	2321	0.553	1278	1361	0.0	1.2	3.436	A
C - A1152 East	775	194	703	1647	0.470	771	513	0.0	0.9	4.094	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	858	214	598	1929	0.445	857	1067	0.6	0.8	3.355	A
B - A12 South West	1532	383	136	2306	0.664	1529	1629	1.2	1.9	4.615	A
C - A1152 East	925	231	841	1570	0.589	923	614	0.9	1.4	5.548	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1051	263	730	1844	0.570	1049	1302	0.8	1.3	4.516	A
B - A12 South West	1876	469	165	2286	0.821	1866	1990	1.9	4.4	8.398	A
C - A1152 East	1133	283	1029	1465	0.773	1126	749	1.4	3.3	10.393	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1051	263	734	1841	0.571	1051	1309	1.3	1.3	4.553	A
B - A12 South West	1876	469	166	2285	0.821	1876	1998	4.4	4.5	8.768	A
C - A1152 East	1133	283	1031	1464	0.774	1133	753	3.3	3.3	10.848	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	858	214	603	1926	0.446	860	1076	1.3	0.8	3.383	A
B - A12 South West	1532	383	137	2305	0.665	1542	1640	4.5	2.0	4.776	A
C - A1152 East	925	231	845	1568	0.590	933	618	3.3	1.5	5.730	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	718	180	503	1990	0.361	719	897	0.8	0.6	2.836	A
B - A12 South West	1283	321	114	2320	0.553	1286	1369	2.0	1.2	3.491	A
C - A1152 East	775	194	706	1645	0.471	777	516	1.5	0.9	4.158	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.23	0.56	1.07	1.23	1.58			N/A	N/A
C - A1152 East	0.88	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.07	0.78	1.06	1.59			N/A	N/A
B - A12 South West	1.95	0.04	0.42	5.28	9.12			N/A	N/A
C - A1152 East	1.41	0.05	0.49	3.56	5.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.03	0.26	1.31	1.31			N/A	N/A
B - A12 South West	4.36	0.03	0.30	4.36	17.77			N/A	N/A
C - A1152 East	3.25	0.03	0.29	3.25	13.33			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.03	0.26	1.32	1.32			N/A	N/A
B - A12 South West	4.47	0.03	0.27	4.47	5.51			N/A	N/A
C - A1152 East	3.34	0.03	0.28	3.34	6.02			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.48	0.97	1.40	1.45			N/A	N/A
B - A12 South West	2.01	0.06	0.87	5.09	7.64			N/A	N/A
C - A1152 East	1.46	0.06	0.79	3.43	4.94			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.06	0.66	1.33	1.42			N/A	N/A
B - A12 South West	1.25	0.04	0.39	3.19	5.67			N/A	N/A
C - A1152 East	0.90	0.04	0.38	2.16	3.74			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	483	100.000
B - A12 South West		ONE HOUR	✓	704	100.000
C - A1152 East		ONE HOUR	✓	470	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	451	32
	B - A12 South West	426	23	255
	C - A1152 East	48	422	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	6
	B - A12 South West	7	26	10
	C - A1152 East	8	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.26	2.44	0.4	1.4	A	443	665
B - A12 South West	0.35	2.48	0.5	2.5	A	646	969
C - A1152 East	0.31	3.12	0.4	1.8	A	431	647

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	364	91	209	2074	0.175	363	356	0.0	0.2	2.102	A
B - A12 South West	530	133	36	2236	0.237	529	673	0.0	0.3	2.108	A
C - A1152 East	354	88	356	1763	0.201	353	216	0.0	0.3	2.551	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	434	109	250	2047	0.212	434	426	0.2	0.3	2.231	A
B - A12 South West	633	158	43	2231	0.284	633	805	0.3	0.4	2.252	A
C - A1152 East	422	106	426	1724	0.245	422	258	0.3	0.3	2.766	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	532	133	306	2010	0.265	532	521	0.3	0.4	2.435	A
B - A12 South West	775	194	53	2224	0.349	775	985	0.4	0.5	2.484	A
C - A1152 East	517	129	522	1669	0.310	517	316	0.3	0.4	3.121	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	532	133	307	2010	0.265	532	521	0.4	0.4	2.435	A
B - A12 South West	775	194	53	2224	0.349	775	986	0.5	0.5	2.484	A
C - A1152 East	517	129	522	1669	0.310	517	317	0.4	0.4	3.124	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	434	109	251	2047	0.212	435	426	0.4	0.3	2.234	A
B - A12 South West	633	158	43	2231	0.284	633	806	0.5	0.4	2.254	A
C - A1152 East	422	106	426	1723	0.245	423	259	0.4	0.3	2.769	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	364	91	210	2074	0.175	364	357	0.3	0.2	2.107	A
B - A12 South West	530	133	36	2236	0.237	530	675	0.4	0.3	2.112	A
C - A1152 East	354	88	357	1763	0.201	354	217	0.3	0.3	2.557	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B - A12 South West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A1152 East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B - A12 South West	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C - A1152 East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.03	0.25	0.45	0.48			N/A	N/A
B - A12 South West	0.53	0.03	0.25	0.53	0.53			N/A	N/A
C - A1152 East	0.45	0.03	0.25	0.45	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.36	0.03	0.33	1.18	1.42			N/A	N/A
B - A12 South West	0.53	0.03	0.30	1.39	2.48			N/A	N/A
C - A1152 East	0.45	0.03	0.32	1.39	1.80			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B - A12 South West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A1152 East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B - A12 South West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A1152 East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	7.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	924	100.000
B - A12 South West		ONE HOUR	✓	1625	100.000
C - A1152 East		ONE HOUR	✓	838	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	841	83
	B - A12 South West	869	45	711
	C - A1152 East	166	672	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	3
	B - A12 South West	8	13	8
	C - A1152 East	2	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.59	5.16	1.4	1.8	A	848	1272
B - A12 South West	0.83	9.95	4.8	21.4	A	1491	2237
C - A1152 East	0.64	6.96	1.8	2.3	A	769	1153

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	696	174	567	1892	0.368	693	776	0.0	0.6	2.999	A
B - A12 South West	1224	306	124	2187	0.559	1219	1169	0.0	1.3	3.697	A
C - A1152 East	631	158	665	1612	0.391	628	595	0.0	0.6	3.652	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	831	208	678	1818	0.457	830	929	0.6	0.8	3.640	A
B - A12 South West	1461	365	149	2171	0.673	1458	1399	1.3	2.0	5.025	A
C - A1152 East	753	188	796	1539	0.489	752	712	0.6	0.9	4.566	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1017	254	827	1719	0.592	1015	1134	0.8	1.4	5.098	A
B - A12 South West	1790	447	182	2150	0.833	1779	1711	2.0	4.7	9.449	A
C - A1152 East	923	231	974	1440	0.640	919	869	0.9	1.7	6.865	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1017	254	832	1715	0.593	1017	1140	1.4	1.4	5.155	A
B - A12 South West	1790	447	183	2149	0.833	1789	1716	4.7	4.8	9.952	A
C - A1152 East	923	231	976	1439	0.641	922	873	1.7	1.8	6.964	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	831	208	685	1813	0.458	833	937	1.4	0.9	3.682	A
B - A12 South West	1461	365	150	2171	0.673	1472	1406	4.8	2.1	5.230	A
C - A1152 East	753	188	799	1537	0.490	756	718	1.8	1.0	4.631	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	696	174	571	1889	0.368	697	781	0.9	0.6	3.020	A
B - A12 South West	1224	306	125	2187	0.560	1227	1175	2.1	1.3	3.762	A
C - A1152 East	631	158	668	1610	0.392	632	599	1.0	0.6	3.688	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.26	0.56	1.10	1.41	1.71			N/A	N/A
C - A1152 East	0.64	0.55	1.00	1.40	1.45			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.07	0.77	1.33	1.77			N/A	N/A
B - A12 South West	2.02	0.04	0.43	5.51	9.45			N/A	N/A
C - A1152 East	0.95	0.06	0.78	1.74	2.32			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.03	0.26	1.43	1.43			N/A	N/A
B - A12 South West	4.68	0.03	0.31	4.83	21.42			N/A	N/A
C - A1152 East	1.74	0.03	0.27	1.74	1.74			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.03	0.27	1.45	1.45			N/A	N/A
B - A12 South West	4.82	0.03	0.28	4.82	8.85			N/A	N/A
C - A1152 East	1.77	0.03	0.27	1.77	1.77			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.27	0.96	1.42	1.47			N/A	N/A
B - A12 South West	2.09	0.06	0.75	5.49	8.40			N/A	N/A
C - A1152 East	0.97	0.12	0.96	1.43	1.78			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.06	0.63	1.33	1.42			N/A	N/A
B - A12 South West	1.28	0.04	0.37	3.28	6.07			N/A	N/A
C - A1152 East	0.65	0.05	0.53	1.34	1.34			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	16.31	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1233	100.000
B - A12 South West		ONE HOUR	✓	1795	100.000
C - A1152 East		ONE HOUR	✓	860	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1046	186
	B - A12 South West	823	67	905
	C - A1152 East	94	765	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	8	16	9
	C - A1152 East	10	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	18.77	6.7	33.6	C	1131	1697
B - A12 South West	0.90	16.54	8.6	44.0	C	1647	2471
C - A1152 East	0.77	12.54	3.2	13.3	B	789	1183

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	928	232	729	1770	0.524	924	688	0.0	1.1	4.230	A
B - A12 South West	1352	338	72	2210	0.612	1345	1407	0.0	1.6	4.135	A
C - A1152 East	647	162	834	1439	0.450	644	818	0.0	0.8	4.510	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1108	277	872	1674	0.662	1105	823	1.1	1.9	6.285	A
B - A12 South West	1614	403	86	2200	0.734	1609	1683	1.6	2.7	6.049	A
C - A1152 East	773	193	998	1352	0.572	771	979	0.8	1.3	6.173	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	339	1060	1549	0.876	1340	1000	1.9	6.2	16.084	C
B - A12 South West	1977	494	105	2187	0.904	1955	2046	2.7	8.1	14.369	B
C - A1152 East	946	237	1211	1239	0.764	939	1189	1.3	3.1	11.753	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	339	1070	1542	0.880	1355	1010	6.2	6.7	18.768	C
B - A12 South West	1977	494	105	2186	0.904	1974	2065	8.1	8.6	16.541	C
C - A1152 East	946	237	1224	1232	0.768	946	1201	3.1	3.2	12.536	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1108	277	887	1664	0.666	1127	837	6.7	2.0	6.922	A
B - A12 South West	1614	403	87	2199	0.734	1637	1711	8.6	2.8	6.659	A
C - A1152 East	773	193	1018	1341	0.576	780	996	3.2	1.4	6.495	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	928	232	735	1766	0.525	932	694	2.0	1.1	4.334	A
B - A12 South West	1352	338	72	2209	0.612	1356	1419	2.8	1.6	4.245	A
C - A1152 East	647	162	842	1435	0.451	649	825	1.4	0.8	4.595	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.55	1.04	1.36	1.36			N/A	N/A
B - A12 South West	1.56	0.58	1.47	1.94	2.37			N/A	N/A
C - A1152 East	0.81	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.92	0.04	0.43	5.19	8.82			N/A	N/A
B - A12 South West	2.69	0.04	0.43	7.44	13.10			N/A	N/A
C - A1152 East	1.31	0.05	0.59	3.11	4.69			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.17	0.04	0.38	15.19	33.61			N/A	N/A
B - A12 South West	8.05	0.04	0.40	20.57	44.02			N/A	N/A
C - A1152 East	3.07	0.03	0.30	3.07	13.32			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.72	0.03	0.32	8.52	32.49			N/A	N/A
B - A12 South West	8.64	0.03	0.32	11.22	42.03			N/A	N/A
C - A1152 East	3.21	0.03	0.28	3.21	7.75			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.04	0.45	5.54	9.26			N/A	N/A
B - A12 South West	2.83	0.05	0.46	7.88	13.44			N/A	N/A
C - A1152 East	1.38	0.06	0.76	3.18	4.65			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.03	0.32	2.23	5.69			N/A	N/A
B - A12 South West	1.59	0.03	0.33	3.41	8.32			N/A	N/A
C - A1152 East	0.83	0.04	0.37	1.95	3.45			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	10.09	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1040	100.000
B - A12 South West		ONE HOUR	✓	1726	100.000
C - A1152 East		ONE HOUR	✓	912	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	902	136
	B - A12 South West	1103	96	527
	C - A1152 East	158	749	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	2
	B - A12 South West	5	8	9
	C - A1152 East	3	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	5.61	1.8	2.7	A	955	1432
B - A12 South West	0.87	12.43	6.3	32.2	B	1584	2376
C - A1152 East	0.75	10.70	2.9	10.6	B	837	1255

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	783	196	471	1932	0.405	781	947	0.0	0.7	3.119	A
B - A12 South West	1300	325	124	2225	0.584	1294	1310	0.0	1.4	3.844	A
C - A1152 East	687	172	751	1534	0.448	683	501	0.0	0.8	4.219	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	935	234	563	1871	0.500	934	1133	0.7	1.0	3.836	A
B - A12 South West	1552	388	148	2209	0.703	1548	1568	1.4	2.3	5.419	A
C - A1152 East	820	205	898	1452	0.565	818	599	0.8	1.3	5.662	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1145	286	686	1790	0.640	1142	1380	1.0	1.7	5.531	A
B - A12 South West	1901	475	181	2187	0.869	1886	1915	2.3	6.1	11.416	B
C - A1152 East	1004	251	1098	1341	0.749	998	731	1.3	2.9	10.299	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1145	286	691	1787	0.641	1145	1390	1.7	1.8	5.608	A
B - A12 South West	1901	475	182	2187	0.869	1900	1924	6.1	6.3	12.429	B
C - A1152 East	1004	251	1101	1339	0.750	1004	735	2.9	2.9	10.704	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	935	234	571	1867	0.501	938	1147	1.8	1.0	3.891	A
B - A12 South West	1552	388	150	2208	0.703	1568	1580	6.3	2.4	5.754	A
C - A1152 East	820	205	903	1449	0.566	826	606	2.9	1.3	5.838	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	783	196	474	1930	0.406	785	954	1.0	0.7	3.147	A
B - A12 South West	1300	325	125	2225	0.584	1304	1319	2.4	1.4	3.927	A
C - A1152 East	687	172	755	1531	0.448	689	504	1.3	0.8	4.282	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.68	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.39	0.58	1.28	1.74	1.89			N/A	N/A
C - A1152 East	0.80	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.06	0.73	1.90	2.69			N/A	N/A
B - A12 South West	2.32	0.04	0.43	6.35	11.14			N/A	N/A
C - A1152 East	1.28	0.05	0.58	2.98	4.53			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.03	0.26	1.75	1.75			N/A	N/A
B - A12 South West	6.05	0.03	0.34	11.12	32.22			N/A	N/A
C - A1152 East	2.85	0.03	0.29	2.85	10.62			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.03	0.26	1.77	1.77			N/A	N/A
B - A12 South West	6.33	0.03	0.29	6.33	21.33			N/A	N/A
C - A1152 East	2.92	0.03	0.27	2.92	4.95			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.17	1.01	1.41	1.75			N/A	N/A
B - A12 South West	2.41	0.05	0.50	6.61	10.68			N/A	N/A
C - A1152 East	1.32	0.06	0.83	2.89	4.09			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.69	0.06	0.66	1.25	1.25			N/A	N/A
B - A12 South West	1.42	0.03	0.35	3.43	7.22			N/A	N/A
C - A1152 East	0.82	0.04	0.39	1.90	3.13			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout	A, C, B	8.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	949	100.000
B - A12 South West		ONE HOUR	✓	1707	100.000
C - A1152 East		ONE HOUR	✓	1036	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	839	108
	B - A12 South West	1047	90	569
	C - A1152 East	146	884	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	2	0
	B - A12 South West	2	2	4
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.57	4.51	1.3	1.5	A	871	1307
B - A12 South West	0.82	8.82	4.5	18.1	A	1566	2349
C - A1152 East	0.78	10.96	3.4	13.8	B	950	1425

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	715	179	498	1993	0.359	713	897	0.0	0.6	2.806	A
B - A12 South West	1285	321	115	2322	0.553	1280	1360	0.0	1.2	3.440	A
C - A1152 East	780	195	699	1650	0.473	776	512	0.0	0.9	4.104	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	853	213	596	1930	0.442	853	1073	0.6	0.8	3.337	A
B - A12 South West	1534	384	137	2307	0.665	1532	1628	1.2	2.0	4.625	A
C - A1152 East	931	233	836	1573	0.592	929	612	0.9	1.4	5.569	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1045	261	728	1845	0.567	1043	1309	0.8	1.3	4.480	A
B - A12 South West	1879	470	167	2286	0.822	1870	1988	2.0	4.4	8.442	A
C - A1152 East	1140	285	1023	1469	0.776	1133	748	1.4	3.3	10.486	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1045	261	731	1843	0.567	1045	1316	1.3	1.3	4.514	A
B - A12 South West	1879	470	169	2286	0.822	1879	1997	4.4	4.5	8.821	A
C - A1152 East	1140	285	1025	1467	0.777	1140	751	3.3	3.4	10.956	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	853	213	601	1927	0.443	855	1082	1.3	0.8	3.365	A
B - A12 South West	1534	384	139	2306	0.665	1544	1639	4.5	2.0	4.786	A
C - A1152 East	931	233	840	1571	0.593	939	617	3.4	1.5	5.759	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	715	179	501	1991	0.359	716	902	0.8	0.6	2.823	A
B - A12 South West	1285	321	116	2322	0.554	1288	1369	2.0	1.3	3.495	A
C - A1152 East	780	195	702	1648	0.473	782	515	1.5	0.9	4.167	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 South West	1.23	0.56	1.07	1.23	1.59			N/A	N/A
C - A1152 East	0.89	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.07	0.78	1.50	1.54			N/A	N/A
B - A12 South West	1.96	0.04	0.42	5.30	9.17			N/A	N/A
C - A1152 East	1.43	0.05	0.49	3.60	5.57			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.03	0.26	1.29	1.29			N/A	N/A
B - A12 South West	4.39	0.03	0.30	4.39	18.05			N/A	N/A
C - A1152 East	3.30	0.03	0.30	3.30	13.75			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.03	0.27	1.30	1.30			N/A	N/A
B - A12 South West	4.50	0.03	0.27	4.50	5.70			N/A	N/A
C - A1152 East	3.39	0.03	0.28	3.39	6.30			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.50	0.98	1.40	1.45			N/A	N/A
B - A12 South West	2.02	0.06	0.87	5.13	7.70			N/A	N/A
C - A1152 East	1.48	0.06	0.78	3.50	5.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.06	0.66	1.33	1.42			N/A	N/A
B - A12 South West	1.25	0.04	0.39	3.20	5.69			N/A	N/A
C - A1152 East	0.91	0.04	0.38	2.19	3.80			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922_J29_Model_CV - med cw width.j9
Path: W:\2020 STAND ALONE MODELLING (POST-DCO)\1 Models\v16 Core Assessment\J29\Model
Report generation date: 23/12/2020 10:11:39

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-C	0.0	0.5	7.79	0.01	A	0.0	0.5	8.53	0.01	A	0.0	0.5	9.38	0.03	A	0.0	0.5	10.39	0.02	B	0.0	0.5	9.01	0.02	A
Stream B-AD	0.0	0.5	9.56	0.04	A	0.3	1.3	22.83	0.24	C	0.6	2.6	35.16	0.38	E	0.6	2.7	37.12	0.39	E	0.2	1.0	23.65	0.19	C
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	0.5	8.25	0.01	A	0.0	0.5	9.90	0.01	A	0.0	0.5	8.49	0.01	A	0.0	0.5	7.63	0.02	A
Stream D-A	0.0	0.5	6.63	0.00	A	0.0	0.5	8.31	0.01	A	0.1	0.5	12.09	0.11	B	0.0	0.5	8.85	0.02	A	0.0	~1	0.00	0.00	A
Stream D-BC	0.0	0.5	10.56	0.01	B	0.0	0.5	21.52	0.03	C	0.1	0.6	41.38	0.09	E	0.0	0.5	29.99	0.01	D	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	6.22	0.01	A	0.0	0.5	8.06	0.02	A	0.1	0.5	8.22	0.05	A	0.0	0.5	8.90	0.02	A	0.1	0.5	9.45	0.05	A
	2023 Reference Case																								
Stream B-C	0.0	0.5	7.97	0.01	A	0.0	0.5	9.23	0.02	A	0.0	0.5	11.30	0.03	B	0.0	0.5	11.90	0.02	B	0.0	0.5	9.58	0.03	A
Stream B-AD	0.1	0.5	10.06	0.05	B	0.4	1.5	29.03	0.30	D	1.0	4.6	52.19	0.51	F	0.9	4.2	50.08	0.49	F	0.3	1.4	29.92	0.24	D
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	0.5	8.55	0.01	A	0.0	0.5	10.16	0.01	B	0.0	0.5	8.76	0.01	A	0.0	0.5	8.02	0.02	A
Stream D-A	0.0	0.5	6.73	0.00	A	0.0	0.5	8.65	0.01	A	0.1	0.5	12.80	0.13	B	0.0	0.5	9.17	0.02	A	0.0	~1	0.00	0.00	A
Stream D-BC	0.0	0.5	11.02	0.01	B	0.0	0.5	25.89	0.03	D	0.1	0.9	55.27	0.13	F	0.0	0.5	35.62	0.01	E	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	6.36	0.01	A	0.0	0.5	8.49	0.03	A	0.1	0.5	8.72	0.06	A	0.0	0.5	9.23	0.03	A	0.1	0.5	9.89	0.06	A
	2023 Early Years																								
Stream B-C	0.0	0.5	8.46	0.01	A	0.0	0.5	13.01	0.02	B	0.1	0.5	19.54	0.06	C	0.0	0.5	14.34	0.02	B	0.0	0.5	10.03	0.03	B
Stream B-AD	0.1	0.5	11.11	0.06	B	0.9	4.0	64.16	0.49	F	1.9	8.7	106.01	0.69	F	1.2	6.0	70.93	0.58	F	0.4	1.3	38.47	0.29	E
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	0.5	8.63	0.01	A	0.0	0.5	10.30	0.01	B	0.0	0.5	9.08	0.01	A	0.0	0.5	8.63	0.02	A
Stream D-A	0.0	0.5	6.76	0.00	A	0.0	0.5	8.77	0.01	A	0.1	0.5	13.35	0.13	B	0.0	0.5	9.51	0.03	A	0.0	~1	0.00	0.00	A
Stream D-BC	0.0	0.5	11.78	0.01	B	0.1	0.5	38.01	0.05	E	0.2	1.2	85.13	0.19	F	0.0	0.5	44.14	0.01	E	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	6.75	0.02	A	0.0	0.5	10.08	0.03	B	0.1	0.5	9.49	0.06	A	0.0	0.5	9.56	0.03	A	0.1	0.5	10.10	0.06	B
	2028 Reference Case																								
Stream B-C	0.0	0.5	8.03	0.01	A	0.0	0.5	9.79	0.02	A	0.1	0.5	15.96	0.05	C	0.0	0.5	16.00	0.03	C	0.0	0.5	10.05	0.03	B
Stream B-AD	0.1	0.5	10.30	0.05	B	0.5	2.0	34.06	0.34	D	1.6	7.8	86.04	0.65	F	1.5	7.1	80.78	0.62	F	0.4	1.2	35.60	0.29	E
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	0.5	8.67	0.01	A	0.0	0.5	10.49	0.01	B	0.0	0.5	9.16	0.01	A	0.0	0.5	8.25	0.02	A
Stream D-A	0.0	0.5	6.81	0.00	A	0.0	0.5	8.79	0.01	A	0.2	0.5	13.74	0.14	B	0.0	0.5	9.61	0.03	A	0.0	~1	0.00	0.00	A
Stream D-BC	0.0	0.5	11.30	0.01	B	0.0	0.5	28.76	0.04	D	0.2	1.2	80.97	0.19	F	0.0	0.5	46.69	0.02	E	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	6.41	0.02	A	0.0	0.5	8.79	0.03	A	0.1	0.5	9.17	0.06	A	0.0	0.5	9.64	0.03	A	0.1	0.5	10.21	0.07	B
	2028 Peak Construction																								
Stream B-C	0.0	0.5	8.95	0.01	A	0.0	0.5	13.32	0.02	B	1.4	1.5	390.35	1.00	F	0.9	1.5	445.42	1.00	F	0.0	0.5	10.73	0.03	B
Stream B-AD	0.1	0.5	12.36	0.06	B	1.0	4.5	67.95	0.51	F	4.7	16.0	236.89	0.94	F	4.2	14.9	222.67	0.91	F	0.5	1.8	46.37	0.34	E
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	0.5	8.86	0.01	A	0.0	0.5	10.76	0.01	B	0.0	0.5	9.86	0.01	A	0.0	0.5	8.68	0.02	A
Stream D-A	0.0	0.5	6.84	0.00	A	0.0	0.5	9.03	0.01	A	0.2	0.5	15.84	0.16	C	0.0	0.5	10.40	0.03	B	0.0	~1	0.00	0.00	A
Stream D-BC	0.0	0.5	12.69	0.01	B	0.1	0.5	41.36	0.06	E	0.4	1.6	175.22	0.34	F	0.0	0.5	85.90	0.03	F	0.0	~1	0.00	0.00	A

Stream C-ABD	0.0	0.5	7.14	0.02	A	0.0	0.5	9.96	0.03	A	0.1	0.5	9.94	0.07	A	0.0	0.5	10.19	0.03	B	0.1	0.5	10.51	0.07	B
	2034 Reference Case																								
Stream B-C	0.0	0.5	8.09	0.01	A	0.0	0.5	9.80	0.02	A	0.0	0.5	10.58	0.03	B	0.0	0.5	25.84	0.05	D	0.0	0.5	10.49	0.03	B
Stream B-AD	0.1	0.5	10.18	0.05	B	0.5	1.8	30.77	0.33	D	0.9	4.1	42.55	0.47	E	2.2	10.0	118.84	0.73	F	0.4	1.5	39.08	0.31	E
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	0.5	8.10	0.01	A	0.0	0.5	9.66	0.01	A	0.0	0.5	8.88	0.01	A	0.0	0.5	8.18	0.02	A
Stream D-A	0.0	0.5	6.63	0.00	A	0.0	0.5	8.21	0.01	A	0.1	0.5	12.15	0.13	B	0.0	0.5	9.33	0.03	A	0.0	~1	0.00	0.00	A
Stream D-BC	0.0	0.5	10.93	0.01	B	0.0	0.5	24.12	0.03	C	0.1	0.7	42.34	0.11	E	0.0	0.5	47.85	0.02	E	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	6.46	0.02	A	0.0	0.5	8.91	0.03	A	0.1	0.5	8.59	0.06	A	0.0	0.5	10.26	0.03	B	0.1	0.5	10.54	0.07	B
	2034 Operational Led																								
Stream B-C	0.0	0.5	8.09	0.01	A	0.0	0.5	10.04	0.02	B	0.0	0.5	10.75	0.03	B	0.0	0.5	26.37	0.05	D	0.0	0.5	10.56	0.03	B
Stream B-AD	0.1	0.5	10.18	0.05	B	0.5	1.9	32.63	0.34	D	0.9	4.3	43.96	0.48	E	2.2	10.0	120.42	0.73	F	0.4	1.5	39.49	0.31	E
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	0.5	8.10	0.01	A	0.0	0.5	9.70	0.01	A	0.0	0.5	8.90	0.01	A	0.0	0.5	8.15	0.02	A
Stream D-A	0.0	0.5	6.63	0.00	A	0.0	0.5	8.21	0.01	A	0.1	0.5	12.23	0.13	B	0.0	0.5	9.35	0.03	A	0.0	~1	0.00	0.00	A
Stream D-BC	0.0	0.5	10.93	0.01	B	0.0	0.5	24.81	0.04	C	0.1	0.8	43.61	0.11	E	0.0	0.5	48.28	0.02	E	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	6.46	0.02	A	0.0	0.5	9.06	0.03	A	0.1	0.5	8.64	0.06	A	0.0	0.5	10.26	0.03	B	0.1	0.5	10.59	0.07	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

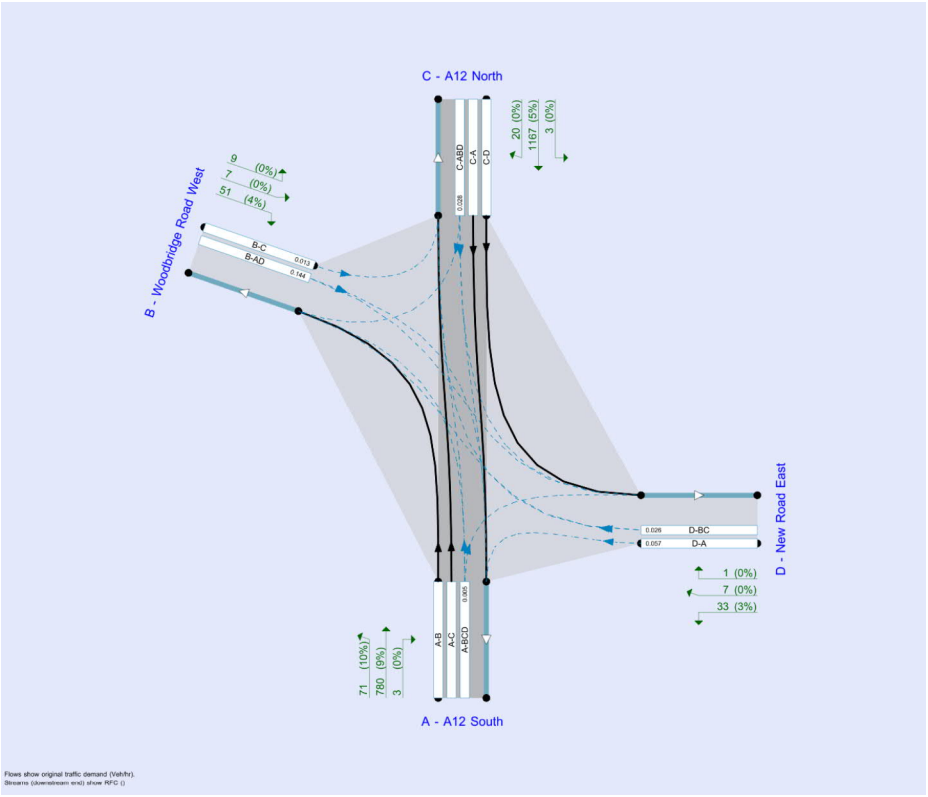
File summary

File Description

Title	A12 / New Road / Woodbridge Road
Location	52° 6'52.56"N, 1°18'46.98"E
Site number	29
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	NV
Description	The Give way widths on both minor arms has been modelled as 10m as Junctions 9 restricts the give way width to less than 10m.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 South		Major
B	Woodbridge Road West		Minor
C	A12 North		Major
D	New Road East		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A12 South	9.33		✓	3.50	61.0	✓	18.60
C - A12 North	9.60		✓	3.50	58.8	✓	22.60

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Woodbridge Road West	One lane plus flare	10.00	9.30	4.40	3.30	3.10	✓	1.00	155	64
D - New Road East	One lane plus flare	10.00	5.40	2.90	2.50	2.40	✓	1.00	77	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
J29	A-D	695	-	-	-	0.230	0.230	0.230	-	0.230	-	-
J29	B-AD	614	0.094	0.239	-	-	-	0.150	0.341	0.150	0.094	0.239
J29	B-C	693	0.090	0.226	-	-	-	-	-	-	0.090	0.226
J29	C-B	694	0.227	0.227	-	-	-	-	-	-	0.227	0.227
J29	D-A	676	-	-	-	0.224	0.089	0.224	-	0.089	-	-
J29	D-BC	525	0.130	0.130	0.295	0.207	0.082	0.207	-	0.082	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	386	100.000
B - Woodbridge Road West		ONE HOUR	✓	20	100.000
C - A12 North		ONE HOUR	✓	479	100.000
D - New Road East		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	24	362	0
	B - Woodbridge Road West	12	0	4	4
	C - A12 North	471	7	0	1
	D - New Road East	2	3	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.06	0.94	0.00
	B - Woodbridge Road West	0.60	0.00	0.20	0.20
	C - A12 North	0.98	0.01	0.00	0.00
	D - New Road East	0.40	0.60	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	11	0
	B - Woodbridge Road West	0	0	25	25
	C - A12 North	8	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.110	1.000
	B - Woodbridge Road West	1.000	1.000	1.250	1.250
	C - A12 North	1.083	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - A12 South	291	322
	B - Woodbridge Road West	15	17
	C - A12 North	361	390
	D - New Road East	4	4
06:00-06:15	A - A12 South	347	385
	B - Woodbridge Road West	18	20
	C - A12 North	431	466
	D - New Road East	4	4
06:15-06:30	A - A12 South	425	471
	B - Woodbridge Road West	22	24
	C - A12 North	527	570
	D - New Road East	6	6
06:30-06:45	A - A12 South	425	471
	B - Woodbridge Road West	22	24
	C - A12 North	527	570
	D - New Road East	6	6
06:45-07:00	A - A12 South	347	385
	B - Woodbridge Road West	18	20
	C - A12 North	431	466
	D - New Road East	4	4
07:00-07:15	A - A12 South	291	322
	B - Woodbridge Road West	15	17
	C - A12 North	361	390
	D - New Road East	4	4

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.79	0.0	0.5	A	4	6
B-AD	0.04	9.56	0.0	0.5	A	15	22
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						22	33
A-C						332	498
D-A	0.00	6.63	0.0	0.5	A	2	3
D-BC	0.01	10.56	0.0	0.5	B	3	4
C-ABD	0.01	6.22	0.0	0.5	A	6	10
C-D						0.92	1
C-A						432	648

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.75	494	0.006	3	0.0	0.0	7.324	A
B-AD	12	3	452	0.027	12	0.0	0.0	8.174	A
A-BCD	0	0	1208	0.000	0	0.0	0.0	0.000	A
A-B	18	5			18				
A-C	273	68			273				
D-A	2	0.38	587	0.003	1	0.0	0.0	6.149	A
D-BC	2	0.56	401	0.006	2	0.0	0.0	9.019	A
C-ABD	5	1	620	0.008	5	0.0	0.0	5.851	A
C-D	0.75	0.19			0.75				
C-A	355	89			355				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	483	0.007	4	0.0	0.0	7.513	A
B-AD	14	4	428	0.034	14	0.0	0.0	8.707	A
A-BCD	0	0	1172	0.000	0	0.0	0.0	0.000	A
A-B	22	5			22				
A-C	325	81			325				
D-A	2	0.45	569	0.003	2	0.0	0.0	6.341	A
D-BC	3	0.67	377	0.007	3	0.0	0.0	9.606	A
C-ABD	6	2	606	0.010	6	0.0	0.0	6.000	A
C-D	0.90	0.22			0.90				
C-A	423	106			423				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	466	0.009	4	0.0	0.0	7.793	A
B-AD	18	4	394	0.045	18	0.0	0.0	9.562	A
A-BCD	0	0	1123	0.000	0	0.0	0.0	0.000	A
A-B	26	7			26				
A-C	399	100			399				
D-A	2	0.55	545	0.004	2	0.0	0.0	6.627	A
D-BC	3	0.83	344	0.010	3	0.0	0.0	10.557	B
C-ABD	8	2	586	0.013	8	0.0	0.0	6.220	A
C-D	1	0.28			1				
C-A	519	130			519				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	466	0.009	4	0.0	0.0	7.793	A
B-AD	18	4	394	0.045	18	0.0	0.0	9.564	A
A-BCD	0	0	1123	0.000	0	0.0	0.0	0.000	A
A-B	26	7			26				
A-C	399	100			399				
D-A	2	0.55	545	0.004	2	0.0	0.0	6.627	A
D-BC	3	0.83	344	0.010	3	0.0	0.0	10.557	B
C-ABD	8	2	586	0.013	8	0.0	0.0	6.220	A
C-D	1	0.28			1				
C-A	519	130			519				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	483	0.007	4	0.0	0.0	7.514	A
B-AD	14	4	428	0.034	14	0.0	0.0	8.709	A
A-BCD	0	0	1172	0.000	0	0.0	0.0	0.000	A
A-B	22	5			22				
A-C	325	81			325				
D-A	2	0.45	569	0.003	2	0.0	0.0	6.345	A
D-BC	3	0.67	377	0.007	3	0.0	0.0	9.607	A
C-ABD	6	2	606	0.010	6	0.0	0.0	6.003	A
C-D	0.90	0.22			0.90				
C-A	423	106			423				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.75	494	0.006	3	0.0	0.0	7.328	A
B-AD	12	3	452	0.027	12	0.0	0.0	8.180	A
A-BCD	0	0	1208	0.000	0	0.0	0.0	0.000	A
A-B	18	5			18				
A-C	273	68			273				
D-A	2	0.38	587	0.003	2	0.0	0.0	6.151	A
D-BC	2	0.56	401	0.006	2	0.0	0.0	9.019	A
C-ABD	5	1	620	0.008	5	0.0	0.0	5.853	A
C-D	0.75	0.19			0.75				
C-A	355	89			355				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.03	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.05	0.03	0.25	0.46	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	870	100.000
B - Woodbridge Road West		ONE HOUR	✓	49	100.000
C - A12 North		ONE HOUR	✓	923	100.000
D - New Road East		ONE HOUR	✓	8	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	79	787	4
	B - Woodbridge Road West	37	0	5	7
	C - A12 North	913	10	0	0
	D - New Road East	4	3	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.09	0.90	0.00
	B - Woodbridge Road West	0.76	0.00	0.10	0.14
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.50	0.38	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	6	9	0
	B - Woodbridge Road West	8	0	0	0
	C - A12 North	5	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.063	1.091	1.000
	B - Woodbridge Road West	1.081	1.000	1.000	1.000
	C - A12 North	1.046	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 South	655	713
	B - Woodbridge Road West	37	39
	C - A12 North	695	727
	D - New Road East	6	6
07:00-07:15	A - A12 South	782	851
	B - Woodbridge Road West	44	47
	C - A12 North	830	868
	D - New Road East	7	7
07:15-07:30	A - A12 South	958	1043
	B - Woodbridge Road West	54	57
	C - A12 North	1016	1062
	D - New Road East	9	9
07:30-07:45	A - A12 South	958	1043
	B - Woodbridge Road West	54	57
	C - A12 North	1016	1062
	D - New Road East	9	9
07:45-08:00	A - A12 South	782	851
	B - Woodbridge Road West	44	47
	C - A12 North	830	868
	D - New Road East	7	7
08:00-08:15	A - A12 South	655	713
	B - Woodbridge Road West	37	39
	C - A12 North	695	727
	D - New Road East	6	6

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	8.53	0.0	0.5	A	5	7
B-AD	0.24	22.83	0.3	1.3	C	40	61
A-BCD	0.01	8.25	0.0	0.5	A	4	6
A-B						72	109
A-C						722	1083
D-A	0.01	8.31	0.0	0.5	A	4	6
D-BC	0.03	21.52	0.0	0.5	C	4	6
C-ABD	0.02	8.06	0.0	0.5	A	9	14
C-D						0	0
C-A						838	1257

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.94	516	0.007	4	0.0	0.0	7.023	A
B-AD	33	8	325	0.102	33	0.0	0.1	12.309	B
A-BCD	3	0.75	522	0.006	3	0.0	0.0	6.940	A
A-B	59	15			59				
A-C	592	148			592				
D-A	3	0.75	520	0.006	3	0.0	0.0	6.969	A
D-BC	3	0.75	294	0.010	3	0.0	0.0	12.374	B
C-ABD	8	2	532	0.014	7	0.0	0.0	6.858	A
C-D	0	0			0				
C-A	687	172			687				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	482	0.009	4	0.0	0.0	7.544	A
B-AD	40	10	275	0.144	39	0.1	0.2	15.267	C
A-BCD	4	0.90	488	0.007	4	0.0	0.0	7.433	A
A-B	71	18			71				
A-C	707	177			707				
D-A	4	0.90	485	0.007	4	0.0	0.0	7.472	A
D-BC	4	0.90	243	0.015	4	0.0	0.0	15.062	C
C-ABD	9	2	501	0.018	9	0.0	0.0	7.316	A
C-D	0	0			0				
C-A	821	205			821				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	428	0.013	5	0.0	0.0	8.519	A
B-AD	48	12	206	0.235	48	0.2	0.3	22.683	C
A-BCD	4	1	441	0.010	4	0.0	0.0	8.243	A
A-B	87	22			87				
A-C	867	217			867				
D-A	4	1	438	0.010	4	0.0	0.0	8.305	A
D-BC	4	1	172	0.026	4	0.0	0.0	21.509	C
C-ABD	11	3	458	0.024	11	0.0	0.0	8.061	A
C-D	0	0			0				
C-A	1005	251			1005				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	428	0.013	6	0.0	0.0	8.530	A
B-AD	48	12	206	0.235	48	0.3	0.3	22.826	C
A-BCD	4	1	441	0.010	4	0.0	0.0	8.245	A
A-B	87	22			87				
A-C	867	217			867				
D-A	4	1	437	0.010	4	0.0	0.0	8.312	A
D-BC	4	1	172	0.026	4	0.0	0.0	21.524	C
C-ABD	11	3	458	0.024	11	0.0	0.0	8.061	A
C-D	0	0			0				
C-A	1005	251			1005				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	481	0.009	5	0.0	0.0	7.556	A
B-AD	40	10	275	0.144	40	0.3	0.2	15.364	C
A-BCD	4	0.90	488	0.007	4	0.0	0.0	7.436	A
A-B	71	18			71				
A-C	707	177			707				
D-A	4	0.90	485	0.007	4	0.0	0.0	7.482	A
D-BC	4	0.90	243	0.015	4	0.0	0.0	15.069	C
C-ABD	9	2	501	0.018	9	0.0	0.0	7.320	A
C-D	0	0			0				
C-A	821	205			821				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.94	516	0.007	4	0.0	0.0	7.031	A
B-AD	33	8	325	0.102	33	0.2	0.1	12.365	B
A-BCD	3	0.75	521	0.006	3	0.0	0.0	6.945	A
A-B	59	15			59				
A-C	592	148			592				
D-A	3	0.75	519	0.006	3	0.0	0.0	6.978	A
D-BC	3	0.75	294	0.010	3	0.0	0.0	12.377	B
C-ABD	8	2	532	0.014	8	0.0	0.0	6.859	A
C-D	0	0			0				
C-A	687	172			687				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.16	0.00	0.00	0.16	0.16			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.30	0.03	0.26	0.47	0.50			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.30	0.03	0.31	1.06	1.34			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.12	0.00	0.00	0.12	0.12			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	854	100.000
B - Woodbridge Road West		ONE HOUR	✓	67	100.000
C - A12 North		ONE HOUR	✓	1190	100.000
D - New Road East		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	71	780	3
	B - Woodbridge Road West	51	0	9	7
	C - A12 North	1167	20	0	3
	D - New Road East	33	7	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.91	0.00
	B - Woodbridge Road West	0.76	0.00	0.13	0.10
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.80	0.17	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	10	9	0
	B - Woodbridge Road West	4	0	0	0
	C - A12 North	5	0	0	0
	D - New Road East	3	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.099	1.091	1.000
	B - Woodbridge Road West	1.039	1.000	1.000	1.000
	C - A12 North	1.054	1.000	1.000	1.000
	D - New Road East	1.030	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 South	643	702
	B - Woodbridge Road West	50	52
	C - A12 North	896	943
	D - New Road East	31	32
08:00-08:15	A - A12 South	768	838
	B - Woodbridge Road West	60	62
	C - A12 North	1070	1126
	D - New Road East	37	38
08:15-08:30	A - A12 South	940	1026
	B - Woodbridge Road West	74	76
	C - A12 North	1310	1380
	D - New Road East	45	46
08:30-08:45	A - A12 South	940	1026
	B - Woodbridge Road West	74	76
	C - A12 North	1310	1380
	D - New Road East	45	46
08:45-09:00	A - A12 South	768	838
	B - Woodbridge Road West	60	62
	C - A12 North	1070	1126
	D - New Road East	37	38
09:00-09:15	A - A12 South	643	702
	B - Woodbridge Road West	50	52
	C - A12 North	896	943
	D - New Road East	31	32

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	9.38	0.0	0.5	A	8	12
B-AD	0.38	35.16	0.6	2.6	E	53	80
A-BCD	0.01	9.90	0.0	0.5	A	3	4
A-B						65	98
A-C						716	1074
D-A	0.11	12.09	0.1	0.5	B	30	45
D-BC	0.09	41.38	0.1	0.6	E	7	11
C-ABD	0.05	8.22	0.1	0.5	A	18	28
C-D						3	4
C-A						1071	1606

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	514	0.013	7	0.0	0.0	7.100	A
B-AD	44	11	303	0.144	43	0.0	0.2	13.823	B
A-BCD	2	0.56	471	0.005	2	0.0	0.0	7.676	A
A-B	53	13			53				
A-C	587	147			587				
D-A	25	6	437	0.057	25	0.0	0.1	8.735	A
D-BC	6	2	229	0.026	6	0.0	0.0	16.160	C
C-ABD	15	4	534	0.028	15	0.0	0.0	6.932	A
C-D	2	0.56			2				
C-A	879	220			879				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	474	0.017	8	0.0	0.0	7.729	A
B-AD	52	13	245	0.212	52	0.2	0.3	18.555	C
A-BCD	3	0.67	427	0.006	3	0.0	0.0	8.474	A
A-B	64	16			64				
A-C	701	175			701				
D-A	30	7	395	0.075	30	0.1	0.1	9.858	A
D-BC	7	2	173	0.042	7	0.0	0.0	21.714	C
C-ABD	18	4	503	0.036	18	0.0	0.0	7.421	A
C-D	3	0.67			3				
C-A	1049	262			1049				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	396	0.025	10	0.0	0.0	9.319	A
B-AD	64	16	166	0.385	63	0.3	0.6	34.372	D
A-BCD	3	0.83	367	0.009	3	0.0	0.0	9.892	A
A-B	78	20			78				
A-C	859	215			859				
D-A	36	9	335	0.109	36	0.1	0.1	12.052	B
D-BC	9	2	96	0.092	9	0.0	0.1	41.110	E
C-ABD	22	6	460	0.048	22	0.0	0.0	8.217	A
C-D	3	0.83			3				
C-A	1285	321			1285				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	394	0.025	10	0.0	0.0	9.379	A
B-AD	64	16	166	0.385	64	0.6	0.6	35.158	E
A-BCD	3	0.83	367	0.009	3	0.0	0.0	9.901	A
A-B	78	20			78				
A-C	859	215			859				
D-A	36	9	334	0.109	36	0.1	0.1	12.088	B
D-BC	9	2	96	0.092	9	0.1	0.1	41.378	E
C-ABD	22	6	460	0.048	22	0.0	0.1	8.219	A
C-D	3	0.83			3				
C-A	1285	321			1285				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	472	0.017	8	0.0	0.0	7.759	A
B-AD	52	13	245	0.212	53	0.6	0.3	18.878	C
A-BCD	3	0.67	427	0.006	3	0.0	0.0	8.483	A
A-B	64	16			64				
A-C	701	175			701				
D-A	30	7	394	0.075	30	0.1	0.1	9.892	A
D-BC	7	2	173	0.042	7	0.1	0.0	21.796	C
C-ABD	18	4	503	0.036	18	0.1	0.0	7.427	A
C-D	3	0.67			3				
C-A	1049	262			1049				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	513	0.013	7	0.0	0.0	7.111	A
B-AD	44	11	303	0.144	44	0.3	0.2	13.937	B
A-BCD	2	0.56	471	0.005	2	0.0	0.0	7.682	A
A-B	53	13			53				
A-C	587	147			587				
D-A	25	6	436	0.057	25	0.1	0.1	8.758	A
D-BC	6	2	229	0.026	6	0.0	0.0	16.189	C
C-ABD	15	4	534	0.028	15	0.0	0.0	6.937	A
C-D	2	0.56			2				
C-A	879	220			879				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.26	0.00	0.00	0.26	0.26			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.08	0.03	0.26	0.46	0.48			N/A	N/A
D-BC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.59	0.03	0.27	0.59	1.47			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.12	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.10	0.03	0.26	0.47	0.55			N/A	N/A
C-ABD	0.05	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.61	0.03	0.33	1.34	2.64			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
D-BC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.28	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.17	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1064	100.000
B - Woodbridge Road West		ONE HOUR	✓	61	100.000
C - A12 North		ONE HOUR	✓	941	100.000
D - New Road East		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	84	976	4
	B - Woodbridge Road West	47	0	5	9
	C - A12 North	927	9	0	5
	D - New Road East	8	0	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.77	0.00	0.08	0.15
	C - A12 North	0.99	0.01	0.00	0.01
	D - New Road East	0.89	0.00	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	5	0
	B - Woodbridge Road West	6	0	0	11
	C - A12 North	6	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.053	1.000
	B - Woodbridge Road West	1.064	1.000	1.000	1.111
	C - A12 North	1.063	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
14:45-15:00	A - A12 South	801	845
	B - Woodbridge Road West	46	49
	C - A12 North	708	752
	D - New Road East	7	7
15:00-15:15	A - A12 South	957	1010
	B - Woodbridge Road West	55	58
	C - A12 North	846	898
	D - New Road East	8	8
15:15-15:30	A - A12 South	1171	1236
	B - Woodbridge Road West	67	72
	C - A12 North	1036	1100
	D - New Road East	10	10
15:30-15:45	A - A12 South	1171	1236
	B - Woodbridge Road West	67	72
	C - A12 North	1036	1100
	D - New Road East	10	10
15:45-16:00	A - A12 South	957	1010
	B - Woodbridge Road West	55	58
	C - A12 North	846	898
	D - New Road East	8	8
16:00-16:15	A - A12 South	801	845
	B - Woodbridge Road West	46	49
	C - A12 North	708	752
	D - New Road East	7	7

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	10.39	0.0	0.5	B	5	7
B-AD	0.39	37.12	0.6	2.7	E	51	77
A-BCD	0.01	8.49	0.0	0.5	A	4	6
A-B						77	116
A-C						896	1343
D-A	0.02	8.85	0.0	0.5	A	7	11
D-BC	0.01	29.99	0.0	0.5	D	0.92	1
C-ABD	0.02	8.90	0.0	0.5	A	8	12
C-D						5	7
C-A						851	1276

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.94	481	0.008	4	0.0	0.0	7.543	A
B-AD	42	11	292	0.144	41	0.0	0.2	14.347	B
A-BCD	3	0.75	513	0.006	3	0.0	0.0	7.053	A
A-B	63	16			63				
A-C	735	184			735				
D-A	6	2	497	0.012	6	0.0	0.0	7.325	A
D-BC	0.75	0.19	242	0.003	0.74	0.0	0.0	14.896	B
C-ABD	7	2	503	0.013	7	0.0	0.0	7.256	A
C-D	4	0.94			4				
C-A	698	174			698				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	436	0.010	4	0.0	0.0	8.334	A
B-AD	50	13	236	0.214	50	0.2	0.3	19.326	C
A-BCD	4	0.90	478	0.008	4	0.0	0.0	7.590	A
A-B	76	19			76				
A-C	877	219			877				
D-A	7	2	463	0.016	7	0.0	0.0	7.895	A
D-BC	0.90	0.22	192	0.005	0.89	0.0	0.0	18.879	C
C-ABD	8	2	466	0.017	8	0.0	0.0	7.866	A
C-D	4	1			4				
C-A	833	208			833				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	354	0.016	5	0.0	0.0	10.324	B
B-AD	62	15	158	0.389	60	0.3	0.6	36.240	E
A-BCD	4	1	429	0.010	4	0.0	0.0	8.481	A
A-B	92	23			92				
A-C	1075	269			1075				
D-A	9	2	416	0.021	9	0.0	0.0	8.845	A
D-BC	1	0.28	121	0.009	1	0.0	0.0	29.933	D
C-ABD	10	2	414	0.024	10	0.0	0.0	8.900	A
C-D	6	1			6				
C-A	1021	255			1021				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	352	0.016	6	0.0	0.0	10.395	B
B-AD	62	15	158	0.389	62	0.6	0.6	37.123	E
A-BCD	4	1	429	0.010	4	0.0	0.0	8.488	A
A-B	92	23			92				
A-C	1075	269			1075				
D-A	9	2	415	0.021	9	0.0	0.0	8.852	A
D-BC	1	0.28	121	0.009	1	0.0	0.0	29.993	D
C-ABD	10	2	414	0.024	10	0.0	0.0	8.900	A
C-D	6	1			6				
C-A	1021	255			1021				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	435	0.010	5	0.0	0.0	8.363	A
B-AD	50	13	236	0.214	52	0.6	0.3	19.689	C
A-BCD	4	0.90	477	0.008	4	0.0	0.0	7.600	A
A-B	76	19			76				
A-C	877	219			877				
D-A	7	2	463	0.016	7	0.0	0.0	7.904	A
D-BC	0.90	0.22	191	0.005	0.92	0.0	0.0	18.907	C
C-ABD	8	2	466	0.017	8	0.0	0.0	7.869	A
C-D	4	1			4				
C-A	833	208			833				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.94	480	0.008	4	0.0	0.0	7.557	A
B-AD	42	11	292	0.144	43	0.3	0.2	14.472	B
A-BCD	3	0.75	513	0.006	3	0.0	0.0	7.057	A
A-B	63	16			63				
A-C	735	184			735				
D-A	6	2	497	0.012	6	0.0	0.0	7.334	A
D-BC	0.75	0.19	242	0.003	0.76	0.0	0.0	14.904	B
C-ABD	7	2	503	0.013	7	0.0	0.0	7.260	A
C-D	4	0.94			4				
C-A	698	174			698				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.26	0.00	0.00	0.26	0.26			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D-BC	0.00	0.00	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.60	0.03	0.27	0.60	1.15			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.62	0.03	0.33	1.38	2.69			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.28	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.17	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1066	100.000
B - Woodbridge Road West		ONE HOUR	✓	41	100.000
C - A12 North		ONE HOUR	✓	820	100.000
D - New Road East		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	75	984	7
	B - Woodbridge Road West	27	0	9	5
	C - A12 North	796	20	0	4
	D - New Road East	3	1	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.07	0.92	0.01
	B - Woodbridge Road West	0.66	0.00	0.22	0.12
	C - A12 North	0.97	0.02	0.00	0.00
	D - New Road East	0.75	0.25	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	3	2	0
	B - Woodbridge Road West	7	0	0	0
	C - A12 North	2	5	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.027	1.024	1.000
	B - Woodbridge Road West	1.074	1.000	1.000	1.000
	C - A12 North	1.021	1.050	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A12 South	803	822
	B - Woodbridge Road West	31	32
	C - A12 North	617	631
	D - New Road East	0	0
17:00-17:15	A - A12 South	958	981
	B - Woodbridge Road West	37	39
	C - A12 North	737	753
	D - New Road East	0	0
17:15-17:30	A - A12 South	1174	1202
	B - Woodbridge Road West	45	47
	C - A12 North	903	923
	D - New Road East	0	0
17:30-17:45	A - A12 South	1174	1202
	B - Woodbridge Road West	45	47
	C - A12 North	903	923
	D - New Road East	0	0
17:45-18:00	A - A12 South	958	981
	B - Woodbridge Road West	37	39
	C - A12 North	737	753
	D - New Road East	0	0
18:00-18:15	A - A12 South	803	822
	B - Woodbridge Road West	31	32
	C - A12 North	617	631
	D - New Road East	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	9.01	0.0	0.5	A	8	12
B-AD	0.19	23.65	0.2	1.0	C	29	44
A-BCD	0.02	7.63	0.0	0.5	A	6	10
A-B						69	103
A-C						903	1354
D-A	0.00	0.00	0.0	~1	A	0	0
D-BC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.05	9.45	0.1	0.5	A	18	28
C-D						4	6
C-A						730	1096

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	504	0.013	7	0.0	0.0	7.234	A
B-AD	24	6	311	0.077	24	0.0	0.1	12.509	B
A-BCD	5	1	548	0.010	5	0.0	0.0	6.634	A
A-B	56	14			56				
A-C	741	185			741				
D-A	0	0	547	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	304	0.000	0	0.0	0.0	0.000	A
C-ABD	15	4	485	0.031	15	0.0	0.0	7.662	A
C-D	3	0.75			3				
C-A	599	150			599				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	466	0.017	8	0.0	0.0	7.858	A
B-AD	29	7	259	0.111	29	0.1	0.1	15.598	C
A-BCD	6	2	519	0.012	6	0.0	0.0	7.018	A
A-B	67	17			67				
A-C	885	221			885				
D-A	0	0	519	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	254	0.000	0	0.0	0.0	0.000	A
C-ABD	18	4	450	0.040	18	0.0	0.0	8.324	A
C-D	4	0.90			4				
C-A	716	179			716				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	410	0.024	10	0.0	0.0	9.005	A
B-AD	35	9	187	0.188	35	0.1	0.2	23.536	C
A-BCD	8	2	479	0.016	8	0.0	0.0	7.629	A
A-B	83	21			83				
A-C	1083	271			1083				
D-A	0	0	479	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	186	0.000	0	0.0	0.0	0.000	A
C-ABD	22	6	403	0.055	22	0.0	0.1	9.444	A
C-D	4	1			4				
C-A	876	219			876				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	409	0.024	10	0.0	0.0	9.015	A
B-AD	35	9	187	0.188	35	0.2	0.2	23.654	C
A-BCD	8	2	479	0.016	8	0.0	0.0	7.631	A
A-B	83	21			83				
A-C	1083	271			1083				
D-A	0	0	479	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	186	0.000	0	0.0	0.0	0.000	A
C-ABD	22	6	403	0.055	22	0.1	0.1	9.446	A
C-D	4	1			4				
C-A	876	219			876				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	466	0.017	8	0.0	0.0	7.867	A
B-AD	29	7	259	0.111	29	0.2	0.1	15.673	C
A-BCD	6	2	519	0.012	6	0.0	0.0	7.024	A
A-B	67	17			67				
A-C	885	221			885				
D-A	0	0	519	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	254	0.000	0	0.0	0.0	0.000	A
C-ABD	18	4	450	0.040	18	0.1	0.0	8.328	A
C-D	4	0.90			4				
C-A	716	179			716				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	504	0.013	7	0.0	0.0	7.239	A
B-AD	24	6	311	0.077	24	0.1	0.1	12.554	B
A-BCD	5	1	548	0.010	5	0.0	0.0	6.638	A
A-B	56	14			56				
A-C	741	185			741				
D-A	0	0	547	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	303	0.000	0	0.0	0.0	0.000	A
C-ABD	15	4	485	0.031	15	0.0	0.0	7.666	A
C-D	3	0.75			3				
C-A	599	150			599				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.12	0.00	0.00	0.12	0.12			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.22	0.03	0.26	0.47	0.50			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.06	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.23	0.03	0.28	0.57	1.04			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.13	0.00	0.00	0.13	0.13			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.09	0.00	0.00	0.09	0.09			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	439	100.000
B - Woodbridge Road West		ONE HOUR	✓	22	100.000
C - A12 North		ONE HOUR	✓	510	100.000
D - New Road East		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	27	412	0
	B - Woodbridge Road West	13	0	4	4
	C - A12 North	501	8	0	1
	D - New Road East	2	3	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.06	0.94	0.00
	B - Woodbridge Road West	0.61	0.00	0.20	0.18
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.40	0.60	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	9	0
	B - Woodbridge Road West	0	0	25	28
	C - A12 North	8	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.087	1.000
	B - Woodbridge Road West	1.000	1.000	1.250	1.278
	C - A12 North	1.076	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - A12 South	330	359
	B - Woodbridge Road West	16	18
	C - A12 North	384	412
	D - New Road East	4	4
06:00-06:15	A - A12 South	395	429
	B - Woodbridge Road West	20	22
	C - A12 North	458	492
	D - New Road East	5	5
06:15-06:30	A - A12 South	483	525
	B - Woodbridge Road West	24	26
	C - A12 North	561	603
	D - New Road East	6	6
06:30-06:45	A - A12 South	483	525
	B - Woodbridge Road West	24	26
	C - A12 North	561	603
	D - New Road East	6	6
06:45-07:00	A - A12 South	395	429
	B - Woodbridge Road West	20	22
	C - A12 North	458	492
	D - New Road East	5	5
07:00-07:15	A - A12 South	330	359
	B - Woodbridge Road West	16	18
	C - A12 North	384	412
	D - New Road East	4	4

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.97	0.0	0.5	A	4	6
B-AD	0.05	10.06	0.1	0.5	B	16	24
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						24	37
A-C						378	567
D-A	0.00	6.73	0.0	0.5	A	2	3
D-BC	0.01	11.02	0.0	0.5	B	3	5
C-ABD	0.01	6.36	0.0	0.5	A	7	11
C-D						0.92	1
C-A						460	689

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	488	0.007	3	0.0	0.0	7.427	A
B-AD	13	3	440	0.030	13	0.0	0.0	8.424	A
A-BCD	0	0	1197	0.000	0	0.0	0.0	0.000	A
A-B	20	5			20				
A-C	310	78			310				
D-A	2	0.42	582	0.003	2	0.0	0.0	6.206	A
D-BC	3	0.63	392	0.006	2	0.0	0.0	9.245	A
C-ABD	6	1	612	0.010	6	0.0	0.0	5.937	A
C-D	0.75	0.19			0.75				
C-A	377	94			377				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	475	0.008	4	0.0	0.0	7.644	A
B-AD	16	4	414	0.038	16	0.0	0.0	9.044	A
A-BCD	0	0	1160	0.000	0	0.0	0.0	0.000	A
A-B	24	6			24				
A-C	371	93			371				
D-A	2	0.50	563	0.004	2	0.0	0.0	6.414	A
D-BC	3	0.75	366	0.008	3	0.0	0.0	9.914	A
C-ABD	7	2	596	0.012	7	0.0	0.0	6.109	A
C-D	0.90	0.22			0.90				
C-A	450	113			450				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	457	0.011	5	0.0	0.0	7.969	A
B-AD	19	5	377	0.051	19	0.0	0.1	10.059	B
A-BCD	0	0	1108	0.000	0	0.0	0.0	0.000	A
A-B	29	7			29				
A-C	454	113			454				
D-A	2	0.61	538	0.005	2	0.0	0.0	6.725	A
D-BC	4	0.92	330	0.011	4	0.0	0.0	11.018	B
C-ABD	9	2	574	0.015	9	0.0	0.0	6.364	A
C-D	1	0.28			1				
C-A	551	138			551				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	457	0.011	5	0.0	0.0	7.970	A
B-AD	19	5	377	0.051	19	0.1	0.1	10.061	B
A-BCD	0	0	1108	0.000	0	0.0	0.0	0.000	A
A-B	29	7			29				
A-C	454	113			454				
D-A	2	0.61	538	0.005	2	0.0	0.0	6.726	A
D-BC	4	0.92	330	0.011	4	0.0	0.0	11.018	B
C-ABD	9	2	574	0.015	9	0.0	0.0	6.364	A
C-D	1	0.28			1				
C-A	551	138			551				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	475	0.008	4	0.0	0.0	7.645	A
B-AD	16	4	414	0.038	16	0.1	0.0	9.048	A
A-BCD	0	0	1160	0.000	0	0.0	0.0	0.000	A
A-B	24	6			24				
A-C	371	93			371				
D-A	2	0.50	563	0.004	2	0.0	0.0	6.416	A
D-BC	3	0.75	366	0.008	3	0.0	0.0	9.917	A
C-ABD	7	2	596	0.012	7	0.0	0.0	6.110	A
C-D	0.90	0.22			0.90				
C-A	450	113			450				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	488	0.007	3	0.0	0.0	7.431	A
B-AD	13	3	440	0.030	13	0.0	0.0	8.431	A
A-BCD	0	0	1197	0.000	0	0.0	0.0	0.000	A
A-B	20	5			20				
A-C	310	78			310				
D-A	2	0.42	581	0.003	2	0.0	0.0	6.208	A
D-BC	3	0.63	392	0.006	3	0.0	0.0	9.247	A
C-ABD	6	1	612	0.010	6	0.0	0.0	5.940	A
C-D	0.75	0.19			0.75				
C-A	377	94			377				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.05	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	944	100.000
B - Woodbridge Road West		ONE HOUR	✓	54	100.000
C - A12 North		ONE HOUR	✓	967	100.000
D - New Road East		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	88	852	4
	B - Woodbridge Road West	41	0	6	7
	C - A12 North	956	11	0	0
	D - New Road East	4	3	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.09	0.90	0.00
	B - Woodbridge Road West	0.77	0.00	0.10	0.13
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.50	0.38	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	6	10	0
	B - Woodbridge Road West	8	0	0	0
	C - A12 North	6	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.063	1.098	1.000
	B - Woodbridge Road West	1.081	1.000	1.000	1.000
	C - A12 North	1.058	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 South	711	777
	B - Woodbridge Road West	40	43
	C - A12 North	728	769
	D - New Road East	7	7
07:00-07:15	A - A12 South	849	928
	B - Woodbridge Road West	48	51
	C - A12 North	869	919
	D - New Road East	8	8
07:15-07:30	A - A12 South	1039	1137
	B - Woodbridge Road West	59	63
	C - A12 North	1064	1125
	D - New Road East	10	10
07:30-07:45	A - A12 South	1039	1137
	B - Woodbridge Road West	59	63
	C - A12 North	1064	1125
	D - New Road East	10	10
07:45-08:00	A - A12 South	849	928
	B - Woodbridge Road West	48	51
	C - A12 North	869	919
	D - New Road East	8	8
08:00-08:15	A - A12 South	711	777
	B - Woodbridge Road West	40	43
	C - A12 North	728	769
	D - New Road East	7	7

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	9.23	0.0	0.5	A	5	8
B-AD	0.30	29.03	0.4	1.5	D	44	66
A-BCD	0.01	8.55	0.0	0.5	A	4	6
A-B						80	121
A-C						782	1173
D-A	0.01	8.65	0.0	0.5	A	4	6
D-BC	0.03	25.89	0.0	0.5	D	4	6
C-ABD	0.03	8.49	0.0	0.5	A	10	15
C-D						0	0
C-A						877	1315

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	501	0.008	4	0.0	0.0	7.247	A
B-AD	36	9	304	0.119	36	0.0	0.1	13.367	B
A-BCD	3	0.75	511	0.006	3	0.0	0.0	7.083	A
A-B	66	17			66				
A-C	642	160			642				
D-A	3	0.84	509	0.007	3	0.0	0.0	7.120	A
D-BC	3	0.84	275	0.012	3	0.0	0.0	13.249	B
C-ABD	8	2	518	0.016	8	0.0	0.0	7.067	A
C-D	0	0			0				
C-A	719	180			719				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	462	0.011	5	0.0	0.0	7.879	A
B-AD	43	11	251	0.172	43	0.1	0.2	17.286	C
A-BCD	4	0.90	475	0.008	4	0.0	0.0	7.631	A
A-B	79	20			79				
A-C	766	192			766				
D-A	4	1.00	472	0.008	4	0.0	0.0	7.685	A
D-BC	4	1.00	220	0.018	4	0.0	0.0	16.660	C
C-ABD	10	2	483	0.021	10	0.0	0.0	7.602	A
C-D	0	0			0				
C-A	859	215			859				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	397	0.015	6	0.0	0.0	9.208	A
B-AD	53	13	177	0.299	52	0.2	0.4	28.681	D
A-BCD	4	1	426	0.010	4	0.0	0.0	8.543	A
A-B	97	24			97				
A-C	938	235			938				
D-A	5	1	422	0.012	5	0.0	0.0	8.636	A
D-BC	5	1	144	0.034	5	0.0	0.0	25.848	D
C-ABD	12	3	436	0.028	12	0.0	0.0	8.492	A
C-D	0	0			0				
C-A	1052	263			1052				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	396	0.015	6	0.0	0.0	9.234	A
B-AD	53	13	177	0.299	53	0.4	0.4	29.030	D
A-BCD	4	1	426	0.010	4	0.0	0.0	8.547	A
A-B	97	24			97				
A-C	938	235			938				
D-A	5	1	421	0.012	5	0.0	0.0	8.647	A
D-BC	5	1	144	0.034	5	0.0	0.0	25.887	D
C-ABD	12	3	436	0.028	12	0.0	0.0	8.493	A
C-D	0	0			0				
C-A	1052	263			1052				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	461	0.011	5	0.0	0.0	7.895	A
B-AD	43	11	251	0.172	44	0.4	0.2	17.470	C
A-BCD	4	0.90	475	0.008	4	0.0	0.0	7.636	A
A-B	79	20			79				
A-C	766	192			766				
D-A	4	1.00	472	0.008	4	0.0	0.0	7.698	A
D-BC	4	1.00	220	0.018	4	0.0	0.0	16.676	C
C-ABD	10	2	483	0.021	10	0.0	0.0	7.604	A
C-D	0	0			0				
C-A	859	215			859				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	500	0.008	4	0.0	0.0	7.257	A
B-AD	36	9	304	0.119	37	0.2	0.1	13.448	B
A-BCD	3	0.75	511	0.006	3	0.0	0.0	7.086	A
A-B	66	17			66				
A-C	642	160			642				
D-A	3	0.84	508	0.007	3	0.0	0.0	7.132	A
D-BC	3	0.84	275	0.012	3	0.0	0.0	13.254	B
C-ABD	8	2	518	0.016	8	0.0	0.0	7.071	A
C-D	0	0			0				
C-A	719	180			719				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.13	0.00	0.00	0.13	0.13			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.20	0.00	0.00	0.20	0.20			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-BC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.41	0.03	0.26	0.48	0.84			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.42	0.03	0.33	1.33	1.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.21	0.00	0.00	0.21	0.21			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.14	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	934	100.000
B - Woodbridge Road West		ONE HOUR	✓	74	100.000
C - A12 North		ONE HOUR	✓	1208	100.000
D - New Road East		ONE HOUR	✓	46	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	79	852	3
	B - Woodbridge Road West	57	0	10	7
	C - A12 North	1182	22	0	3
	D - New Road East	37	8	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.91	0.00
	B - Woodbridge Road West	0.77	0.00	0.14	0.10
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.80	0.17	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	10	10	0
	B - Woodbridge Road West	4	0	0	0
	C - A12 North	7	0	0	0
	D - New Road East	3	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.099	1.095	1.000
	B - Woodbridge Road West	1.039	1.000	1.000	1.000
	C - A12 North	1.065	1.000	1.000	1.000
	D - New Road East	1.030	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 South	703	770
	B - Woodbridge Road West	55	57
	C - A12 North	909	967
	D - New Road East	34	35
08:00-08:15	A - A12 South	839	919
	B - Woodbridge Road West	66	68
	C - A12 North	1086	1155
	D - New Road East	41	42
08:15-08:30	A - A12 South	1028	1126
	B - Woodbridge Road West	81	84
	C - A12 North	1330	1415
	D - New Road East	50	51
08:30-08:45	A - A12 South	1028	1126
	B - Woodbridge Road West	81	84
	C - A12 North	1330	1415
	D - New Road East	50	51
08:45-09:00	A - A12 South	839	919
	B - Woodbridge Road West	66	68
	C - A12 North	1086	1155
	D - New Road East	41	42
09:00-09:15	A - A12 South	703	770
	B - Woodbridge Road West	55	57
	C - A12 North	909	967
	D - New Road East	34	35

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	11.30	0.0	0.5	B	9	14
B-AD	0.51	52.19	1.0	4.6	F	58	88
A-BCD	0.01	10.16	0.0	0.5	B	3	4
A-B						72	109
A-C						782	1172
D-A	0.13	12.80	0.1	0.5	B	34	50
D-BC	0.13	55.27	0.1	0.9	F	8	12
C-ABD	0.06	8.72	0.1	0.5	A	20	31
C-D						3	4
C-A						1085	1627

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	496	0.015	7	0.0	0.0	7.369	A
B-AD	48	12	284	0.169	47	0.0	0.2	15.158	C
A-BCD	2	0.56	465	0.005	2	0.0	0.0	7.779	A
A-B	59	15			59				
A-C	641	160			641				
D-A	28	7	430	0.064	27	0.0	0.1	8.928	A
D-BC	7	2	214	0.031	7	0.0	0.0	17.302	C
C-ABD	17	4	518	0.032	17	0.0	0.0	7.171	A
C-D	2	0.56			2				
C-A	890	223			890				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	449	0.020	9	0.0	0.0	8.181	A
B-AD	57	14	223	0.257	57	0.2	0.3	21.595	C
A-BCD	3	0.67	420	0.006	3	0.0	0.0	8.624	A
A-B	71	18			71				
A-C	766	191			766				
D-A	33	8	387	0.085	33	0.1	0.1	10.166	B
D-BC	8	2	156	0.051	8	0.0	0.1	24.291	C
C-ABD	20	5	484	0.041	20	0.0	0.0	7.751	A
C-D	3	0.67			3				
C-A	1063	266			1063				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	337	0.033	11	0.0	0.0	11.053	B
B-AD	70	18	138	0.506	68	0.3	0.9	49.399	E
A-BCD	3	0.83	358	0.009	3	0.0	0.0	10.145	B
A-B	87	22			87				
A-C	938	234			938				
D-A	40	10	323	0.125	40	0.1	0.1	12.733	B
D-BC	10	2	75	0.130	9	0.1	0.1	54.444	F
C-ABD	24	6	437	0.056	24	0.0	0.1	8.719	A
C-D	3	0.83			3				
C-A	1302	325			1302				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	330	0.033	11	0.0	0.0	11.300	B
B-AD	70	18	138	0.506	70	0.9	1.0	52.186	F
A-BCD	3	0.83	358	0.009	3	0.0	0.0	10.162	B
A-B	87	22			87				
A-C	938	234			938				
D-A	40	10	321	0.125	40	0.1	0.1	12.803	B
D-BC	10	2	75	0.131	10	0.1	0.1	55.269	F
C-ABD	24	6	437	0.056	24	0.1	0.1	8.722	A
C-D	3	0.83			3				
C-A	1302	325			1302				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	446	0.020	9	0.0	0.0	8.246	A
B-AD	57	14	223	0.257	60	1.0	0.4	22.372	C
A-BCD	3	0.67	419	0.006	3	0.0	0.0	8.640	A
A-B	71	18			71				
A-C	766	191			766				
D-A	33	8	386	0.085	33	0.1	0.1	10.217	B
D-BC	8	2	156	0.051	8	0.1	0.1	24.483	C
C-ABD	20	5	484	0.041	20	0.1	0.0	7.757	A
C-D	3	0.67			3				
C-A	1063	266			1063				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	495	0.015	8	0.0	0.0	7.388	A
B-AD	48	12	284	0.169	49	0.4	0.2	15.335	C
A-BCD	2	0.56	465	0.005	2	0.0	0.0	7.785	A
A-B	59	15			59				
A-C	641	160			641				
D-A	28	7	430	0.064	28	0.1	0.1	8.957	A
D-BC	7	2	214	0.031	7	0.1	0.0	17.350	C
C-ABD	17	4	518	0.032	17	0.0	0.0	7.178	A
C-D	2	0.56			2				
C-A	890	223			890				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.20	0.00	0.00	0.20	0.20			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.34	0.00	0.00	0.34	0.34			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-BC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-ABD	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.92	0.03	0.29	1.18	3.83			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.14	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.14	0.03	0.27	0.48	0.91			N/A	N/A
C-ABD	0.06	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.97	0.03	0.34	2.30	4.63			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.14	0.03	0.25	0.45	0.48			N/A	N/A
D-BC	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.36	0.03	0.33	1.09	1.30			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.21	0.03	0.28	0.56	1.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1106	100.000
B - Woodbridge Road West		ONE HOUR	✓	67	100.000
C - A12 North		ONE HOUR	✓	975	100.000
D - New Road East		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	93	1008	4
	B - Woodbridge Road West	52	0	6	9
	C - A12 North	960	10	0	5
	D - New Road East	9	0	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.91	0.00
	B - Woodbridge Road West	0.78	0.00	0.08	0.13
	C - A12 North	0.98	0.01	0.00	0.01
	D - New Road East	0.89	0.00	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	6	0
	B - Woodbridge Road West	6	0	0	12
	C - A12 North	7	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.063	1.000
	B - Woodbridge Road West	1.064	1.000	1.000	1.124
	C - A12 North	1.073	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
14:45-15:00	A - A12 South	832	886
	B - Woodbridge Road West	50	54
	C - A12 North	734	787
	D - New Road East	8	8
15:00-15:15	A - A12 South	994	1058
	B - Woodbridge Road West	60	64
	C - A12 North	877	940
	D - New Road East	9	9
15:15-15:30	A - A12 South	1217	1296
	B - Woodbridge Road West	74	79
	C - A12 North	1074	1151
	D - New Road East	11	11
15:30-15:45	A - A12 South	1217	1296
	B - Woodbridge Road West	74	79
	C - A12 North	1074	1151
	D - New Road East	11	11
15:45-16:00	A - A12 South	994	1058
	B - Woodbridge Road West	60	64
	C - A12 North	877	940
	D - New Road East	9	9
16:00-16:15	A - A12 South	832	886
	B - Woodbridge Road West	50	54
	C - A12 North	734	787
	D - New Road East	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	11.90	0.0	0.5	B	5	8
B-AD	0.49	50.08	0.9	4.2	F	56	84
A-BCD	0.01	8.76	0.0	0.5	A	4	6
A-B						86	129
A-C						925	1388
D-A	0.02	9.17	0.0	0.5	A	8	12
D-BC	0.01	35.62	0.0	0.5	E	1	2
C-ABD	0.03	9.23	0.0	0.5	A	9	14
C-D						5	7
C-A						881	1322

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	470	0.009	4	0.0	0.0	7.728	A
B-AD	46	12	278	0.166	45	0.0	0.2	15.413	C
A-BCD	3	0.75	504	0.006	3	0.0	0.0	7.178	A
A-B	70	18			70				
A-C	759	190			759				
D-A	7	2	489	0.014	7	0.0	0.0	7.467	A
D-BC	0.84	0.21	230	0.004	0.82	0.0	0.0	15.729	C
C-ABD	8	2	494	0.015	7	0.0	0.0	7.406	A
C-D	4	0.94			4				
C-A	723	181			723				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	421	0.012	5	0.0	0.0	8.661	A
B-AD	55	14	220	0.251	55	0.2	0.3	21.732	C
A-BCD	4	0.90	467	0.008	4	0.0	0.0	7.765	A
A-B	84	21			84				
A-C	906	227			906				
D-A	8	2	453	0.018	8	0.0	0.0	8.094	A
D-BC	1	0.25	176	0.006	0.99	0.0	0.0	20.530	C
C-ABD	9	2	455	0.020	9	0.0	0.0	8.077	A
C-D	4	1			4				
C-A	863	216			863				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	314	0.020	6	0.0	0.0	11.681	B
B-AD	67	17	139	0.486	65	0.3	0.9	47.718	E
A-BCD	4	1	416	0.011	4	0.0	0.0	8.751	A
A-B	103	26			103				
A-C	1110	278			1110				
D-A	10	2	403	0.024	10	0.0	0.0	9.157	A
D-BC	1	0.31	103	0.012	1	0.0	0.0	35.472	E
C-ABD	11	3	401	0.028	11	0.0	0.0	9.234	A
C-D	6	1			6				
C-A	1057	264			1057				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	309	0.020	6	0.0	0.0	11.896	B
B-AD	67	17	139	0.486	67	0.9	0.9	50.078	F
A-BCD	4	1	415	0.011	4	0.0	0.0	8.762	A
A-B	103	26			103				
A-C	1110	278			1110				
D-A	10	2	402	0.024	10	0.0	0.0	9.170	A
D-BC	1	0.31	102	0.012	1	0.0	0.0	35.617	E
C-ABD	11	3	401	0.028	11	0.0	0.0	9.234	A
C-D	6	1			6				
C-A	1057	264			1057				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	418	0.012	5	0.0	0.0	8.720	A
B-AD	55	14	220	0.251	57	0.9	0.3	22.445	C
A-BCD	4	0.90	466	0.008	4	0.0	0.0	7.779	A
A-B	84	21			84				
A-C	906	227			906				
D-A	8	2	452	0.018	8	0.0	0.0	8.110	A
D-BC	1	0.25	176	0.006	1	0.0	0.0	20.585	C
C-ABD	9	2	455	0.020	9	0.0	0.0	8.079	A
C-D	4	1			4				
C-A	863	216			863				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	469	0.009	4	0.0	0.0	7.743	A
B-AD	46	12	278	0.166	47	0.3	0.2	15.588	C
A-BCD	3	0.75	504	0.006	3	0.0	0.0	7.186	A
A-B	70	18			70				
A-C	759	190			759				
D-A	7	2	488	0.014	7	0.0	0.0	7.477	A
D-BC	0.84	0.21	230	0.004	0.85	0.0	0.0	15.744	C
C-ABD	8	2	494	0.015	8	0.0	0.0	7.409	A
C-D	4	0.94			4				
C-A	723	181			723				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.19	0.00	0.00	0.19	0.19			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.32	0.00	0.00	0.32	0.32			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.86	0.03	0.28	0.91	3.29			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.90	0.03	0.34	2.07	4.24			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.35	0.03	0.32	1.04	1.28			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.20	0.03	0.28	0.50	0.95			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1116	100.000
B - Woodbridge Road West		ONE HOUR	✓	45	100.000
C - A12 North		ONE HOUR	✓	896	100.000
D - New Road East		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	83	1026	7
	B - Woodbridge Road West	30	0	10	5
	C - A12 North	869	22	0	4
	D - New Road East	3	1	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.07	0.92	0.01
	B - Woodbridge Road West	0.67	0.00	0.22	0.11
	C - A12 North	0.97	0.02	0.00	0.00
	D - New Road East	0.75	0.25	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	3	3	0
	B - Woodbridge Road West	7	0	0	0
	C - A12 North	4	5	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.027	1.034	1.000
	B - Woodbridge Road West	1.074	1.000	1.000	1.000
	C - A12 North	1.036	1.050	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A12 South	840	868
	B - Woodbridge Road West	34	36
	C - A12 North	674	698
	D - New Road East	0	0
17:00-17:15	A - A12 South	1003	1037
	B - Woodbridge Road West	41	43
	C - A12 North	805	834
	D - New Road East	0	0
17:15-17:30	A - A12 South	1229	1270
	B - Woodbridge Road West	50	52
	C - A12 North	986	1021
	D - New Road East	0	0
17:30-17:45	A - A12 South	1229	1270
	B - Woodbridge Road West	50	52
	C - A12 North	986	1021
	D - New Road East	0	0
17:45-18:00	A - A12 South	1003	1037
	B - Woodbridge Road West	41	43
	C - A12 North	805	834
	D - New Road East	0	0
18:00-18:15	A - A12 South	840	868
	B - Woodbridge Road West	34	36
	C - A12 North	674	698
	D - New Road East	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	9.58	0.0	0.5	A	9	14
B-AD	0.24	29.92	0.3	1.4	D	32	48
A-BCD	0.02	8.02	0.0	0.5	A	6	10
A-B						77	115
A-C						941	1412
D-A	0.00	0.00	0.0	~1	A	0	0
D-BC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.06	9.89	0.1	0.5	A	20	31
C-D						4	6
C-A						798	1197

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	493	0.015	7	0.0	0.0	7.408	A
B-AD	26	7	292	0.091	26	0.0	0.1	13.540	B
A-BCD	5	1	532	0.010	5	0.0	0.0	6.831	A
A-B	63	16			63				
A-C	772	193			772				
D-A	0	0	532	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	282	0.000	0	0.0	0.0	0.000	A
C-ABD	17	4	475	0.035	17	0.0	0.0	7.857	A
C-D	3	0.75			3				
C-A	654	164			654				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	452	0.020	9	0.0	0.0	8.124	A
B-AD	32	8	236	0.134	31	0.1	0.2	17.584	C
A-BCD	6	2	500	0.013	6	0.0	0.0	7.285	A
A-B	75	19			75				
A-C	922	230			922				
D-A	0	0	500	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	229	0.000	0	0.0	0.0	0.000	A
C-ABD	20	5	438	0.046	20	0.0	0.0	8.601	A
C-D	4	0.90			4				
C-A	782	195			782				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	388	0.028	11	0.0	0.0	9.556	A
B-AD	39	10	159	0.243	38	0.2	0.3	29.637	D
A-BCD	8	2	456	0.017	8	0.0	0.0	8.022	A
A-B	92	23			92				
A-C	1129	282			1129				
D-A	0	0	456	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	155	0.000	0	0.0	0.0	0.000	A
C-ABD	25	6	388	0.063	24	0.0	0.1	9.887	A
C-D	4	1			4				
C-A	957	239			957				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	387	0.029	11	0.0	0.0	9.576	A
B-AD	39	10	159	0.243	39	0.3	0.3	29.920	D
A-BCD	8	2	456	0.017	8	0.0	0.0	8.024	A
A-B	92	23			92				
A-C	1129	282			1129				
D-A	0	0	456	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	154	0.000	0	0.0	0.0	0.000	A
C-ABD	25	6	388	0.063	25	0.1	0.1	9.891	A
C-D	4	1			4				
C-A	957	239			957				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	451	0.020	9	0.0	0.0	8.139	A
B-AD	32	8	236	0.134	32	0.3	0.2	17.726	C
A-BCD	6	2	500	0.013	6	0.0	0.0	7.289	A
A-B	75	19			75				
A-C	922	230			922				
D-A	0	0	500	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	228	0.000	0	0.0	0.0	0.000	A
C-ABD	20	5	438	0.046	20	0.1	0.0	8.607	A
C-D	4	0.90			4				
C-A	782	195			782				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	493	0.015	8	0.0	0.0	7.416	A
B-AD	26	7	291	0.091	27	0.2	0.1	13.601	B
A-BCD	5	1	532	0.010	5	0.0	0.0	6.834	A
A-B	63	16			63				
A-C	772	193			772				
D-A	0	0	531	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	282	0.000	0	0.0	0.0	0.000	A
C-ABD	17	4	475	0.035	17	0.0	0.0	7.865	A
C-D	3	0.75			3				
C-A	654	164			654				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.31	0.03	0.27	0.48	0.83			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.31	0.03	0.32	1.08	1.35			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.16	0.00	0.00	0.16	0.16			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.10	0.00	0.00	0.10	0.10			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	549	100.000
B - Woodbridge Road West		ONE HOUR	✓	22	100.000
C - A12 North		ONE HOUR	✓	521	100.000
D - New Road East		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	27	522	0
	B - Woodbridge Road West	13	0	4	4
	C - A12 North	512	8	0	1
	D - New Road East	2	3	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.05	0.95	0.00
	B - Woodbridge Road West	0.61	0.00	0.20	0.18
	C - A12 North	0.98	0.01	0.00	0.00
	D - New Road East	0.40	0.60	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	11	0
	B - Woodbridge Road West	0	0	25	28
	C - A12 North	7	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.107	1.000
	B - Woodbridge Road West	1.000	1.000	1.250	1.278
	C - A12 North	1.075	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - A12 South	413	457
	B - Woodbridge Road West	16	18
	C - A12 North	392	421
	D - New Road East	4	4
06:00-06:15	A - A12 South	493	546
	B - Woodbridge Road West	20	22
	C - A12 North	468	502
	D - New Road East	5	5
06:15-06:30	A - A12 South	604	668
	B - Woodbridge Road West	24	26
	C - A12 North	573	615
	D - New Road East	6	6
06:30-06:45	A - A12 South	604	668
	B - Woodbridge Road West	24	26
	C - A12 North	573	615
	D - New Road East	6	6
06:45-07:00	A - A12 South	493	546
	B - Woodbridge Road West	20	22
	C - A12 North	468	502
	D - New Road East	5	5
07:00-07:15	A - A12 South	413	457
	B - Woodbridge Road West	16	18
	C - A12 North	392	421
	D - New Road East	4	4

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	8.46	0.0	0.5	A	4	6
B-AD	0.06	11.11	0.1	0.5	B	16	24
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						24	37
A-C						479	719
D-A	0.00	6.76	0.0	0.5	A	2	3
D-BC	0.01	11.78	0.0	0.5	B	3	5
C-ABD	0.02	6.75	0.0	0.5	A	7	11
C-D						0.92	1
C-A						470	704

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	470	0.007	3	0.0	0.0	7.711	A
B-AD	13	3	417	0.031	13	0.0	0.0	8.904	A
A-BCD	0	0	1193	0.000	0	0.0	0.0	0.000	A
A-B	20	5			20				
A-C	393	98			393				
D-A	2	0.42	580	0.003	2	0.0	0.0	6.226	A
D-BC	3	0.63	377	0.007	2	0.0	0.0	9.601	A
C-ABD	6	1	590	0.010	6	0.0	0.0	6.163	A
C-D	0.75	0.19			0.75				
C-A	385	96			385				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	454	0.009	4	0.0	0.0	8.007	A
B-AD	16	4	386	0.040	16	0.0	0.0	9.715	A
A-BCD	0	0	1155	0.000	0	0.0	0.0	0.000	A
A-B	24	6			24				
A-C	470	117			470				
D-A	2	0.50	561	0.004	2	0.0	0.0	6.440	A
D-BC	3	0.75	349	0.009	3	0.0	0.0	10.408	B
C-ABD	7	2	570	0.012	7	0.0	0.0	6.397	A
C-D	0.90	0.22			0.90				
C-A	460	115			460				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	430	0.011	5	0.0	0.0	8.460	A
B-AD	19	5	343	0.056	19	0.0	0.1	11.106	B
A-BCD	0	0	1102	0.000	0	0.0	0.0	0.000	A
A-B	29	7			29				
A-C	575	144			575				
D-A	2	0.61	535	0.005	2	0.0	0.0	6.760	A
D-BC	4	0.92	309	0.012	4	0.0	0.0	11.779	B
C-ABD	9	2	542	0.016	9	0.0	0.0	6.751	A
C-D	1	0.28			1				
C-A	563	141			563				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	430	0.011	5	0.0	0.0	8.461	A
B-AD	19	5	343	0.056	19	0.1	0.1	11.110	B
A-BCD	0	0	1102	0.000	0	0.0	0.0	0.000	A
A-B	29	7			29				
A-C	575	144			575				
D-A	2	0.61	535	0.005	2	0.0	0.0	6.761	A
D-BC	4	0.92	309	0.012	4	0.0	0.0	11.779	B
C-ABD	9	2	542	0.016	9	0.0	0.0	6.752	A
C-D	1	0.28			1				
C-A	563	141			563				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	453	0.009	4	0.0	0.0	8.010	A
B-AD	16	4	386	0.040	16	0.1	0.0	9.720	A
A-BCD	0	0	1155	0.000	0	0.0	0.0	0.000	A
A-B	24	6			24				
A-C	470	117			470				
D-A	2	0.50	561	0.004	2	0.0	0.0	6.442	A
D-BC	3	0.75	349	0.009	3	0.0	0.0	10.409	B
C-ABD	7	2	570	0.012	7	0.0	0.0	6.397	A
C-D	0.90	0.22			0.90				
C-A	460	115			460				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	470	0.007	3	0.0	0.0	7.712	A
B-AD	13	3	417	0.031	13	0.0	0.0	8.911	A
A-BCD	0	0	1193	0.000	0	0.0	0.0	0.000	A
A-B	20	5			20				
A-C	393	98			393				
D-A	2	0.42	580	0.003	2	0.0	0.0	6.231	A
D-BC	3	0.63	377	0.007	3	0.0	0.0	9.601	A
C-ABD	6	1	590	0.010	6	0.0	0.0	6.163	A
C-D	0.75	0.19			0.75				
C-A	385	96			385				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1160	100.000
B - Woodbridge Road West		ONE HOUR	✓	54	100.000
C - A12 North		ONE HOUR	✓	978	100.000
D - New Road East		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	88	1068	4
	B - Woodbridge Road West	41	0	6	7
	C - A12 North	967	11	0	0
	D - New Road East	4	3	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.77	0.00	0.10	0.13
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.50	0.38	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	6	13	0
	B - Woodbridge Road West	8	0	0	0
	C - A12 North	6	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.063	1.126	1.000
	B - Woodbridge Road West	1.081	1.000	1.000	1.000
	C - A12 North	1.060	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 South	873	978
	B - Woodbridge Road West	40	43
	C - A12 North	736	780
	D - New Road East	7	7
07:00-07:15	A - A12 South	1043	1168
	B - Woodbridge Road West	48	51
	C - A12 North	879	931
	D - New Road East	8	8
07:15-07:30	A - A12 South	1277	1431
	B - Woodbridge Road West	59	63
	C - A12 North	1076	1141
	D - New Road East	10	10
07:30-07:45	A - A12 South	1277	1431
	B - Woodbridge Road West	59	63
	C - A12 North	1076	1141
	D - New Road East	10	10
07:45-08:00	A - A12 South	1043	1168
	B - Woodbridge Road West	48	51
	C - A12 North	879	931
	D - New Road East	8	8
08:00-08:15	A - A12 South	873	978
	B - Woodbridge Road West	40	43
	C - A12 North	736	780
	D - New Road East	7	7

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	13.01	0.0	0.5	B	5	8
B-AD	0.49	64.16	0.9	4.0	F	44	66
A-BCD	0.01	8.63	0.0	0.5	A	4	6
A-B						80	121
A-C						980	1470
D-A	0.01	8.77	0.0	0.5	A	4	6
D-BC	0.05	38.01	0.1	0.5	E	4	6
C-ABD	0.03	10.08	0.0	0.5	B	10	15
C-D						0	0
C-A						887	1330

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	455	0.009	4	0.0	0.0	7.993	A
B-AD	36	9	258	0.140	36	0.0	0.2	16.162	C
A-BCD	3	0.75	509	0.006	3	0.0	0.0	7.117	A
A-B	66	17			66				
A-C	804	201			804				
D-A	3	0.84	506	0.007	3	0.0	0.0	7.157	A
D-BC	3	0.84	245	0.014	3	0.0	0.0	14.897	B
C-ABD	8	2	472	0.018	8	0.0	0.0	7.761	A
C-D	0	0			0				
C-A	728	182			728				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	403	0.012	5	0.0	0.0	9.038	A
B-AD	43	11	195	0.222	43	0.2	0.3	23.572	C
A-BCD	4	0.90	472	0.008	4	0.0	0.0	7.678	A
A-B	79	20			79				
A-C	960	240			960				
D-A	4	1.00	469	0.009	4	0.0	0.0	7.740	A
D-BC	4	1.00	184	0.022	4	0.0	0.0	19.984	C
C-ABD	10	2	429	0.023	10	0.0	0.0	8.591	A
C-D	0	0			0				
C-A	869	217			869				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	290	0.021	6	0.0	0.0	12.683	B
B-AD	53	13	108	0.489	51	0.3	0.8	60.259	F
A-BCD	4	1	422	0.010	4	0.0	0.0	8.617	A
A-B	97	24			97				
A-C	1176	294			1176				
D-A	5	1	416	0.012	5	0.0	0.0	8.747	A
D-BC	5	1	100	0.049	5	0.0	0.0	37.777	E
C-ABD	12	3	369	0.033	12	0.0	0.0	10.076	B
C-D	0	0			0				
C-A	1064	266			1064				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	283	0.022	6	0.0	0.0	13.011	B
B-AD	53	13	108	0.489	53	0.8	0.9	64.155	F
A-BCD	4	1	422	0.010	4	0.0	0.0	8.629	A
A-B	97	24			97				
A-C	1176	294			1176				
D-A	5	1	415	0.012	5	0.0	0.0	8.772	A
D-BC	5	1	100	0.049	5	0.0	0.1	38.009	E
C-ABD	12	3	369	0.033	12	0.0	0.0	10.078	B
C-D	0	0			0				
C-A	1064	266			1064				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	400	0.012	5	0.0	0.0	9.105	A
B-AD	43	11	195	0.222	46	0.9	0.3	24.445	C
A-BCD	4	0.90	472	0.008	4	0.0	0.0	7.693	A
A-B	79	20			79				
A-C	960	240			960				
D-A	4	1.00	467	0.009	4	0.0	0.0	7.768	A
D-BC	4	1.00	184	0.022	4	0.1	0.0	20.048	C
C-ABD	10	2	429	0.023	10	0.0	0.0	8.593	A
C-D	0	0			0				
C-A	869	217			869				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	454	0.009	4	0.0	0.0	8.008	A
B-AD	36	9	258	0.140	37	0.3	0.2	16.329	C
A-BCD	3	0.75	508	0.006	3	0.0	0.0	7.121	A
A-B	66	17			66				
A-C	804	201			804				
D-A	3	0.84	505	0.007	3	0.0	0.0	7.172	A
D-BC	3	0.84	245	0.014	3	0.0	0.0	14.908	B
C-ABD	8	2	472	0.018	8	0.0	0.0	7.765	A
C-D	0	0			0				
C-A	728	182			728				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.16	0.00	0.00	0.16	0.16			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.28	0.00	0.00	0.28	0.28			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-BC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.85	0.03	0.29	1.18	3.59			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.05	0.03	0.25	0.46	0.48			N/A	N/A
C-ABD	0.03	0.03	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.89	0.04	0.36	2.15	3.95			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.29	0.03	0.30	0.87	1.19			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.17	0.03	0.27	0.48	0.76			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	3.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1009	100.000
B - Woodbridge Road West		ONE HOUR	✓	74	100.000
C - A12 North		ONE HOUR	✓	1211	100.000
D - New Road East		ONE HOUR	✓	46	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	79	927	3
	B - Woodbridge Road West	57	0	10	7
	C - A12 North	1185	22	0	3
	D - New Road East	37	8	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.77	0.00	0.14	0.10
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.80	0.17	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	10	15	0
	B - Woodbridge Road West	4	0	0	0
	C - A12 North	8	0	0	0
	D - New Road East	3	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.099	1.151	1.000
	B - Woodbridge Road West	1.039	1.000	1.000	1.000
	C - A12 North	1.076	1.000	1.000	1.000
	D - New Road East	1.030	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 South	759	871
	B - Woodbridge Road West	55	57
	C - A12 North	911	979
	D - New Road East	34	35
08:00-08:15	A - A12 South	907	1040
	B - Woodbridge Road West	66	68
	C - A12 North	1088	1169
	D - New Road East	41	42
08:15-08:30	A - A12 South	1111	1273
	B - Woodbridge Road West	81	84
	C - A12 North	1333	1432
	D - New Road East	50	51
08:30-08:45	A - A12 South	1111	1273
	B - Woodbridge Road West	81	84
	C - A12 North	1333	1432
	D - New Road East	50	51
08:45-09:00	A - A12 South	907	1040
	B - Woodbridge Road West	66	68
	C - A12 North	1088	1169
	D - New Road East	41	42
09:00-09:15	A - A12 South	759	871
	B - Woodbridge Road West	55	57
	C - A12 North	911	979
	D - New Road East	34	35

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	19.54	0.1	0.5	C	9	14
B-AD	0.69	106.01	1.9	8.7	F	58	88
A-BCD	0.01	10.30	0.0	0.5	B	3	4
A-B						72	109
A-C						850	1276
D-A	0.13	13.35	0.1	0.5	B	34	50
D-BC	0.19	85.13	0.2	1.2	F	8	12
C-ABD	0.06	9.49	0.1	0.5	A	20	31
C-D						3	4
C-A						1088	1632

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	472	0.016	7	0.0	0.0	7.753	A
B-AD	48	12	259	0.185	47	0.0	0.2	16.942	C
A-BCD	2	0.56	462	0.005	2	0.0	0.0	7.826	A
A-B	59	15			59				
A-C	698	174			698				
D-A	28	7	427	0.065	27	0.0	0.1	8.991	A
D-BC	7	2	199	0.034	7	0.0	0.0	18.676	C
C-ABD	17	4	496	0.034	17	0.0	0.0	7.513	A
C-D	2	0.56			2				
C-A	892	223			892				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	416	0.022	9	0.0	0.0	8.851	A
B-AD	57	14	193	0.297	56	0.2	0.4	26.277	D
A-BCD	3	0.67	417	0.006	3	0.0	0.0	8.694	A
A-B	71	18			71				
A-C	833	208			833				
D-A	33	8	383	0.086	33	0.1	0.1	10.276	B
D-BC	8	2	138	0.058	8	0.0	0.1	27.701	D
C-ABD	20	5	457	0.044	20	0.0	0.0	8.234	A
C-D	3	0.67			3				
C-A	1066	266			1066				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	225	0.049	11	0.0	0.1	16.818	C
B-AD	70	18	102	0.690	65	0.4	1.7	89.164	F
A-BCD	3	0.83	354	0.009	3	0.0	0.0	10.265	B
A-B	87	22			87				
A-C	1020	255			1020				
D-A	40	10	313	0.129	40	0.1	0.1	13.196	B
D-BC	10	2	53	0.185	9	0.1	0.2	81.614	F
C-ABD	24	6	404	0.061	24	0.0	0.1	9.486	A
C-D	3	0.83			3				
C-A	1305	326			1305				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	195	0.056	11	0.1	0.1	19.539	C
B-AD	70	18	102	0.690	69	1.7	1.9	106.007	F
A-BCD	3	0.83	353	0.009	3	0.0	0.0	10.300	B
A-B	87	22			87				
A-C	1020	255			1020				
D-A	40	10	310	0.130	40	0.1	0.1	13.348	B
D-BC	10	2	52	0.188	10	0.2	0.2	85.128	F
C-ABD	24	6	404	0.061	24	0.1	0.1	9.494	A
C-D	3	0.83			3				
C-A	1305	326			1305				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	407	0.022	9	0.1	0.0	9.055	A
B-AD	57	14	193	0.297	63	1.9	0.4	28.842	D
A-BCD	3	0.67	415	0.007	3	0.0	0.0	8.728	A
A-B	71	18			71				
A-C	833	208			833				
D-A	33	8	381	0.087	33	0.1	0.1	10.367	B
D-BC	8	2	137	0.058	9	0.2	0.1	28.190	D
C-ABD	20	5	457	0.044	20	0.1	0.0	8.242	A
C-D	3	0.67			3				
C-A	1066	266			1066				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	470	0.016	8	0.0	0.0	7.778	A
B-AD	48	12	259	0.185	49	0.4	0.2	17.217	C
A-BCD	2	0.56	462	0.005	2	0.0	0.0	7.835	A
A-B	59	15			59				
A-C	698	174			698				
D-A	28	7	427	0.065	28	0.1	0.1	9.021	A
D-BC	7	2	199	0.034	7	0.1	0.0	18.739	C
C-ABD	17	4	496	0.034	17	0.0	0.0	7.522	A
C-D	2	0.56			2				
C-A	892	223			892				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.22	0.00	0.00	0.22	0.22			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.41	0.03	0.31	0.96	1.23			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.25	0.46	0.48			N/A	N/A
B-AD	1.68	0.04	0.39	4.44	8.09			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.15	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.21	0.03	0.27	0.49	1.25			N/A	N/A
C-ABD	0.06	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-AD	1.89	0.04	0.43	5.08	8.75			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
D-BC	0.22	0.03	0.27	0.48	0.64			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.44	0.03	0.33	1.37	1.54			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.23	0.03	0.28	0.71	1.36			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1129	100.000
B - Woodbridge Road West		ONE HOUR	✓	67	100.000
C - A12 North		ONE HOUR	✓	1003	100.000
D - New Road East		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	93	1031	4
	B - Woodbridge Road West	52	0	6	9
	C - A12 North	988	10	0	5
	D - New Road East	9	0	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.91	0.00
	B - Woodbridge Road West	0.78	0.00	0.08	0.13
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.89	0.00	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	9	0
	B - Woodbridge Road West	6	0	0	12
	C - A12 North	10	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.091	1.000
	B - Woodbridge Road West	1.064	1.000	1.000	1.124
	C - A12 North	1.098	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
14:45-15:00	A - A12 South	850	926
	B - Woodbridge Road West	50	54
	C - A12 North	755	829
	D - New Road East	8	8
15:00-15:15	A - A12 South	1015	1106
	B - Woodbridge Road West	60	64
	C - A12 North	902	989
	D - New Road East	9	9
15:15-15:30	A - A12 South	1243	1354
	B - Woodbridge Road West	74	79
	C - A12 North	1105	1212
	D - New Road East	11	11
15:30-15:45	A - A12 South	1243	1354
	B - Woodbridge Road West	74	79
	C - A12 North	1105	1212
	D - New Road East	11	11
15:45-16:00	A - A12 South	1015	1106
	B - Woodbridge Road West	60	64
	C - A12 North	902	989
	D - New Road East	9	9
16:00-16:15	A - A12 South	850	926
	B - Woodbridge Road West	50	54
	C - A12 North	755	829
	D - New Road East	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	14.34	0.0	0.5	B	5	8
B-AD	0.58	70.93	1.2	6.0	F	56	84
A-BCD	0.01	9.08	0.0	0.5	A	4	6
A-B						86	129
A-C						946	1420
D-A	0.03	9.51	0.0	0.5	A	8	12
D-BC	0.01	44.14	0.0	0.5	E	1	2
C-ABD	0.03	9.56	0.0	0.5	A	9	14
C-D						5	7
C-A						907	1360

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	460	0.009	4	0.0	0.0	7.896	A
B-AD	46	12	263	0.175	45	0.0	0.2	16.447	C
A-BCD	3	0.75	495	0.006	3	0.0	0.0	7.317	A
A-B	70	18			70				
A-C	776	194			776				
D-A	7	2	479	0.014	7	0.0	0.0	7.613	A
D-BC	0.84	0.21	216	0.004	0.82	0.0	0.0	16.691	C
C-ABD	8	2	485	0.016	7	0.0	0.0	7.546	A
C-D	4	0.94			4				
C-A	744	186			744				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	407	0.012	5	0.0	0.0	8.965	A
B-AD	55	14	202	0.273	54	0.2	0.4	24.304	C
A-BCD	4	0.90	456	0.008	4	0.0	0.0	7.961	A
A-B	84	21			84				
A-C	927	232			927				
D-A	8	2	442	0.018	8	0.0	0.0	8.300	A
D-BC	1	0.25	161	0.006	0.99	0.0	0.0	22.555	C
C-ABD	9	2	444	0.020	9	0.0	0.0	8.278	A
C-D	4	1			4				
C-A	889	222			889				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	269	0.023	6	0.0	0.0	13.681	B
B-AD	67	17	117	0.576	64	0.4	1.2	64.779	F
A-BCD	4	1	402	0.011	4	0.0	0.0	9.059	A
A-B	103	26			103				
A-C	1136	284			1136				
D-A	10	2	389	0.025	10	0.0	0.0	9.490	A
D-BC	1	0.31	83	0.015	1	0.0	0.0	43.821	E
C-ABD	11	3	388	0.028	11	0.0	0.0	9.559	A
C-D	6	1			6				
C-A	1088	272			1088				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	257	0.024	6	0.0	0.0	14.335	B
B-AD	67	17	117	0.576	67	1.2	1.2	70.932	F
A-BCD	4	1	401	0.011	4	0.0	0.0	9.077	A
A-B	103	26			103				
A-C	1136	284			1136				
D-A	10	2	388	0.025	10	0.0	0.0	9.510	A
D-BC	1	0.31	83	0.015	1	0.0	0.0	44.142	E
C-ABD	11	3	388	0.028	11	0.0	0.0	9.559	A
C-D	6	1			6				
C-A	1088	272			1088				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	402	0.012	5	0.0	0.0	9.072	A
B-AD	55	14	202	0.273	59	1.2	0.4	25.635	D
A-BCD	4	0.90	455	0.008	4	0.0	0.0	7.980	A
A-B	84	21			84				
A-C	927	232			927				
D-A	8	2	441	0.018	8	0.0	0.0	8.324	A
D-BC	1	0.25	160	0.006	1	0.0	0.0	22.661	C
C-ABD	9	2	444	0.020	9	0.0	0.0	8.281	A
C-D	4	1			4				
C-A	889	222			889				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	459	0.009	4	0.0	0.0	7.915	A
B-AD	46	12	263	0.175	47	0.4	0.2	16.678	C
A-BCD	3	0.75	495	0.006	3	0.0	0.0	7.326	A
A-B	70	18			70				
A-C	776	194			776				
D-A	7	2	479	0.014	7	0.0	0.0	7.624	A
D-BC	0.84	0.21	216	0.004	0.85	0.0	0.0	16.711	C
C-ABD	8	2	485	0.016	8	0.0	0.0	7.550	A
C-D	4	0.94			4				
C-A	744	186			744				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.21	0.00	0.00	0.21	0.21			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.36	0.00	0.00	0.36	0.36			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	1.16	0.03	0.31	2.10	5.92			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	1.25	0.04	0.36	3.14	5.97			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.39	0.03	0.34	1.21	1.42			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.22	0.03	0.29	0.77	1.20			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1136	100.000
B - Woodbridge Road West		ONE HOUR	✓	45	100.000
C - A12 North		ONE HOUR	✓	984	100.000
D - New Road East		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	83	1046	7
	B - Woodbridge Road West	30	0	10	5
	C - A12 North	957	22	0	4
	D - New Road East	3	1	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.07	0.92	0.01
	B - Woodbridge Road West	0.67	0.00	0.22	0.11
	C - A12 North	0.97	0.02	0.00	0.00
	D - New Road East	0.75	0.25	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	3	4	0
	B - Woodbridge Road West	7	0	0	0
	C - A12 North	7	5	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.027	1.044	1.000
	B - Woodbridge Road West	1.074	1.000	1.000	1.000
	C - A12 North	1.069	1.050	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A12 South	855	891
	B - Woodbridge Road West	34	36
	C - A12 North	741	791
	D - New Road East	0	0
17:00-17:15	A - A12 South	1021	1064
	B - Woodbridge Road West	41	43
	C - A12 North	884	945
	D - New Road East	0	0
17:15-17:30	A - A12 South	1251	1304
	B - Woodbridge Road West	50	52
	C - A12 North	1083	1157
	D - New Road East	0	0
17:30-17:45	A - A12 South	1251	1304
	B - Woodbridge Road West	50	52
	C - A12 North	1083	1157
	D - New Road East	0	0
17:45-18:00	A - A12 South	1021	1064
	B - Woodbridge Road West	41	43
	C - A12 North	884	945
	D - New Road East	0	0
18:00-18:15	A - A12 South	855	891
	B - Woodbridge Road West	34	36
	C - A12 North	741	791
	D - New Road East	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	10.03	0.0	0.5	B	9	14
B-AD	0.29	38.47	0.4	1.3	E	32	48
A-BCD	0.02	8.63	0.0	0.5	A	6	10
A-B						77	115
A-C						959	1439
D-A	0.00	0.00	0.0	~1	A	0	0
D-BC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.06	10.10	0.1	0.5	B	20	31
C-D						4	6
C-A						878	1318

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	487	0.015	7	0.0	0.0	7.501	A
B-AD	26	7	273	0.097	26	0.0	0.1	14.537	B
A-BCD	5	1	511	0.010	5	0.0	0.0	7.120	A
A-B	63	16			63				
A-C	787	197			787				
D-A	0	0	510	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	259	0.000	0	0.0	0.0	0.000	A
C-ABD	17	4	470	0.036	17	0.0	0.0	7.944	A
C-D	3	0.75			3				
C-A	721	180			721				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	444	0.020	9	0.0	0.0	8.274	A
B-AD	32	8	214	0.147	31	0.1	0.2	19.680	C
A-BCD	6	2	475	0.013	6	0.0	0.0	7.682	A
A-B	75	19			75				
A-C	940	235			940				
D-A	0	0	475	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	200	0.000	0	0.0	0.0	0.000	A
C-ABD	20	5	432	0.046	20	0.0	0.0	8.726	A
C-D	4	0.90			4				
C-A	861	215			861				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	371	0.030	11	0.0	0.0	9.986	A
B-AD	39	10	132	0.292	38	0.2	0.4	37.826	E
A-BCD	8	2	425	0.018	8	0.0	0.0	8.621	A
A-B	92	23			92				
A-C	1151	288			1151				
D-A	0	0	425	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	120	0.000	0	0.0	0.0	0.000	A
C-ABD	25	6	381	0.064	24	0.0	0.1	10.091	B
C-D	4	1			4				
C-A	1054	264			1054				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	370	0.030	11	0.0	0.0	10.029	B
B-AD	39	10	132	0.292	39	0.4	0.4	38.466	E
A-BCD	8	2	425	0.018	8	0.0	0.0	8.626	A
A-B	92	23			92				
A-C	1151	288			1151				
D-A	0	0	425	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	120	0.000	0	0.0	0.0	0.000	A
C-ABD	25	6	381	0.064	25	0.1	0.1	10.095	B
C-D	4	1			4				
C-A	1054	264			1054				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	443	0.020	9	0.0	0.0	8.298	A
B-AD	32	8	214	0.147	32	0.4	0.2	19.921	C
A-BCD	6	2	475	0.013	6	0.0	0.0	7.688	A
A-B	75	19			75				
A-C	940	235			940				
D-A	0	0	474	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	200	0.000	0	0.0	0.0	0.000	A
C-ABD	20	5	432	0.046	20	0.1	0.0	8.731	A
C-D	4	0.90			4				
C-A	861	215			861				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	487	0.015	8	0.0	0.0	7.510	A
B-AD	26	7	273	0.097	27	0.2	0.1	14.621	B
A-BCD	5	1	511	0.010	5	0.0	0.0	7.123	A
A-B	63	16			63				
A-C	787	197			787				
D-A	0	0	510	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	258	0.000	0	0.0	0.0	0.000	A
C-ABD	17	4	470	0.036	17	0.0	0.0	7.952	A
C-D	3	0.75			3				
C-A	721	180			721				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.39	0.03	0.27	0.48	1.27			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.40	0.03	0.33	1.21	1.21			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.18	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.11	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	452	100.000
B - Woodbridge Road West		ONE HOUR	✓	23	100.000
C - A12 North		ONE HOUR	✓	535	100.000
D - New Road East		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	28	424	0
	B - Woodbridge Road West	14	0	5	4
	C - A12 North	526	8	0	1
	D - New Road East	2	4	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.06	0.94	0.00
	B - Woodbridge Road West	0.62	0.00	0.21	0.18
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.40	0.60	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	9	0
	B - Woodbridge Road West	0	0	25	29
	C - A12 North	7	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.086	1.000
	B - Woodbridge Road West	1.000	1.000	1.250	1.292
	C - A12 North	1.073	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - A12 South	340	370
	B - Woodbridge Road West	17	19
	C - A12 North	403	432
	D - New Road East	4	4
06:00-06:15	A - A12 South	407	442
	B - Woodbridge Road West	20	22
	C - A12 North	481	515
	D - New Road East	5	5
06:15-06:30	A - A12 South	498	541
	B - Woodbridge Road West	25	28
	C - A12 North	589	631
	D - New Road East	6	6
06:30-06:45	A - A12 South	498	541
	B - Woodbridge Road West	25	28
	C - A12 North	589	631
	D - New Road East	6	6
06:45-07:00	A - A12 South	407	442
	B - Woodbridge Road West	20	22
	C - A12 North	481	515
	D - New Road East	5	5
07:00-07:15	A - A12 South	340	370
	B - Woodbridge Road West	17	19
	C - A12 North	403	432
	D - New Road East	4	4

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	8.03	0.0	0.5	A	4	6
B-AD	0.05	10.30	0.1	0.5	B	17	25
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						26	39
A-C						389	584
D-A	0.00	6.81	0.0	0.5	A	2	3
D-BC	0.01	11.30	0.0	0.5	B	3	5
C-ABD	0.02	6.41	0.0	0.5	A	7	11
C-D						0.92	1
C-A						482	724

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	486	0.007	3	0.0	0.0	7.459	A
B-AD	14	3	435	0.031	13	0.0	0.0	8.541	A
A-BCD	0	0	1188	0.000	0	0.0	0.0	0.000	A
A-B	21	5			21				
A-C	319	80			319				
D-A	2	0.44	577	0.003	2	0.0	0.0	6.254	A
D-BC	3	0.66	386	0.007	3	0.0	0.0	9.379	A
C-ABD	6	2	610	0.010	6	0.0	0.0	5.965	A
C-D	0.75	0.19			0.75				
C-A	396	99			396				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	473	0.009	4	0.0	0.0	7.686	A
B-AD	16	4	407	0.040	16	0.0	0.0	9.205	A
A-BCD	0	0	1149	0.000	0	0.0	0.0	0.000	A
A-B	25	6			25				
A-C	381	95			381				
D-A	2	0.52	558	0.004	2	0.0	0.0	6.476	A
D-BC	3	0.79	360	0.009	3	0.0	0.0	10.098	B
C-ABD	7	2	593	0.012	7	0.0	0.0	6.144	A
C-D	0.90	0.22			0.90				
C-A	473	118			473				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	454	0.011	5	0.0	0.0	8.026	A
B-AD	20	5	369	0.054	20	0.0	0.1	10.302	B
A-BCD	0	0	1094	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	467	117			467				
D-A	3	0.64	531	0.005	3	0.0	0.0	6.808	A
D-BC	4	0.96	322	0.012	4	0.0	0.0	11.298	B
C-ABD	9	2	570	0.016	9	0.0	0.0	6.410	A
C-D	1	0.28			1				
C-A	579	145			579				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	454	0.011	5	0.0	0.0	8.027	A
B-AD	20	5	369	0.054	20	0.1	0.1	10.304	B
A-BCD	0	0	1094	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	467	117			467				
D-A	3	0.64	531	0.005	3	0.0	0.0	6.809	A
D-BC	4	0.96	322	0.012	4	0.0	0.0	11.298	B
C-ABD	9	2	570	0.016	9	0.0	0.0	6.410	A
C-D	1	0.28			1				
C-A	579	145			579				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	472	0.009	4	0.0	0.0	7.688	A
B-AD	16	4	407	0.040	16	0.1	0.0	9.208	A
A-BCD	0	0	1149	0.000	0	0.0	0.0	0.000	A
A-B	25	6			25				
A-C	381	95			381				
D-A	2	0.52	558	0.004	2	0.0	0.0	6.480	A
D-BC	3	0.79	360	0.009	3	0.0	0.0	10.099	B
C-ABD	7	2	593	0.012	7	0.0	0.0	6.147	A
C-D	0.90	0.22			0.90				
C-A	473	118			473				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	486	0.007	4	0.0	0.0	7.460	A
B-AD	14	3	435	0.031	14	0.0	0.0	8.549	A
A-BCD	0	0	1188	0.000	0	0.0	0.0	0.000	A
A-B	21	5			21				
A-C	319	80			319				
D-A	2	0.44	577	0.003	2	0.0	0.0	6.256	A
D-BC	3	0.66	386	0.007	3	0.0	0.0	9.378	A
C-ABD	6	2	610	0.010	6	0.0	0.0	5.968	A
C-D	0.75	0.19			0.75				
C-A	396	99			396				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	996	100.000
B - Woodbridge Road West		ONE HOUR	✓	56	100.000
C - A12 North		ONE HOUR	✓	986	100.000
D - New Road East		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	92	900	4
	B - Woodbridge Road West	43	0	6	7
	C - A12 North	975	12	0	0
	D - New Road East	5	4	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.09	0.90	0.00
	B - Woodbridge Road West	0.77	0.00	0.10	0.12
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.50	0.37	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	6	9	0
	B - Woodbridge Road West	8	0	0	0
	C - A12 North	6	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.063	1.093	1.000
	B - Woodbridge Road West	1.081	1.000	1.000	1.000
	C - A12 North	1.058	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 South	750	818
	B - Woodbridge Road West	42	45
	C - A12 North	742	785
	D - New Road East	7	7
07:00-07:15	A - A12 South	896	977
	B - Woodbridge Road West	50	53
	C - A12 North	887	937
	D - New Road East	8	8
07:15-07:30	A - A12 South	1097	1196
	B - Woodbridge Road West	62	66
	C - A12 North	1086	1148
	D - New Road East	10	10
07:30-07:45	A - A12 South	1097	1196
	B - Woodbridge Road West	62	66
	C - A12 North	1086	1148
	D - New Road East	10	10
07:45-08:00	A - A12 South	896	977
	B - Woodbridge Road West	50	53
	C - A12 North	887	937
	D - New Road East	8	8
08:00-08:15	A - A12 South	750	818
	B - Woodbridge Road West	42	45
	C - A12 North	742	785
	D - New Road East	7	7

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	9.79	0.0	0.5	A	5	8
B-AD	0.34	34.06	0.5	2.0	D	46	69
A-BCD	0.01	8.67	0.0	0.5	A	4	6
A-B						85	127
A-C						826	1239
D-A	0.01	8.79	0.0	0.5	A	4	6
D-BC	0.04	28.76	0.0	0.5	D	4	6
C-ABD	0.03	8.79	0.0	0.5	A	11	16
C-D						0	0
C-A						894	1341

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	491	0.009	4	0.0	0.0	7.394	A
B-AD	38	9	293	0.129	37	0.0	0.1	14.020	B
A-BCD	3	0.75	507	0.006	3	0.0	0.0	7.137	A
A-B	69	17			69				
A-C	678	169			678				
D-A	4	0.88	505	0.007	3	0.0	0.0	7.179	A
D-BC	4	0.88	266	0.013	3	0.0	0.0	13.722	B
C-ABD	9	2	508	0.017	9	0.0	0.0	7.203	A
C-D	0	0			0				
C-A	734	183			734				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	449	0.012	5	0.0	0.0	8.106	A
B-AD	45	11	238	0.190	45	0.1	0.2	18.627	C
A-BCD	4	0.90	471	0.008	4	0.0	0.0	7.707	A
A-B	83	21			83				
A-C	809	202			809				
D-A	4	1	468	0.009	4	0.0	0.0	7.768	A
D-BC	4	1	209	0.020	4	0.0	0.0	17.578	C
C-ABD	10	3	472	0.022	10	0.0	0.0	7.793	A
C-D	0	0			0				
C-A	876	219			876				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	376	0.017	6	0.0	0.0	9.750	A
B-AD	55	14	161	0.344	54	0.2	0.5	33.444	D
A-BCD	4	1	420	0.010	4	0.0	0.0	8.660	A
A-B	101	25			101				
A-C	991	248			991				
D-A	5	1	415	0.012	5	0.0	0.0	8.772	A
D-BC	5	1	130	0.039	5	0.0	0.0	28.692	D
C-ABD	13	3	423	0.030	13	0.0	0.0	8.785	A
C-D	0	0			0				
C-A	1073	268			1073				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	374	0.017	6	0.0	0.0	9.795	A
B-AD	55	14	161	0.344	55	0.5	0.5	34.056	D
A-BCD	4	1	420	0.010	4	0.0	0.0	8.665	A
A-B	101	25			101				
A-C	991	248			991				
D-A	5	1	415	0.012	5	0.0	0.0	8.786	A
D-BC	5	1	130	0.039	5	0.0	0.0	28.757	D
C-ABD	13	3	423	0.030	13	0.0	0.0	8.785	A
C-D	0	0			0				
C-A	1073	268			1073				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	448	0.012	5	0.0	0.0	8.130	A
B-AD	45	11	238	0.190	46	0.5	0.2	18.892	C
A-BCD	4	0.90	470	0.008	4	0.0	0.0	7.713	A
A-B	83	21			83				
A-C	809	202			809				
D-A	4	1	467	0.009	4	0.0	0.0	7.786	A
D-BC	4	1	209	0.020	4	0.0	0.0	17.602	C
C-ABD	10	3	472	0.022	11	0.0	0.0	7.796	A
C-D	0	0			0				
C-A	876	219			876				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	491	0.009	4	0.0	0.0	7.406	A
B-AD	38	9	293	0.129	38	0.2	0.2	14.121	B
A-BCD	3	0.75	507	0.006	3	0.0	0.0	7.143	A
A-B	69	17			69				
A-C	678	169			678				
D-A	4	0.88	504	0.007	4	0.0	0.0	7.189	A
D-BC	4	0.88	266	0.013	4	0.0	0.0	13.735	B
C-ABD	9	2	508	0.017	9	0.0	0.0	7.204	A
C-D	0	0			0				
C-A	734	183			734				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.23	0.00	0.00	0.23	0.23			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-BC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.50	0.03	0.27	0.50	1.25			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.51	0.03	0.33	1.50	1.95			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.24	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.15	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	2.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1006	100.000
B - Woodbridge Road West		ONE HOUR	✓	77	100.000
C - A12 North		ONE HOUR	✓	1247	100.000
D - New Road East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	83	920	3
	B - Woodbridge Road West	60	0	11	7
	C - A12 North	1220	23	0	3
	D - New Road East	39	8	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.91	0.00
	B - Woodbridge Road West	0.77	0.00	0.14	0.09
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.80	0.17	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	10	9	0
	B - Woodbridge Road West	4	0	0	0
	C - A12 North	6	0	0	0
	D - New Road East	3	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.099	1.090	1.000
	B - Woodbridge Road West	1.039	1.000	1.000	1.000
	C - A12 North	1.064	1.000	1.000	1.000
	D - New Road East	1.030	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 South	757	826
	B - Woodbridge Road West	58	60
	C - A12 North	939	998
	D - New Road East	36	37
08:00-08:15	A - A12 South	904	986
	B - Woodbridge Road West	69	71
	C - A12 North	1121	1191
	D - New Road East	43	44
08:15-08:30	A - A12 South	1107	1208
	B - Woodbridge Road West	85	87
	C - A12 North	1373	1459
	D - New Road East	53	54
08:30-08:45	A - A12 South	1107	1208
	B - Woodbridge Road West	85	87
	C - A12 North	1373	1459
	D - New Road East	53	54
08:45-09:00	A - A12 South	904	986
	B - Woodbridge Road West	69	71
	C - A12 North	1121	1191
	D - New Road East	43	44
09:00-09:15	A - A12 South	757	826
	B - Woodbridge Road West	58	60
	C - A12 North	939	998
	D - New Road East	36	37

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	15.96	0.1	0.5	C	10	14
B-AD	0.65	86.04	1.6	7.8	F	61	92
A-BCD	0.01	10.49	0.0	0.5	B	3	4
A-B						76	114
A-C						844	1266
D-A	0.14	13.74	0.2	0.5	B	35	53
D-BC	0.19	80.97	0.2	1.2	F	9	13
C-ABD	0.06	9.17	0.1	0.5	A	21	32
C-D						3	4
C-A						1120	1680

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	481	0.016	8	0.0	0.0	7.605	A
B-AD	50	13	267	0.188	49	0.0	0.2	16.488	C
A-BCD	2	0.56	458	0.005	2	0.0	0.0	7.903	A
A-B	62	16			62				
A-C	692	173			692				
D-A	29	7	423	0.069	29	0.0	0.1	9.120	A
D-BC	7	2	201	0.035	7	0.0	0.0	18.541	C
C-ABD	18	4	506	0.035	17	0.0	0.0	7.371	A
C-D	2	0.56			2				
C-A	919	230			919				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	427	0.022	9	0.0	0.0	8.616	A
B-AD	60	15	202	0.296	59	0.2	0.4	25.014	D
A-BCD	3	0.67	411	0.007	3	0.0	0.0	8.808	A
A-B	74	19			74				
A-C	827	207			827				
D-A	35	9	378	0.092	35	0.1	0.1	10.478	B
D-BC	8	2	140	0.060	8	0.0	0.1	27.350	D
C-ABD	21	5	469	0.045	21	0.0	0.0	8.033	A
C-D	3	0.67			3				
C-A	1097	274			1097				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	258	0.045	11	0.0	0.0	14.593	B
B-AD	73	18	113	0.646	69	0.4	1.5	75.337	F
A-BCD	3	0.83	347	0.010	3	0.0	0.0	10.461	B
A-B	91	23			91				
A-C	1013	253			1013				
D-A	42	11	307	0.138	42	0.1	0.2	13.577	B
D-BC	10	3	55	0.186	10	0.1	0.2	78.028	F
C-ABD	26	6	419	0.061	26	0.0	0.1	9.163	A
C-D	3	0.83			3				
C-A	1344	336			1344				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	237	0.049	12	0.0	0.1	15.963	C
B-AD	73	18	113	0.647	73	1.5	1.6	86.044	F
A-BCD	3	0.83	346	0.010	3	0.0	0.0	10.493	B
A-B	91	23			91				
A-C	1013	253			1013				
D-A	42	11	304	0.139	42	0.2	0.2	13.735	B
D-BC	10	3	55	0.188	10	0.2	0.2	80.970	F
C-ABD	26	6	418	0.061	26	0.1	0.1	9.167	A
C-D	3	0.83			3				
C-A	1344	336			1344				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	420	0.022	10	0.1	0.0	8.770	A
B-AD	60	15	202	0.296	65	1.6	0.4	26.943	D
A-BCD	3	0.67	410	0.007	3	0.0	0.0	8.838	A
A-B	74	19			74				
A-C	827	207			827				
D-A	35	9	376	0.092	35	0.2	0.1	10.565	B
D-BC	8	2	139	0.060	9	0.2	0.1	27.785	D
C-ABD	21	5	469	0.045	21	0.1	0.0	8.039	A
C-D	3	0.67			3				
C-A	1097	274			1097				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	480	0.016	8	0.0	0.0	7.630	A
B-AD	50	13	267	0.188	51	0.4	0.2	16.746	C
A-BCD	2	0.56	457	0.005	2	0.0	0.0	7.911	A
A-B	62	16			62				
A-C	692	173			692				
D-A	29	7	423	0.069	29	0.1	0.1	9.153	A
D-BC	7	2	201	0.035	7	0.1	0.0	18.604	C
C-ABD	18	4	506	0.035	18	0.0	0.0	7.379	A
C-D	2	0.56			2				
C-A	919	230			919				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.23	0.00	0.00	0.23	0.23			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.40	0.03	0.29	0.74	1.12			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-AD	1.48	0.04	0.35	3.63	7.51			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.16	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.21	0.03	0.27	0.49	1.25			N/A	N/A
C-ABD	0.06	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-AD	1.62	0.04	0.39	4.28	7.78			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.16	0.03	0.25	0.45	0.48			N/A	N/A
D-BC	0.22	0.03	0.27	0.48	0.68			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.44	0.03	0.35	1.33	1.33			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.24	0.03	0.29	0.83	1.34			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	2.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1168	100.000
B - Woodbridge Road West		ONE HOUR	✓	70	100.000
C - A12 North		ONE HOUR	✓	1041	100.000
D - New Road East		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	98	1065	4
	B - Woodbridge Road West	55	0	6	9
	C - A12 North	1025	11	0	5
	D - New Road East	9	0	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.91	0.00
	B - Woodbridge Road West	0.79	0.00	0.08	0.13
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.89	0.00	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	6	0
	B - Woodbridge Road West	6	0	0	13
	C - A12 North	7	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.061	1.000
	B - Woodbridge Road West	1.064	1.000	1.000	1.130
	C - A12 North	1.068	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
14:45-15:00	A - A12 South	879	934
	B - Woodbridge Road West	53	56
	C - A12 North	784	837
	D - New Road East	8	8
15:00-15:15	A - A12 South	1050	1115
	B - Woodbridge Road West	63	67
	C - A12 North	936	999
	D - New Road East	9	9
15:15-15:30	A - A12 South	1286	1366
	B - Woodbridge Road West	77	82
	C - A12 North	1146	1223
	D - New Road East	12	12
15:30-15:45	A - A12 South	1286	1366
	B - Woodbridge Road West	77	82
	C - A12 North	1146	1223
	D - New Road East	12	12
15:45-16:00	A - A12 South	1050	1115
	B - Woodbridge Road West	63	67
	C - A12 North	936	999
	D - New Road East	9	9
16:00-16:15	A - A12 South	879	934
	B - Woodbridge Road West	53	56
	C - A12 North	784	837
	D - New Road East	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	16.00	0.0	0.5	C	5	8
B-AD	0.62	80.78	1.5	7.1	F	59	88
A-BCD	0.01	9.16	0.0	0.5	A	4	6
A-B						90	135
A-C						978	1466
D-A	0.03	9.61	0.0	0.5	A	9	13
D-BC	0.02	46.69	0.0	0.5	E	1	2
C-ABD	0.03	9.64	0.0	0.5	A	10	15
C-D						5	7
C-A						941	1411

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	457	0.010	4	0.0	0.0	7.946	A
B-AD	48	12	261	0.185	47	0.0	0.2	16.796	C
A-BCD	3	0.75	493	0.006	3	0.0	0.0	7.351	A
A-B	74	19			74				
A-C	802	201			802				
D-A	7	2	477	0.015	7	0.0	0.0	7.655	A
D-BC	0.88	0.22	214	0.004	0.87	0.0	0.0	16.922	C
C-ABD	8	2	483	0.016	8	0.0	0.0	7.581	A
C-D	4	0.94			4				
C-A	772	193			772				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	402	0.013	5	0.0	0.0	9.078	A
B-AD	58	14	199	0.289	57	0.2	0.4	25.210	D
A-BCD	4	0.90	453	0.008	4	0.0	0.0	8.009	A
A-B	88	22			88				
A-C	958	239			958				
D-A	8	2	439	0.019	8	0.0	0.0	8.360	A
D-BC	1	0.26	157	0.007	1	0.0	0.0	23.065	C
C-ABD	9	2	442	0.021	9	0.0	0.0	8.328	A
C-D	4	1			4				
C-A	922	230			922				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	248	0.026	6	0.0	0.0	14.911	B
B-AD	71	18	114	0.621	67	0.4	1.4	71.961	F
A-BCD	4	1	398	0.011	4	0.0	0.0	9.135	A
A-B	108	27			108				
A-C	1173	293			1173				
D-A	10	3	386	0.027	10	0.0	0.0	9.587	A
D-BC	1	0.32	79	0.016	1	0.0	0.0	46.235	E
C-ABD	12	3	385	0.030	12	0.0	0.0	9.638	A
C-D	6	1			6				
C-A	1129	282			1129				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	231	0.028	6	0.0	0.0	16.003	C
B-AD	71	18	114	0.621	70	1.4	1.5	80.785	F
A-BCD	4	1	397	0.011	4	0.0	0.0	9.157	A
A-B	108	27			108				
A-C	1173	293			1173				
D-A	10	3	385	0.027	10	0.0	0.0	9.613	A
D-BC	1	0.32	78	0.016	1	0.0	0.0	46.694	E
C-ABD	12	3	385	0.030	12	0.0	0.0	9.640	A
C-D	6	1			6				
C-A	1129	282			1129				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	396	0.013	5	0.0	0.0	9.218	A
B-AD	58	14	199	0.289	62	1.5	0.4	26.946	D
A-BCD	4	0.90	452	0.008	4	0.0	0.0	8.033	A
A-B	88	22			88				
A-C	958	239			958				
D-A	8	2	438	0.019	8	0.0	0.0	8.386	A
D-BC	1	0.26	156	0.007	1	0.0	0.0	23.200	C
C-ABD	9	2	442	0.021	10	0.0	0.0	8.331	A
C-D	4	1			4				
C-A	922	230			922				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	456	0.010	4	0.0	0.0	7.968	A
B-AD	48	12	261	0.185	49	0.4	0.2	17.052	C
A-BCD	3	0.75	492	0.006	3	0.0	0.0	7.360	A
A-B	74	19			74				
A-C	802	201			802				
D-A	7	2	477	0.015	7	0.0	0.0	7.666	A
D-BC	0.88	0.22	213	0.004	0.89	0.0	0.0	16.943	C
C-ABD	8	2	483	0.016	8	0.0	0.0	7.581	A
C-D	4	0.94			4				
C-A	772	193			772				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.22	0.00	0.00	0.22	0.22			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.39	0.00	0.00	0.39	0.39			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	1.35	0.03	0.34	3.07	6.92			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	1.47	0.04	0.38	3.83	7.08			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.42	0.03	0.35	1.12	1.12			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.23	0.03	0.29	0.83	1.30			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1161	100.000
B - Woodbridge Road West		ONE HOUR	✓	47	100.000
C - A12 North		ONE HOUR	✓	954	100.000
D - New Road East		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	88	1067	7
	B - Woodbridge Road West	32	0	11	5
	C - A12 North	926	23	0	4
	D - New Road East	4	1	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.01
	B - Woodbridge Road West	0.67	0.00	0.22	0.11
	C - A12 North	0.97	0.02	0.00	0.00
	D - New Road East	0.75	0.25	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	3	3	0
	B - Woodbridge Road West	7	0	0	0
	C - A12 North	2	5	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.027	1.029	1.000
	B - Woodbridge Road West	1.074	1.000	1.000	1.000
	C - A12 North	1.022	1.050	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A12 South	874	900
	B - Woodbridge Road West	36	37
	C - A12 North	718	735
	D - New Road East	0	0
17:00-17:15	A - A12 South	1044	1074
	B - Woodbridge Road West	42	45
	C - A12 North	857	877
	D - New Road East	0	0
17:15-17:30	A - A12 South	1279	1316
	B - Woodbridge Road West	52	55
	C - A12 North	1050	1074
	D - New Road East	0	0
17:30-17:45	A - A12 South	1279	1316
	B - Woodbridge Road West	52	55
	C - A12 North	1050	1074
	D - New Road East	0	0
17:45-18:00	A - A12 South	1044	1074
	B - Woodbridge Road West	42	45
	C - A12 North	857	877
	D - New Road East	0	0
18:00-18:15	A - A12 South	874	900
	B - Woodbridge Road West	36	37
	C - A12 North	718	735
	D - New Road East	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	10.05	0.0	0.5	B	10	15
B-AD	0.29	35.60	0.4	1.2	E	34	50
A-BCD	0.02	8.25	0.0	0.5	A	6	10
A-B						81	121
A-C						979	1468
D-A	0.00	0.00	0.0	~1	A	0	0
D-BC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.07	10.21	0.1	0.5	B	21	32
C-D						4	6
C-A						850	1275

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	486	0.016	8	0.0	0.0	7.532	A
B-AD	28	7	279	0.099	27	0.0	0.1	14.244	B
A-BCD	5	1	524	0.010	5	0.0	0.0	6.942	A
A-B	66	17			66				
A-C	803	201			803				
D-A	0	0	523	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	270	0.000	0	0.0	0.0	0.000	A
C-ABD	18	4	468	0.038	17	0.0	0.0	7.992	A
C-D	3	0.75			3				
C-A	697	174			697				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	442	0.021	9	0.0	0.0	8.316	A
B-AD	33	8	221	0.149	33	0.1	0.2	19.043	C
A-BCD	6	2	490	0.013	6	0.0	0.0	7.437	A
A-B	79	20			79				
A-C	959	240			959				
D-A	0	0	490	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	214	0.000	0	0.0	0.0	0.000	A
C-ABD	21	5	430	0.049	21	0.0	0.1	8.794	A
C-D	4	0.90			4				
C-A	833	208			833				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	371	0.031	12	0.0	0.0	10.012	B
B-AD	40	10	141	0.285	39	0.2	0.4	35.078	E
A-BCD	8	2	444	0.017	8	0.0	0.0	8.248	A
A-B	97	24			97				
A-C	1174	294			1174				
D-A	0	0	444	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	136	0.000	0	0.0	0.0	0.000	A
C-ABD	26	6	378	0.068	26	0.1	0.1	10.203	B
C-D	4	1			4				
C-A	1020	255			1020				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	370	0.031	12	0.0	0.0	10.050	B
B-AD	40	10	141	0.285	40	0.4	0.4	35.600	E
A-BCD	8	2	444	0.017	8	0.0	0.0	8.252	A
A-B	97	24			97				
A-C	1174	294			1174				
D-A	0	0	444	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	136	0.000	0	0.0	0.0	0.000	A
C-ABD	26	6	378	0.068	26	0.1	0.1	10.207	B
C-D	4	1			4				
C-A	1020	255			1020				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	441	0.021	10	0.0	0.0	8.339	A
B-AD	33	8	221	0.149	34	0.4	0.2	19.259	C
A-BCD	6	2	490	0.013	6	0.0	0.0	7.444	A
A-B	79	20			79				
A-C	959	240			959				
D-A	0	0	490	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	214	0.000	0	0.0	0.0	0.000	A
C-ABD	21	5	430	0.049	21	0.1	0.1	8.801	A
C-D	4	0.90			4				
C-A	833	208			833				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	485	0.016	8	0.0	0.0	7.541	A
B-AD	28	7	279	0.099	28	0.2	0.1	14.326	B
A-BCD	5	1	524	0.010	5	0.0	0.0	6.948	A
A-B	66	17			66				
A-C	803	201			803				
D-A	0	0	523	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	270	0.000	0	0.0	0.0	0.000	A
C-ABD	18	4	468	0.038	18	0.1	0.0	8.000	A
C-D	3	0.75			3				
C-A	697	174			697				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.38	0.03	0.27	0.48	1.15			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.39	0.03	0.33	1.13	1.13			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.18	0.00	0.00	0.18	0.18			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.11	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	662	100.000
B - Woodbridge Road West		ONE HOUR	✓	23	100.000
C - A12 North		ONE HOUR	✓	542	100.000
D - New Road East		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	28	634	0
	B - Woodbridge Road West	14	0	5	4
	C - A12 North	533	8	0	1
	D - New Road East	2	4	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.04	0.96	0.00
	B - Woodbridge Road West	0.62	0.00	0.21	0.18
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.40	0.60	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	9	0
	B - Woodbridge Road West	0	0	25	29
	C - A12 North	8	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.089	1.000
	B - Woodbridge Road West	1.000	1.000	1.250	1.292
	C - A12 North	1.076	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - A12 South	499	543
	B - Woodbridge Road West	17	19
	C - A12 North	408	438
	D - New Road East	4	4
06:00-06:15	A - A12 South	595	648
	B - Woodbridge Road West	20	22
	C - A12 North	487	523
	D - New Road East	5	5
06:15-06:30	A - A12 South	729	794
	B - Woodbridge Road West	25	28
	C - A12 North	597	641
	D - New Road East	6	6
06:30-06:45	A - A12 South	729	794
	B - Woodbridge Road West	25	28
	C - A12 North	597	641
	D - New Road East	6	6
06:45-07:00	A - A12 South	595	648
	B - Woodbridge Road West	20	22
	C - A12 North	487	523
	D - New Road East	5	5
07:00-07:15	A - A12 South	499	543
	B - Woodbridge Road West	17	19
	C - A12 North	408	438
	D - New Road East	4	4

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	8.95	0.0	0.5	A	4	6
B-AD	0.06	12.36	0.1	0.5	B	17	25
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						26	39
A-C						582	873
D-A	0.00	6.84	0.0	0.5	A	2	3
D-BC	0.01	12.69	0.0	0.5	B	3	5
C-ABD	0.02	7.14	0.0	0.5	A	7	11
C-D						0.92	1
C-A						489	733

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	455	0.008	3	0.0	0.0	7.980	A
B-AD	14	3	395	0.034	13	0.0	0.0	9.430	A
A-BCD	0	0	1185	0.000	0	0.0	0.0	0.000	A
A-B	21	5			21				
A-C	478	119			478				
D-A	2	0.44	576	0.003	2	0.0	0.0	6.271	A
D-BC	3	0.66	363	0.007	3	0.0	0.0	10.001	B
C-ABD	6	2	570	0.011	6	0.0	0.0	6.380	A
C-D	0.75	0.19			0.75				
C-A	401	100			401				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	435	0.010	4	0.0	0.0	8.359	A
B-AD	16	4	360	0.045	16	0.0	0.0	10.474	B
A-BCD	0	0	1145	0.000	0	0.0	0.0	0.000	A
A-B	25	6			25				
A-C	570	143			570				
D-A	2	0.52	556	0.004	2	0.0	0.0	6.498	A
D-BC	3	0.79	331	0.010	3	0.0	0.0	10.978	B
C-ABD	7	2	546	0.013	7	0.0	0.0	6.679	A
C-D	0.90	0.22			0.90				
C-A	479	120			479				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	407	0.013	5	0.0	0.0	8.952	A
B-AD	20	5	311	0.064	20	0.0	0.1	12.355	B
A-BCD	0	0	1090	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	698	175			698				
D-A	3	0.64	529	0.005	3	0.0	0.0	6.840	A
D-BC	4	0.96	287	0.013	4	0.0	0.0	12.691	B
C-ABD	9	2	513	0.018	9	0.0	0.0	7.141	A
C-D	1	0.28			1				
C-A	587	147			587				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	407	0.013	5	0.0	0.0	8.953	A
B-AD	20	5	311	0.064	20	0.0	0.1	12.359	B
A-BCD	0	0	1090	0.000	0	0.0	0.0	0.000	A
A-B	31	8			31				
A-C	698	175			698				
D-A	3	0.64	529	0.005	3	0.0	0.0	6.841	A
D-BC	4	0.96	288	0.013	4	0.0	0.0	12.691	B
C-ABD	9	2	513	0.018	9	0.0	0.0	7.141	A
C-D	1	0.28			1				
C-A	587	147			587				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	435	0.010	4	0.0	0.0	8.363	A
B-AD	16	4	360	0.045	16	0.1	0.0	10.481	B
A-BCD	0	0	1145	0.000	0	0.0	0.0	0.000	A
A-B	25	6			25				
A-C	570	143			570				
D-A	2	0.52	556	0.004	2	0.0	0.0	6.501	A
D-BC	3	0.79	331	0.010	3	0.0	0.0	10.980	B
C-ABD	7	2	546	0.013	7	0.0	0.0	6.682	A
C-D	0.90	0.22			0.90				
C-A	479	120			479				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	454	0.008	4	0.0	0.0	7.982	A
B-AD	14	3	395	0.034	14	0.0	0.0	9.438	A
A-BCD	0	0	1185	0.000	0	0.0	0.0	0.000	A
A-B	21	5			21				
A-C	478	119			478				
D-A	2	0.44	575	0.003	2	0.0	0.0	6.277	A
D-BC	3	0.66	363	0.007	3	0.0	0.0	10.003	B
C-ABD	6	2	570	0.011	6	0.0	0.0	6.383	A
C-D	0.75	0.19			0.75				
C-A	401	100			401				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1136	100.000
B - Woodbridge Road West		ONE HOUR	✓	56	100.000
C - A12 North		ONE HOUR	✓	1013	100.000
D - New Road East		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	92	1040	4
	B - Woodbridge Road West	43	0	6	7
	C - A12 North	1002	12	0	0
	D - New Road East	5	4	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.77	0.00	0.10	0.12
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.50	0.37	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	6	13	0
	B - Woodbridge Road West	8	0	0	0
	C - A12 North	6	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.063	1.132	1.000
	B - Woodbridge Road West	1.081	1.000	1.000	1.000
	C - A12 North	1.064	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 South	855	963
	B - Woodbridge Road West	42	45
	C - A12 North	763	811
	D - New Road East	7	7
07:00-07:15	A - A12 South	1022	1150
	B - Woodbridge Road West	50	53
	C - A12 North	911	969
	D - New Road East	8	8
07:15-07:30	A - A12 South	1251	1409
	B - Woodbridge Road West	62	66
	C - A12 North	1116	1186
	D - New Road East	10	10
07:30-07:45	A - A12 South	1251	1409
	B - Woodbridge Road West	62	66
	C - A12 North	1116	1186
	D - New Road East	10	10
07:45-08:00	A - A12 South	1022	1150
	B - Woodbridge Road West	50	53
	C - A12 North	911	969
	D - New Road East	8	8
08:00-08:15	A - A12 South	855	963
	B - Woodbridge Road West	42	45
	C - A12 North	763	811
	D - New Road East	7	7

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	13.32	0.0	0.5	B	5	8
B-AD	0.51	67.95	1.0	4.5	F	46	69
A-BCD	0.01	8.86	0.0	0.5	A	4	6
A-B						85	127
A-C						954	1432
D-A	0.01	9.03	0.0	0.5	A	4	6
D-BC	0.06	41.36	0.1	0.5	E	4	6
C-ABD	0.03	9.96	0.0	0.5	A	11	16
C-D						0	0
C-A						919	1379

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	457	0.010	4	0.0	0.0	7.947	A
B-AD	38	9	257	0.147	37	0.0	0.2	16.327	C
A-BCD	3	0.75	501	0.006	3	0.0	0.0	7.224	A
A-B	69	17			69				
A-C	783	196			783				
D-A	4	0.88	499	0.007	3	0.0	0.0	7.269	A
D-BC	4	0.88	240	0.015	3	0.0	0.0	15.225	C
C-ABD	9	2	476	0.018	9	0.0	0.0	7.711	A
C-D	0	0			0				
C-A	754	189			754				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	406	0.013	5	0.0	0.0	8.988	A
B-AD	45	11	194	0.232	45	0.2	0.3	23.986	C
A-BCD	4	0.90	463	0.008	4	0.0	0.0	7.829	A
A-B	83	21			83				
A-C	935	234			935				
D-A	4	1	460	0.009	4	0.0	0.0	7.899	A
D-BC	4	1	178	0.024	4	0.0	0.0	20.699	C
C-ABD	10	3	433	0.024	10	0.0	0.0	8.518	A
C-D	0	0			0				
C-A	900	225			900				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	285	0.023	6	0.0	0.0	12.904	B
B-AD	55	14	107	0.514	53	0.3	0.9	63.230	F
A-BCD	4	1	411	0.011	4	0.0	0.0	8.850	A
A-B	101	25			101				
A-C	1145	286			1145				
D-A	5	1	405	0.013	5	0.0	0.0	9.005	A
D-BC	5	1	93	0.056	5	0.0	0.1	41.057	E
C-ABD	13	3	374	0.034	13	0.0	0.0	9.954	A
C-D	0	0			0				
C-A	1103	276			1103				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	277	0.023	6	0.0	0.0	13.319	B
B-AD	55	14	107	0.514	55	0.9	1.0	67.945	F
A-BCD	4	1	411	0.011	4	0.0	0.0	8.864	A
A-B	101	25			101				
A-C	1145	286			1145				
D-A	5	1	404	0.013	5	0.0	0.0	9.035	A
D-BC	5	1	92	0.056	5	0.1	0.1	41.365	E
C-ABD	13	3	374	0.034	13	0.0	0.0	9.957	A
C-D	0	0			0				
C-A	1103	276			1103				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	402	0.013	5	0.0	0.0	9.066	A
B-AD	45	11	194	0.232	48	1.0	0.3	24.997	C
A-BCD	4	0.90	463	0.008	4	0.0	0.0	7.843	A
A-B	83	21			83				
A-C	935	234			935				
D-A	4	1	458	0.009	4	0.0	0.0	7.931	A
D-BC	4	1	178	0.024	4	0.1	0.0	20.779	C
C-ABD	10	3	433	0.024	11	0.0	0.0	8.521	A
C-D	0	0			0				
C-A	900	225			900				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	456	0.010	4	0.0	0.0	7.962	A
B-AD	38	9	257	0.147	38	0.3	0.2	16.508	C
A-BCD	3	0.75	501	0.006	3	0.0	0.0	7.231	A
A-B	69	17			69				
A-C	783	196			783				
D-A	4	0.88	498	0.007	4	0.0	0.0	7.285	A
D-BC	4	0.88	240	0.015	4	0.0	0.0	15.238	C
C-ABD	9	2	475	0.018	9	0.0	0.0	7.714	A
C-D	0	0			0				
C-A	754	189			754				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.17	0.00	0.00	0.17	0.17			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.29	0.00	0.00	0.29	0.29			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-BC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.93	0.03	0.29	1.45	4.22			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.06	0.03	0.25	0.46	0.48			N/A	N/A
C-ABD	0.04	0.03	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.99	0.04	0.36	2.44	4.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.31	0.03	0.31	0.99	1.26			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.18	0.03	0.27	0.49	0.93			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	8.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1071	100.000
B - Woodbridge Road West		ONE HOUR	✓	77	100.000
C - A12 North		ONE HOUR	✓	1261	100.000
D - New Road East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	83	985	3
	B - Woodbridge Road West	60	0	11	7
	C - A12 North	1234	23	0	3
	D - New Road East	39	8	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.77	0.00	0.14	0.09
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.80	0.17	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	10	14	0
	B - Woodbridge Road West	4	0	0	0
	C - A12 North	7	0	0	0
	D - New Road East	3	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.099	1.142	1.000
	B - Woodbridge Road West	1.039	1.000	1.000	1.000
	C - A12 North	1.073	1.000	1.000	1.000
	D - New Road East	1.030	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 South	806	918
	B - Woodbridge Road West	58	60
	C - A12 North	949	1017
	D - New Road East	36	37
08:00-08:15	A - A12 South	963	1096
	B - Woodbridge Road West	69	71
	C - A12 North	1133	1215
	D - New Road East	43	44
08:15-08:30	A - A12 South	1179	1342
	B - Woodbridge Road West	85	87
	C - A12 North	1388	1488
	D - New Road East	53	54
08:30-08:45	A - A12 South	1179	1342
	B - Woodbridge Road West	85	87
	C - A12 North	1388	1488
	D - New Road East	53	54
08:45-09:00	A - A12 South	963	1096
	B - Woodbridge Road West	69	71
	C - A12 North	1133	1215
	D - New Road East	43	44
09:00-09:15	A - A12 South	806	918
	B - Woodbridge Road West	58	60
	C - A12 North	949	1017
	D - New Road East	36	37

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.00	390.35	1.4	1.5	F	10	14
B-AD	0.94	236.89	4.7	16.0	F	61	92
A-BCD	0.01	10.76	0.0	0.5	B	3	4
A-B						76	114
A-C						904	1356
D-A	0.16	15.84	0.2	0.5	C	35	53
D-BC	0.34	175.22	0.4	1.6	F	9	13
C-ABD	0.07	9.94	0.1	0.5	A	21	32
C-D						3	4
C-A						1133	1699

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	459	0.017	8	0.0	0.0	7.986	A
B-AD	50	13	242	0.207	49	0.0	0.3	18.522	C
A-BCD	2	0.56	453	0.005	2	0.0	0.0	7.982	A
A-B	62	16			62				
A-C	741	185			741				
D-A	29	7	419	0.069	29	0.0	0.1	9.224	A
D-BC	7	2	185	0.038	7	0.0	0.0	20.166	C
C-ABD	18	4	485	0.036	17	0.0	0.0	7.699	A
C-D	2	0.56			2				
C-A	929	232			929				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	393	0.024	9	0.0	0.0	9.377	A
B-AD	60	15	173	0.345	59	0.3	0.5	31.152	D
A-BCD	3	0.67	406	0.007	3	0.0	0.0	8.926	A
A-B	74	19			74				
A-C	885	221			885				
D-A	35	9	372	0.093	35	0.1	0.1	10.662	B
D-BC	8	2	121	0.069	8	0.0	0.1	31.874	D
C-ABD	21	5	444	0.047	21	0.0	0.0	8.503	A
C-D	3	0.67			3				
C-A	1110	277			1110				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	40	0.287	10	0.0	0.3	116.152	F
B-AD	73	18	78	0.940	62	0.5	3.4	167.113	F
A-BCD	3	0.83	341	0.010	3	0.0	0.0	10.669	B
A-B	91	23			91				
A-C	1084	271			1084				
D-A	42	11	283	0.150	42	0.1	0.2	14.915	B
D-BC	10	3	32	0.318	9	0.1	0.4	149.073	F
C-ABD	26	6	388	0.066	26	0.0	0.1	9.930	A
C-D	3	0.83			3				
C-A	1359	340			1359				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	12	1.000	7	0.3	1.4	390.355	F
B-AD	73	18	78	0.942	68	3.4	4.7	236.891	F
A-BCD	3	0.83	338	0.010	3	0.0	0.0	10.757	B
A-B	91	23			91				
A-C	1084	271			1084				
D-A	42	11	270	0.157	42	0.2	0.2	15.840	C
D-BC	10	3	30	0.341	10	0.4	0.4	175.218	F
C-ABD	26	6	388	0.066	26	0.1	0.1	9.942	A
C-D	3	0.83			3				
C-A	1359	340			1359				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	365	0.026	15	1.4	0.0	10.450	B
B-AD	60	15	173	0.346	76	4.7	0.6	42.852	E
A-BCD	3	0.67	402	0.007	3	0.0	0.0	9.023	A
A-B	74	19			74				
A-C	885	221			885				
D-A	35	9	366	0.095	35	0.2	0.1	10.887	B
D-BC	8	2	118	0.071	10	0.4	0.1	33.554	D
C-ABD	21	5	444	0.047	21	0.1	0.1	8.517	A
C-D	3	0.67			3				
C-A	1110	277			1110				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	457	0.017	8	0.0	0.0	8.023	A
B-AD	50	13	242	0.207	51	0.6	0.3	18.942	C
A-BCD	2	0.56	453	0.005	2	0.0	0.0	7.993	A
A-B	62	16			62				
A-C	741	185			741				
D-A	29	7	418	0.069	29	0.1	0.1	9.265	A
D-BC	7	2	185	0.038	7	0.1	0.0	20.260	C
C-ABD	18	4	485	0.036	18	0.1	0.0	7.708	A
C-D	2	0.56			2				
C-A	929	232			929				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.25	0.00	0.00	0.25	0.25			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.50	0.04	0.41	1.32	1.46			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.34	0.03	0.27	0.49	1.11			N/A	N/A
B-AD	3.40	0.12	1.55	8.00	10.99			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.17	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.38	0.03	0.29	0.95	1.63			N/A	N/A
C-ABD	0.07	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.40	0.55	1.00	1.40	1.45			N/A	N/A
B-AD	4.67	0.13	2.05	11.55	16.05			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.18	0.03	0.25	0.45	0.48			N/A	N/A
D-BC	0.44	0.04	0.37	1.27	1.44			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-AD	0.56	0.03	0.30	1.38	2.64			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-BC	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.27	0.03	0.27	0.48	0.88			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D-BC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	6.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1209	100.000
B - Woodbridge Road West		ONE HOUR	✓	70	100.000
C - A12 North		ONE HOUR	✓	1120	100.000
D - New Road East		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	98	1106	4
	B - Woodbridge Road West	55	0	6	9
	C - A12 North	1104	11	0	5
	D - New Road East	9	0	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.79	0.00	0.08	0.13
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.89	0.00	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	9	0
	B - Woodbridge Road West	6	0	0	13
	C - A12 North	9	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.094	1.000
	B - Woodbridge Road West	1.064	1.000	1.000	1.130
	C - A12 North	1.086	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
14:45-15:00	A - A12 South	910	995
	B - Woodbridge Road West	53	56
	C - A12 North	843	915
	D - New Road East	8	8
15:00-15:15	A - A12 South	1087	1188
	B - Woodbridge Road West	63	67
	C - A12 North	1007	1092
	D - New Road East	9	9
15:15-15:30	A - A12 South	1331	1455
	B - Woodbridge Road West	77	82
	C - A12 North	1233	1338
	D - New Road East	12	12
15:30-15:45	A - A12 South	1331	1455
	B - Woodbridge Road West	77	82
	C - A12 North	1233	1338
	D - New Road East	12	12
15:45-16:00	A - A12 South	1087	1188
	B - Woodbridge Road West	63	67
	C - A12 North	1007	1092
	D - New Road East	9	9
16:00-16:15	A - A12 South	910	995
	B - Woodbridge Road West	53	56
	C - A12 North	843	915
	D - New Road East	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	1.00	445.42	0.9	1.5	F	5	8
B-AD	0.91	222.67	4.2	14.9	F	59	88
A-BCD	0.01	9.86	0.0	0.5	A	4	6
A-B						90	135
A-C						1015	1523
D-A	0.03	10.40	0.0	0.5	B	9	13
D-BC	0.03	85.90	0.0	0.5	F	1	2
C-ABD	0.03	10.19	0.0	0.5	B	10	15
C-D						5	7
C-A						1013	1520

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	441	0.010	4	0.0	0.0	8.238	A
B-AD	48	12	236	0.204	47	0.0	0.3	18.970	C
A-BCD	3	0.75	475	0.006	3	0.0	0.0	7.632	A
A-B	74	19			74				
A-C	833	208			833				
D-A	7	2	460	0.015	7	0.0	0.0	7.949	A
D-BC	0.88	0.22	190	0.005	0.86	0.0	0.0	18.989	C
C-ABD	8	2	469	0.017	8	0.0	0.0	7.807	A
C-D	4	0.94			4				
C-A	831	208			831				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	376	0.014	5	0.0	0.0	9.718	A
B-AD	58	14	169	0.340	57	0.2	0.5	31.653	D
A-BCD	4	0.90	431	0.008	4	0.0	0.0	8.413	A
A-B	88	22			88				
A-C	995	249			995				
D-A	8	2	418	0.020	8	0.0	0.0	8.788	A
D-BC	1	0.26	129	0.008	1	0.0	0.0	28.028	D
C-ABD	9	2	425	0.022	9	0.0	0.0	8.658	A
C-D	4	1			4				
C-A	993	248			993				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	55	0.116	6	0.0	0.1	72.445	F
B-AD	71	18	77	0.913	60	0.5	3.1	160.684	F
A-BCD	4	1	372	0.012	4	0.0	0.0	9.793	A
A-B	108	27			108				
A-C	1218	305			1218				
D-A	10	3	359	0.029	10	0.0	0.0	10.317	B
D-BC	1	0.32	45	0.029	1	0.0	0.0	81.795	F
C-ABD	12	3	365	0.032	12	0.0	0.0	10.190	B
C-D	6	1			6				
C-A	1216	304			1216				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	6	1.000	3	0.1	0.9	445.423	F
B-AD	71	18	77	0.913	66	3.1	4.2	222.670	F
A-BCD	4	1	369	0.012	4	0.0	0.0	9.863	A
A-B	108	27			108				
A-C	1218	305			1218				
D-A	10	3	356	0.029	10	0.0	0.0	10.402	B
D-BC	1	0.32	43	0.030	1	0.0	0.0	85.901	F
C-ABD	12	3	365	0.032	12	0.0	0.0	10.192	B
C-D	6	1			6				
C-A	1216	304			1216				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	352	0.015	9	0.9	0.0	10.613	B
B-AD	58	14	169	0.341	72	4.2	0.5	41.967	E
A-BCD	4	0.90	428	0.008	4	0.0	0.0	8.490	A
A-B	88	22			88				
A-C	995	249			995				
D-A	8	2	414	0.020	8	0.0	0.0	8.873	A
D-BC	1	0.26	127	0.008	1	0.0	0.0	28.690	D
C-ABD	9	2	425	0.022	10	0.0	0.0	8.662	A
C-D	4	1			4				
C-A	993	248			993				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	440	0.010	4	0.0	0.0	8.273	A
B-AD	48	12	236	0.204	49	0.5	0.3	19.394	C
A-BCD	3	0.75	474	0.006	3	0.0	0.0	7.641	A
A-B	74	19			74				
A-C	833	208			833				
D-A	7	2	459	0.015	7	0.0	0.0	7.964	A
D-BC	0.88	0.22	190	0.005	0.90	0.0	0.0	19.022	C
C-ABD	8	2	469	0.017	8	0.0	0.0	7.810	A
C-D	4	0.94			4				
C-A	831	208			831				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.25	0.00	0.00	0.25	0.25			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.49	0.04	0.41	1.29	1.42			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.03	0.27	0.48	0.80			N/A	N/A
B-AD	3.13	0.10	1.25	7.55	10.53			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.91	0.55	1.00	1.40	1.45			N/A	N/A
B-AD	4.18	0.10	1.61	10.57	14.95			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.55	0.03	0.30	1.41	2.55			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.26	0.03	0.27	0.48	1.03			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1183	100.000
B - Woodbridge Road West		ONE HOUR	✓	47	100.000
C - A12 North		ONE HOUR	✓	990	100.000
D - New Road East		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	88	1089	7
	B - Woodbridge Road West	32	0	11	5
	C - A12 North	962	23	0	4
	D - New Road East	4	1	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.07	0.92	0.01
	B - Woodbridge Road West	0.67	0.00	0.22	0.11
	C - A12 North	0.97	0.02	0.00	0.00
	D - New Road East	0.75	0.25	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	3	5	0
	B - Woodbridge Road West	7	0	0	0
	C - A12 North	7	5	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.027	1.048	1.000
	B - Woodbridge Road West	1.074	1.000	1.000	1.000
	C - A12 North	1.072	1.050	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A12 South	891	932
	B - Woodbridge Road West	36	37
	C - A12 North	745	798
	D - New Road East	0	0
17:00-17:15	A - A12 South	1064	1113
	B - Woodbridge Road West	42	45
	C - A12 North	890	953
	D - New Road East	0	0
17:15-17:30	A - A12 South	1303	1363
	B - Woodbridge Road West	52	55
	C - A12 North	1090	1167
	D - New Road East	0	0
17:30-17:45	A - A12 South	1303	1363
	B - Woodbridge Road West	52	55
	C - A12 North	1090	1167
	D - New Road East	0	0
17:45-18:00	A - A12 South	1064	1113
	B - Woodbridge Road West	42	45
	C - A12 North	890	953
	D - New Road East	0	0
18:00-18:15	A - A12 South	891	932
	B - Woodbridge Road West	36	37
	C - A12 North	745	798
	D - New Road East	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	10.73	0.0	0.5	B	10	15
B-AD	0.34	46.37	0.5	1.8	E	34	50
A-BCD	0.02	8.68	0.0	0.5	A	6	10
A-B						81	121
A-C						999	1498
D-A	0.00	0.00	0.0	~1	A	0	0
D-BC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.07	10.51	0.1	0.5	B	21	32
C-D						4	6
C-A						883	1325

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	478	0.017	8	0.0	0.0	7.658	A
B-AD	28	7	263	0.105	27	0.0	0.1	15.212	C
A-BCD	5	1	509	0.010	5	0.0	0.0	7.144	A
A-B	66	17			66				
A-C	820	205			820				
D-A	0	0	509	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	251	0.000	0	0.0	0.0	0.000	A
C-ABD	18	4	461	0.038	17	0.0	0.0	8.116	A
C-D	3	0.75			3				
C-A	725	181			725				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	432	0.022	9	0.0	0.0	8.520	A
B-AD	33	8	202	0.163	33	0.1	0.2	21.191	C
A-BCD	6	2	473	0.013	6	0.0	0.0	7.716	A
A-B	79	20			79				
A-C	979	245			979				
D-A	0	0	473	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	192	0.000	0	0.0	0.0	0.000	A
C-ABD	21	5	422	0.050	21	0.0	0.1	8.975	A
C-D	4	0.90			4				
C-A	865	216			865				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	350	0.033	12	0.0	0.0	10.649	B
B-AD	40	10	118	0.343	39	0.2	0.5	45.177	E
A-BCD	8	2	423	0.018	8	0.0	0.0	8.673	A
A-B	97	24			97				
A-C	1199	300			1199				
D-A	0	0	423	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	110	0.000	0	0.0	0.0	0.000	A
C-ABD	26	6	368	0.070	26	0.1	0.1	10.504	B
C-D	4	1			4				
C-A	1060	265			1060				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	347	0.033	12	0.0	0.0	10.729	B
B-AD	40	10	118	0.343	40	0.5	0.5	46.368	E
A-BCD	8	2	422	0.018	8	0.0	0.0	8.679	A
A-B	97	24			97				
A-C	1199	300			1199				
D-A	0	0	423	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	109	0.000	0	0.0	0.0	0.000	A
C-ABD	26	6	368	0.070	26	0.1	0.1	10.508	B
C-D	4	1			4				
C-A	1060	265			1060				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	430	0.022	10	0.0	0.0	8.552	A
B-AD	33	8	202	0.163	34	0.5	0.2	21.557	C
A-BCD	6	2	472	0.013	6	0.0	0.0	7.722	A
A-B	79	20			79				
A-C	979	245			979				
D-A	0	0	472	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	192	0.000	0	0.0	0.0	0.000	A
C-ABD	21	5	422	0.050	21	0.1	0.1	8.981	A
C-D	4	0.90			4				
C-A	865	216			865				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	477	0.017	8	0.0	0.0	7.668	A
B-AD	28	7	263	0.105	28	0.2	0.1	15.311	C
A-BCD	5	1	509	0.010	5	0.0	0.0	7.147	A
A-B	66	17			66				
A-C	820	205			820				
D-A	0	0	508	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	251	0.000	0	0.0	0.0	0.000	A
C-ABD	18	4	461	0.038	18	0.1	0.0	8.124	A
C-D	3	0.75			3				
C-A	725	181			725				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.19	0.00	0.00	0.19	0.19			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.49	0.03	0.27	0.49	1.25			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.50	0.03	0.34	1.47	1.79			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.20	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.12	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	471	100.000
B - Woodbridge Road West		ONE HOUR	✓	23	100.000
C - A12 North		ONE HOUR	✓	480	100.000
D - New Road East		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	29	442	0
	B - Woodbridge Road West	15	0	5	4
	C - A12 North	471	8	0	1
	D - New Road East	2	4	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.06	0.94	0.00
	B - Woodbridge Road West	0.62	0.00	0.21	0.17
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.40	0.60	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	8	0
	B - Woodbridge Road West	0	0	25	30
	C - A12 North	7	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.078	1.000
	B - Woodbridge Road West	1.000	1.000	1.250	1.303
	C - A12 North	1.073	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - A12 South	355	383
	B - Woodbridge Road West	18	19
	C - A12 North	362	387
	D - New Road East	5	5
06:00-06:15	A - A12 South	424	457
	B - Woodbridge Road West	21	23
	C - A12 North	432	462
	D - New Road East	5	5
06:15-06:30	A - A12 South	519	560
	B - Woodbridge Road West	26	28
	C - A12 North	529	566
	D - New Road East	7	7
06:30-06:45	A - A12 South	519	560
	B - Woodbridge Road West	26	28
	C - A12 North	529	566
	D - New Road East	7	7
06:45-07:00	A - A12 South	424	457
	B - Woodbridge Road West	21	23
	C - A12 North	432	462
	D - New Road East	5	5
07:00-07:15	A - A12 South	355	383
	B - Woodbridge Road West	18	19
	C - A12 North	362	387
	D - New Road East	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	8.09	0.0	0.5	A	4	7
B-AD	0.05	10.18	0.1	0.5	B	17	26
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						27	40
A-C						406	609
D-A	0.00	6.63	0.0	0.5	A	2	3
D-BC	0.01	10.93	0.0	0.5	B	3	5
C-ABD	0.02	6.46	0.0	0.5	A	8	12
C-D						0.92	1
C-A						432	648

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	484	0.008	4	0.0	0.0	7.495	A
B-AD	14	3	438	0.032	14	0.0	0.0	8.486	A
A-BCD	0	0	1209	0.000	0	0.0	0.0	0.000	A
A-B	22	5			22				
A-C	333	83			333				
D-A	2	0.46	587	0.003	2	0.0	0.0	6.150	A
D-BC	3	0.68	394	0.007	3	0.0	0.0	9.203	A
C-ABD	6	2	607	0.011	6	0.0	0.0	5.997	A
C-D	0.75	0.19			0.75				
C-A	354	89			354				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	470	0.009	4	0.0	0.0	7.733	A
B-AD	17	4	411	0.041	17	0.0	0.0	9.127	A
A-BCD	0	0	1173	0.000	0	0.0	0.0	0.000	A
A-B	26	7			26				
A-C	398	99			398				
D-A	2	0.54	570	0.004	2	0.0	0.0	6.343	A
D-BC	3	0.82	368	0.009	3	0.0	0.0	9.857	A
C-ABD	8	2	590	0.013	8	0.0	0.0	6.184	A
C-D	0.90	0.22			0.90				
C-A	423	106			423				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	450	0.012	5	0.0	0.0	8.089	A
B-AD	20	5	374	0.055	20	0.0	0.1	10.181	B
A-BCD	0	0	1124	0.000	0	0.0	0.0	0.000	A
A-B	32	8			32				
A-C	487	122			487				
D-A	3	0.67	546	0.005	3	0.0	0.0	6.629	A
D-BC	4	1.00	333	0.012	4	0.0	0.0	10.931	B
C-ABD	9	2	566	0.016	9	0.0	0.0	6.464	A
C-D	1	0.28			1				
C-A	518	130			518				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	450	0.012	5	0.0	0.0	8.089	A
B-AD	20	5	374	0.055	20	0.1	0.1	10.183	B
A-BCD	0	0	1124	0.000	0	0.0	0.0	0.000	A
A-B	32	8			32				
A-C	487	122			487				
D-A	3	0.67	546	0.005	3	0.0	0.0	6.630	A
D-BC	4	1.00	333	0.012	4	0.0	0.0	10.931	B
C-ABD	9	2	566	0.016	9	0.0	0.0	6.464	A
C-D	1	0.28			1				
C-A	518	130			518				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	470	0.009	4	0.0	0.0	7.734	A
B-AD	17	4	411	0.041	17	0.1	0.0	9.130	A
A-BCD	0	0	1173	0.000	0	0.0	0.0	0.000	A
A-B	26	7			26				
A-C	398	99			398				
D-A	2	0.54	570	0.004	2	0.0	0.0	6.347	A
D-BC	3	0.82	368	0.009	3	0.0	0.0	9.859	A
C-ABD	8	2	590	0.013	8	0.0	0.0	6.185	A
C-D	0.90	0.22			0.90				
C-A	423	106			423				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	484	0.008	4	0.0	0.0	7.500	A
B-AD	14	3	438	0.032	14	0.0	0.0	8.492	A
A-BCD	0	0	1208	0.000	0	0.0	0.0	0.000	A
A-B	22	5			22				
A-C	333	83			333				
D-A	2	0.46	587	0.003	2	0.0	0.0	6.152	A
D-BC	3	0.68	394	0.007	3	0.0	0.0	9.205	A
C-ABD	6	2	607	0.011	6	0.0	0.0	5.997	A
C-D	0.75	0.19			0.75				
C-A	354	89			354				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1034	100.000
B - Woodbridge Road West		ONE HOUR	✓	58	100.000
C - A12 North		ONE HOUR	✓	894	100.000
D - New Road East		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	96	934	4
	B - Woodbridge Road West	45	0	6	7
	C - A12 North	882	12	0	0
	D - New Road East	5	4	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.09	0.90	0.00
	B - Woodbridge Road West	0.77	0.00	0.10	0.12
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.50	0.37	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	6	7	0
	B - Woodbridge Road West	8	0	0	0
	C - A12 North	4	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.063	1.072	1.000
	B - Woodbridge Road West	1.081	1.000	1.000	1.000
	C - A12 North	1.039	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 South	778	833
	B - Woodbridge Road West	44	46
	C - A12 North	673	699
	D - New Road East	7	7
07:00-07:15	A - A12 South	929	995
	B - Woodbridge Road West	52	55
	C - A12 North	803	834
	D - New Road East	9	9
07:15-07:30	A - A12 South	1138	1219
	B - Woodbridge Road West	64	68
	C - A12 North	984	1022
	D - New Road East	11	11
07:30-07:45	A - A12 South	1138	1219
	B - Woodbridge Road West	64	68
	C - A12 North	984	1022
	D - New Road East	11	11
07:45-08:00	A - A12 South	929	995
	B - Woodbridge Road West	52	55
	C - A12 North	803	834
	D - New Road East	9	9
08:00-08:15	A - A12 South	778	833
	B - Woodbridge Road West	44	46
	C - A12 North	673	699
	D - New Road East	7	7

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	9.80	0.0	0.5	A	6	8
B-AD	0.33	30.77	0.5	1.8	D	48	71
A-BCD	0.01	8.10	0.0	0.5	A	4	6
A-B						88	132
A-C						857	1286
D-A	0.01	8.21	0.0	0.5	A	4	7
D-BC	0.03	24.12	0.0	0.5	C	4	7
C-ABD	0.03	8.91	0.0	0.5	A	11	17
C-D						0	0
C-A						809	1213

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	488	0.009	5	0.0	0.0	7.443	A
B-AD	39	10	302	0.129	38	0.0	0.1	13.611	B
A-BCD	3	0.75	527	0.006	3	0.0	0.0	6.869	A
A-B	72	18			72				
A-C	703	176			703				
D-A	4	0.91	524	0.007	4	0.0	0.0	6.911	A
D-BC	4	0.91	282	0.013	4	0.0	0.0	12.916	B
C-ABD	9	2	505	0.018	9	0.0	0.0	7.260	A
C-D	0	0			0				
C-A	664	166			664				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	446	0.012	5	0.0	0.0	8.167	A
B-AD	47	12	248	0.187	46	0.1	0.2	17.779	C
A-BCD	4	0.90	494	0.007	4	0.0	0.0	7.338	A
A-B	86	21			86				
A-C	840	210			840				
D-A	4	1	491	0.009	4	0.0	0.0	7.396	A
D-BC	4	1	229	0.019	4	0.0	0.0	16.040	C
C-ABD	11	3	468	0.023	11	0.0	0.0	7.872	A
C-D	0	0			0				
C-A	793	198			793				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	375	0.018	7	0.0	0.0	9.760	A
B-AD	57	14	174	0.328	56	0.2	0.5	30.312	D
A-BCD	4	1	449	0.010	4	0.0	0.0	8.100	A
A-B	105	26			105				
A-C	1029	257			1029				
D-A	5	1	444	0.012	5	0.0	0.0	8.198	A
D-BC	5	1	155	0.034	5	0.0	0.0	24.082	C
C-ABD	13	3	417	0.032	13	0.0	0.0	8.908	A
C-D	0	0			0				
C-A	971	243			971				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	374	0.018	7	0.0	0.0	9.795	A
B-AD	57	14	174	0.328	57	0.5	0.5	30.766	D
A-BCD	4	1	449	0.010	4	0.0	0.0	8.104	A
A-B	105	26			105				
A-C	1029	257			1029				
D-A	5	1	444	0.012	5	0.0	0.0	8.208	A
D-BC	5	1	155	0.035	5	0.0	0.0	24.120	C
C-ABD	13	3	417	0.032	13	0.0	0.0	8.909	A
C-D	0	0			0				
C-A	971	243			971				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	445	0.012	5	0.0	0.0	8.186	A
B-AD	47	12	248	0.187	48	0.5	0.2	18.001	C
A-BCD	4	0.90	494	0.007	4	0.0	0.0	7.346	A
A-B	86	21			86				
A-C	840	210			840				
D-A	4	1	490	0.009	4	0.0	0.0	7.412	A
D-BC	4	1	229	0.019	4	0.0	0.0	16.058	C
C-ABD	11	3	468	0.023	11	0.0	0.0	7.875	A
C-D	0	0			0				
C-A	793	198			793				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	488	0.009	5	0.0	0.0	7.452	A
B-AD	39	10	302	0.129	39	0.2	0.2	13.706	B
A-BCD	3	0.75	527	0.006	3	0.0	0.0	6.875	A
A-B	72	18			72				
A-C	703	176			703				
D-A	4	0.91	524	0.007	4	0.0	0.0	6.920	A
D-BC	4	0.91	282	0.013	4	0.0	0.0	12.922	B
C-ABD	9	2	505	0.018	9	0.0	0.0	7.261	A
C-D	0	0			0				
C-A	664	166			664				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.23	0.00	0.00	0.23	0.23			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-BC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.47	0.03	0.27	0.48	1.02			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.48	0.03	0.33	1.44	1.82			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.24	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.15	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	920	100.000
B - Woodbridge Road West		ONE HOUR	✓	80	100.000
C - A12 North		ONE HOUR	✓	1158	100.000
D - New Road East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	86	831	3
	B - Woodbridge Road West	62	0	11	7
	C - A12 North	1130	24	0	3
	D - New Road East	40	8	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.09	0.90	0.00
	B - Woodbridge Road West	0.78	0.00	0.14	0.09
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.80	0.17	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	10	7	0
	B - Woodbridge Road West	4	0	0	0
	C - A12 North	5	0	0	0
	D - New Road East	3	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.099	1.072	1.000
	B - Woodbridge Road West	1.039	1.000	1.000	1.000
	C - A12 North	1.046	1.000	1.000	1.000
	D - New Road East	1.030	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 South	692	744
	B - Woodbridge Road West	60	62
	C - A12 North	872	911
	D - New Road East	37	38
08:00-08:15	A - A12 South	827	888
	B - Woodbridge Road West	72	74
	C - A12 North	1041	1088
	D - New Road East	45	46
08:15-08:30	A - A12 South	1013	1088
	B - Woodbridge Road West	88	90
	C - A12 North	1275	1332
	D - New Road East	55	56
08:30-08:45	A - A12 South	1013	1088
	B - Woodbridge Road West	88	90
	C - A12 North	1275	1332
	D - New Road East	55	56
08:45-09:00	A - A12 South	827	888
	B - Woodbridge Road West	72	74
	C - A12 North	1041	1088
	D - New Road East	45	46
09:00-09:15	A - A12 South	692	744
	B - Woodbridge Road West	60	62
	C - A12 North	872	911
	D - New Road East	37	38

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	10.58	0.0	0.5	B	10	15
B-AD	0.47	42.55	0.9	4.1	E	63	95
A-BCD	0.01	9.66	0.0	0.5	A	3	4
A-B						79	118
A-C						762	1144
D-A	0.13	12.15	0.1	0.5	B	37	55
D-BC	0.11	42.34	0.1	0.7	E	9	13
C-ABD	0.06	8.59	0.1	0.5	A	22	33
C-D						3	4
C-A						1037	1556

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	501	0.016	8	0.0	0.0	7.298	A
B-AD	52	13	298	0.173	51	0.0	0.2	14.498	B
A-BCD	2	0.56	477	0.005	2	0.0	0.0	7.574	A
A-B	65	16			65				
A-C	625	156			625				
D-A	30	8	442	0.068	30	0.0	0.1	8.733	A
D-BC	7	2	229	0.032	7	0.0	0.0	16.243	C
C-ABD	18	5	524	0.035	18	0.0	0.0	7.111	A
C-D	2	0.56			2				
C-A	851	213			851				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	456	0.021	10	0.0	0.0	8.065	A
B-AD	62	15	240	0.257	61	0.2	0.3	20.054	C
A-BCD	3	0.67	435	0.006	3	0.0	0.0	8.328	A
A-B	77	19			77				
A-C	747	187			747				
D-A	36	9	401	0.090	36	0.1	0.1	9.867	A
D-BC	9	2	173	0.050	9	0.0	0.1	21.897	C
C-ABD	22	5	491	0.044	22	0.0	0.0	7.668	A
C-D	3	0.67			3				
C-A	1016	254			1016				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	357	0.034	12	0.0	0.0	10.431	B
B-AD	76	19	160	0.474	74	0.3	0.8	40.914	E
A-BCD	3	0.83	376	0.009	3	0.0	0.0	9.651	A
A-B	95	24			95				
A-C	915	229			915				
D-A	44	11	341	0.129	44	0.1	0.1	12.106	B
D-BC	11	3	96	0.111	10	0.1	0.1	41.943	E
C-ABD	27	7	446	0.060	27	0.0	0.1	8.592	A
C-D	3	0.83			3				
C-A	1245	311			1245				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	352	0.034	12	0.0	0.0	10.580	B
B-AD	76	19	160	0.474	76	0.8	0.9	42.553	E
A-BCD	3	0.83	376	0.009	3	0.0	0.0	9.663	A
A-B	95	24			95				
A-C	915	229			915				
D-A	44	11	340	0.129	44	0.1	0.1	12.155	B
D-BC	11	3	96	0.112	11	0.1	0.1	42.337	E
C-ABD	27	7	445	0.060	27	0.1	0.1	8.595	A
C-D	3	0.83			3				
C-A	1245	311			1245				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	454	0.022	10	0.0	0.0	8.116	A
B-AD	62	15	240	0.257	64	0.9	0.4	20.624	C
A-BCD	3	0.67	434	0.006	3	0.0	0.0	8.340	A
A-B	77	19			77				
A-C	747	187			747				
D-A	36	9	400	0.090	36	0.1	0.1	9.909	A
D-BC	9	2	173	0.050	9	0.1	0.1	22.026	C
C-ABD	22	5	491	0.044	22	0.1	0.0	7.672	A
C-D	3	0.67			3				
C-A	1016	254			1016				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	500	0.016	8	0.0	0.0	7.313	A
B-AD	52	13	298	0.173	52	0.4	0.2	14.662	B
A-BCD	2	0.56	477	0.005	2	0.0	0.0	7.583	A
A-B	65	16			65				
A-C	625	156			625				
D-A	30	8	441	0.068	30	0.1	0.1	8.762	A
D-BC	7	2	229	0.032	7	0.1	0.0	16.283	C
C-ABD	18	5	524	0.035	18	0.0	0.0	7.119	A
C-D	2	0.56			2				
C-A	851	213			851				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.21	0.00	0.00	0.21	0.21			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.34	0.00	0.00	0.34	0.34			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.05	0.03	0.25	0.46	0.48			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.83	0.03	0.28	0.83	2.69			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.15	0.03	0.26	0.47	0.49			N/A	N/A
D-BC	0.12	0.03	0.27	0.48	0.74			N/A	N/A
C-ABD	0.06	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.86	0.03	0.33	1.93	4.13			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
D-BC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.36	0.03	0.32	1.04	1.27			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.21	0.03	0.27	0.49	0.92			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	3.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1269	100.000
B - Woodbridge Road West		ONE HOUR	✓	72	100.000
C - A12 North		ONE HOUR	✓	1008	100.000
D - New Road East		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	102	1163	4
	B - Woodbridge Road West	57	0	6	9
	C - A12 North	992	11	0	5
	D - New Road East	10	0	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.79	0.00	0.08	0.12
	C - A12 North	0.98	0.01	0.00	0.00
	D - New Road East	0.89	0.00	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	4	0
	B - Woodbridge Road West	6	0	0	14
	C - A12 North	5	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.044	1.000
	B - Woodbridge Road West	1.064	1.000	1.000	1.135
	C - A12 North	1.052	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
14:45-15:00	A - A12 South	956	1001
	B - Woodbridge Road West	54	58
	C - A12 North	759	798
	D - New Road East	8	8
15:00-15:15	A - A12 South	1141	1195
	B - Woodbridge Road West	65	69
	C - A12 North	906	952
	D - New Road East	10	10
15:15-15:30	A - A12 South	1398	1464
	B - Woodbridge Road West	80	85
	C - A12 North	1110	1167
	D - New Road East	12	12
15:30-15:45	A - A12 South	1398	1464
	B - Woodbridge Road West	80	85
	C - A12 North	1110	1167
	D - New Road East	12	12
15:45-16:00	A - A12 South	1141	1195
	B - Woodbridge Road West	65	69
	C - A12 North	906	952
	D - New Road East	10	10
16:00-16:15	A - A12 South	956	1001
	B - Woodbridge Road West	54	58
	C - A12 North	759	798
	D - New Road East	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	25.84	0.0	0.5	D	6	8
B-AD	0.73	118.84	2.2	10.0	F	61	91
A-BCD	0.01	8.88	0.0	0.5	A	4	6
A-B						94	141
A-C						1067	1601
D-A	0.03	9.33	0.0	0.5	A	9	13
D-BC	0.02	47.85	0.0	0.5	E	1	2
C-ABD	0.03	10.26	0.0	0.5	B	10	15
C-D						5	7
C-A						911	1366

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	442	0.010	5	0.0	0.0	8.237	A
B-AD	50	12	251	0.198	49	0.0	0.2	17.686	C
A-BCD	3	0.75	501	0.006	3	0.0	0.0	7.224	A
A-B	77	19			77				
A-C	876	219			876				
D-A	7	2	486	0.015	7	0.0	0.0	7.526	A
D-BC	0.92	0.23	213	0.004	0.90	0.0	0.0	17.001	C
C-ABD	8	2	468	0.018	8	0.0	0.0	7.836	A
C-D	4	0.94			4				
C-A	747	187			747				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	380	0.014	5	0.0	0.0	9.604	A
B-AD	59	15	188	0.317	59	0.2	0.4	27.683	D
A-BCD	4	0.90	463	0.008	4	0.0	0.0	7.830	A
A-B	92	23			92				
A-C	1046	261			1046				
D-A	9	2	449	0.019	9	0.0	0.0	8.178	A
D-BC	1	0.27	156	0.007	1	0.0	0.0	23.242	C
C-ABD	10	2	424	0.023	10	0.0	0.0	8.701	A
C-D	4	1			4				
C-A	892	223			892				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	180	0.037	7	0.0	0.0	20.787	C
B-AD	73	18	100	0.729	67	0.4	1.9	97.003	F
A-BCD	4	1	411	0.011	4	0.0	0.0	8.853	A
A-B	112	28			112				
A-C	1281	320			1281				
D-A	11	3	398	0.027	11	0.0	0.0	9.300	A
D-BC	1	0.33	78	0.017	1	0.0	0.0	47.126	E
C-ABD	12	3	363	0.033	12	0.0	0.0	10.262	B
C-D	6	1			6				
C-A	1093	273			1093				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	146	0.046	7	0.0	0.0	25.844	D
B-AD	73	18	100	0.729	72	1.9	2.2	118.844	F
A-BCD	4	1	410	0.011	4	0.0	0.0	8.885	A
A-B	112	28			112				
A-C	1281	320			1281				
D-A	11	3	396	0.027	11	0.0	0.0	9.335	A
D-BC	1	0.33	77	0.017	1	0.0	0.0	47.847	E
C-ABD	12	3	363	0.033	12	0.0	0.0	10.264	B
C-D	6	1			6				
C-A	1093	273			1093				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	370	0.015	6	0.0	0.0	9.879	A
B-AD	59	15	188	0.316	66	2.2	0.5	31.041	D
A-BCD	4	0.90	461	0.008	4	0.0	0.0	7.863	A
A-B	92	23			92				
A-C	1046	261			1046				
D-A	9	2	447	0.020	9	0.0	0.0	8.217	A
D-BC	1	0.27	155	0.007	1	0.0	0.0	23.462	C
C-ABD	10	2	424	0.023	10	0.0	0.0	8.705	A
C-D	4	1			4				
C-A	892	223			892				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	440	0.010	5	0.0	0.0	8.267	A
B-AD	50	12	251	0.198	51	0.5	0.3	18.013	C
A-BCD	3	0.75	501	0.006	3	0.0	0.0	7.234	A
A-B	77	19			77				
A-C	876	219			876				
D-A	7	2	485	0.015	7	0.0	0.0	7.535	A
D-BC	0.92	0.23	212	0.004	0.93	0.0	0.0	17.026	C
C-ABD	8	2	468	0.018	8	0.0	0.0	7.840	A
C-D	4	0.94			4				
C-A	747	187			747				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.24	0.00	0.00	0.24	0.24			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.44	0.04	0.37	1.19	1.34			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-AD	1.90	0.04	0.44	5.14	8.71			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.03	0.03	0.25	0.45	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-AD	2.18	0.05	0.46	5.95	9.95			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.48	0.03	0.33	1.45	1.82			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.25	0.03	0.28	0.68	1.44			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1214	100.000
B - Woodbridge Road West		ONE HOUR	✓	49	100.000
C - A12 North		ONE HOUR	✓	946	100.000
D - New Road East		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	91	1116	7
	B - Woodbridge Road West	33	0	11	5
	C - A12 North	917	24	0	4
	D - New Road East	4	1	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.01
	B - Woodbridge Road West	0.67	0.00	0.22	0.10
	C - A12 North	0.97	0.03	0.00	0.00
	D - New Road East	0.75	0.25	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	3	2	0
	B - Woodbridge Road West	7	0	0	0
	C - A12 North	1	5	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.027	1.019	1.000
	B - Woodbridge Road West	1.074	1.000	1.000	1.000
	C - A12 North	1.014	1.050	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A12 South	914	932
	B - Woodbridge Road West	37	39
	C - A12 North	712	722
	D - New Road East	0	0
17:00-17:15	A - A12 South	1091	1113
	B - Woodbridge Road West	44	46
	C - A12 North	850	862
	D - New Road East	0	0
17:15-17:30	A - A12 South	1336	1363
	B - Woodbridge Road West	54	56
	C - A12 North	1041	1056
	D - New Road East	0	0
17:30-17:45	A - A12 South	1336	1363
	B - Woodbridge Road West	54	56
	C - A12 North	1041	1056
	D - New Road East	0	0
17:45-18:00	A - A12 South	1091	1113
	B - Woodbridge Road West	44	46
	C - A12 North	850	862
	D - New Road East	0	0
18:00-18:15	A - A12 South	914	932
	B - Woodbridge Road West	37	39
	C - A12 North	712	722
	D - New Road East	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	10.49	0.0	0.5	B	10	15
B-AD	0.31	39.08	0.4	1.5	E	35	52
A-BCD	0.02	8.18	0.0	0.5	A	6	10
A-B						84	126
A-C						1024	1535
D-A	0.00	0.00	0.0	~1	A	0	0
D-BC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.07	10.54	0.1	0.5	B	22	33
C-D						4	6
C-A						842	1263

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	478	0.017	8	0.0	0.0	7.655	A
B-AD	28	7	274	0.104	28	0.0	0.1	14.603	B
A-BCD	5	1	527	0.010	5	0.0	0.0	6.905	A
A-B	69	17			69				
A-C	840	210			840				
D-A	0	0	526	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	268	0.000	0	0.0	0.0	0.000	A
C-ABD	18	5	461	0.040	18	0.0	0.0	8.129	A
C-D	3	0.75			3				
C-A	691	173			691				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	433	0.023	10	0.0	0.0	8.504	A
B-AD	34	9	215	0.158	34	0.1	0.2	19.816	C
A-BCD	6	2	494	0.013	6	0.0	0.0	7.386	A
A-B	82	21			82				
A-C	1003	251			1003				
D-A	0	0	493	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	212	0.000	0	0.0	0.0	0.000	A
C-ABD	22	5	422	0.052	22	0.0	0.1	8.994	A
C-D	4	0.90			4				
C-A	825	206			825				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	357	0.034	12	0.0	0.0	10.441	B
B-AD	42	10	134	0.312	41	0.2	0.4	38.356	E
A-BCD	8	2	448	0.017	8	0.0	0.0	8.172	A
A-B	100	25			100				
A-C	1228	307			1228				
D-A	0	0	448	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	134	0.000	0	0.0	0.0	0.000	A
C-ABD	27	7	368	0.073	27	0.1	0.1	10.535	B
C-D	4	1			4				
C-A	1010	253			1010				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	355	0.034	12	0.0	0.0	10.493	B
B-AD	42	10	134	0.312	42	0.4	0.4	39.081	E
A-BCD	8	2	448	0.017	8	0.0	0.0	8.177	A
A-B	100	25			100				
A-C	1228	307			1228				
D-A	0	0	448	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	134	0.000	0	0.0	0.0	0.000	A
C-ABD	27	7	368	0.073	27	0.1	0.1	10.539	B
C-D	4	1			4				
C-A	1010	253			1010				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	432	0.023	10	0.0	0.0	8.530	A
B-AD	34	9	215	0.158	35	0.4	0.2	20.086	C
A-BCD	6	2	493	0.013	6	0.0	0.0	7.394	A
A-B	82	21			82				
A-C	1003	251			1003				
D-A	0	0	493	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	211	0.000	0	0.0	0.0	0.000	A
C-ABD	22	5	422	0.052	22	0.1	0.1	9.001	A
C-D	4	0.90			4				
C-A	825	206			825				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	478	0.017	8	0.0	0.0	7.668	A
B-AD	28	7	274	0.104	29	0.2	0.1	14.691	B
A-BCD	5	1	526	0.010	5	0.0	0.0	6.908	A
A-B	69	17			69				
A-C	840	210			840				
D-A	0	0	526	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	268	0.000	0	0.0	0.0	0.000	A
C-ABD	18	5	461	0.040	18	0.1	0.0	8.136	A
C-D	3	0.75			3				
C-A	691	173			691				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.18	0.00	0.00	0.18	0.18			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-AD	0.43	0.03	0.27	0.48	1.34			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-AD	0.44	0.03	0.34	1.36	1.51			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.19	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.12	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	471	100.000
B - Woodbridge Road West		ONE HOUR	✓	23	100.000
C - A12 North		ONE HOUR	✓	481	100.000
D - New Road East		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	29	442	0
	B - Woodbridge Road West	15	0	5	4
	C - A12 North	472	8	0	1
	D - New Road East	2	4	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.06	0.94	0.00
	B - Woodbridge Road West	0.62	0.00	0.21	0.17
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.40	0.60	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	8	0
	B - Woodbridge Road West	0	0	25	30
	C - A12 North	7	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.076	1.000
	B - Woodbridge Road West	1.000	1.000	1.250	1.303
	C - A12 North	1.073	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - A12 South	355	382
	B - Woodbridge Road West	18	19
	C - A12 North	362	388
	D - New Road East	5	5
06:00-06:15	A - A12 South	424	456
	B - Woodbridge Road West	21	23
	C - A12 North	433	463
	D - New Road East	5	5
06:15-06:30	A - A12 South	519	559
	B - Woodbridge Road West	26	28
	C - A12 North	530	568
	D - New Road East	7	7
06:30-06:45	A - A12 South	519	559
	B - Woodbridge Road West	26	28
	C - A12 North	530	568
	D - New Road East	7	7
06:45-07:00	A - A12 South	424	456
	B - Woodbridge Road West	21	23
	C - A12 North	433	463
	D - New Road East	5	5
07:00-07:15	A - A12 South	355	382
	B - Woodbridge Road West	18	19
	C - A12 North	362	388
	D - New Road East	5	5

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	8.09	0.0	0.5	A	4	7
B-AD	0.05	10.18	0.1	0.5	B	17	26
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						27	40
A-C						406	609
D-A	0.00	6.63	0.0	0.5	A	2	3
D-BC	0.01	10.93	0.0	0.5	B	3	5
C-ABD	0.02	6.46	0.0	0.5	A	8	12
C-D						0.92	1
C-A						433	649

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	484	0.008	4	0.0	0.0	7.493	A
B-AD	14	3	438	0.032	14	0.0	0.0	8.485	A
A-BCD	0	0	1208	0.000	0	0.0	0.0	0.000	A
A-B	22	5			22				
A-C	333	83			333				
D-A	2	0.46	587	0.003	2	0.0	0.0	6.152	A
D-BC	3	0.68	394	0.007	3	0.0	0.0	9.204	A
C-ABD	6	2	607	0.011	6	0.0	0.0	5.995	A
C-D	0.75	0.19			0.75				
C-A	355	89			355				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	470	0.009	4	0.0	0.0	7.730	A
B-AD	17	4	411	0.041	17	0.0	0.0	9.126	A
A-BCD	0	0	1173	0.000	0	0.0	0.0	0.000	A
A-B	26	7			26				
A-C	398	99			398				
D-A	2	0.54	569	0.004	2	0.0	0.0	6.345	A
D-BC	3	0.82	368	0.009	3	0.0	0.0	9.859	A
C-ABD	8	2	590	0.013	8	0.0	0.0	6.182	A
C-D	0.90	0.22			0.90				
C-A	424	106			424				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	451	0.012	5	0.0	0.0	8.085	A
B-AD	20	5	374	0.055	20	0.0	0.1	10.178	B
A-BCD	0	0	1124	0.000	0	0.0	0.0	0.000	A
A-B	32	8			32				
A-C	487	122			487				
D-A	3	0.67	545	0.005	3	0.0	0.0	6.632	A
D-BC	4	1.00	333	0.012	4	0.0	0.0	10.934	B
C-ABD	9	2	566	0.016	9	0.0	0.0	6.461	A
C-D	1	0.28			1				
C-A	519	130			519				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	451	0.012	5	0.0	0.0	8.086	A
B-AD	20	5	374	0.055	20	0.1	0.1	10.180	B
A-BCD	0	0	1124	0.000	0	0.0	0.0	0.000	A
A-B	32	8			32				
A-C	487	122			487				
D-A	3	0.67	545	0.005	3	0.0	0.0	6.633	A
D-BC	4	1.00	333	0.012	4	0.0	0.0	10.934	B
C-ABD	9	2	566	0.016	9	0.0	0.0	6.461	A
C-D	1	0.28			1				
C-A	519	130			519				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	470	0.009	4	0.0	0.0	7.733	A
B-AD	17	4	411	0.041	17	0.1	0.0	9.130	A
A-BCD	0	0	1173	0.000	0	0.0	0.0	0.000	A
A-B	26	7			26				
A-C	398	99			398				
D-A	2	0.54	569	0.004	2	0.0	0.0	6.347	A
D-BC	3	0.82	368	0.009	3	0.0	0.0	9.861	A
C-ABD	8	2	590	0.013	8	0.0	0.0	6.185	A
C-D	0.90	0.22			0.90				
C-A	424	106			424				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	484	0.008	4	0.0	0.0	7.495	A
B-AD	14	3	438	0.032	14	0.0	0.0	8.491	A
A-BCD	0	0	1208	0.000	0	0.0	0.0	0.000	A
A-B	22	5			22				
A-C	333	83			333				
D-A	2	0.46	587	0.003	2	0.0	0.0	6.156	A
D-BC	3	0.68	394	0.007	3	0.0	0.0	9.204	A
C-ABD	6	2	607	0.011	6	0.0	0.0	5.995	A
C-D	0.75	0.19			0.75				
C-A	355	89			355				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.04	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.03	0.26	0.46	0.49			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1059	100.000
B - Woodbridge Road West		ONE HOUR	✓	58	100.000
C - A12 North		ONE HOUR	✓	894	100.000
D - New Road East		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	96	959	4
	B - Woodbridge Road West	45	0	6	7
	C - A12 North	882	12	0	0
	D - New Road East	5	4	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.09	0.91	0.00
	B - Woodbridge Road West	0.77	0.00	0.10	0.12
	C - A12 North	0.99	0.01	0.00	0.00
	D - New Road East	0.50	0.37	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	6	7	0
	B - Woodbridge Road West	8	0	0	0
	C - A12 North	4	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.063	1.072	1.000
	B - Woodbridge Road West	1.081	1.000	1.000	1.000
	C - A12 North	1.039	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 South	797	854
	B - Woodbridge Road West	44	46
	C - A12 North	673	699
	D - New Road East	7	7
07:00-07:15	A - A12 South	952	1019
	B - Woodbridge Road West	52	55
	C - A12 North	803	834
	D - New Road East	9	9
07:15-07:30	A - A12 South	1166	1249
	B - Woodbridge Road West	64	68
	C - A12 North	984	1022
	D - New Road East	11	11
07:30-07:45	A - A12 South	1166	1249
	B - Woodbridge Road West	64	68
	C - A12 North	984	1022
	D - New Road East	11	11
07:45-08:00	A - A12 South	952	1019
	B - Woodbridge Road West	52	55
	C - A12 North	803	834
	D - New Road East	9	9
08:00-08:15	A - A12 South	797	854
	B - Woodbridge Road West	44	46
	C - A12 North	673	699
	D - New Road East	7	7

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	10.04	0.0	0.5	B	6	8
B-AD	0.34	32.63	0.5	1.9	D	48	71
A-BCD	0.01	8.10	0.0	0.5	A	4	6
A-B						88	132
A-C						880	1320
D-A	0.01	8.21	0.0	0.5	A	4	7
D-BC	0.04	24.81	0.0	0.5	C	4	7
C-ABD	0.03	9.06	0.0	0.5	A	11	17
C-D						0	0
C-A						809	1213

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	484	0.009	5	0.0	0.0	7.515	A
B-AD	39	10	298	0.131	38	0.0	0.1	13.852	B
A-BCD	3	0.75	527	0.006	3	0.0	0.0	6.869	A
A-B	72	18			72				
A-C	722	181			722				
D-A	4	0.91	524	0.007	4	0.0	0.0	6.911	A
D-BC	4	0.91	279	0.013	4	0.0	0.0	13.049	B
C-ABD	9	2	500	0.018	9	0.0	0.0	7.328	A
C-D	0	0			0				
C-A	664	166			664				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	440	0.012	5	0.0	0.0	8.276	A
B-AD	47	12	243	0.192	46	0.1	0.2	18.268	C
A-BCD	4	0.90	494	0.007	4	0.0	0.0	7.338	A
A-B	86	21			86				
A-C	862	216			862				
D-A	4	1	491	0.009	4	0.0	0.0	7.397	A
D-BC	4	1	225	0.019	4	0.0	0.0	16.284	C
C-ABD	11	3	463	0.024	11	0.0	0.0	7.968	A
C-D	0	0			0				
C-A	793	198			793				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	367	0.018	7	0.0	0.0	10.002	B
B-AD	57	14	167	0.341	56	0.2	0.5	32.078	D
A-BCD	4	1	449	0.010	4	0.0	0.0	8.100	A
A-B	105	26			105				
A-C	1056	264			1056				
D-A	5	1	444	0.012	5	0.0	0.0	8.200	A
D-BC	5	1	151	0.035	5	0.0	0.0	24.761	C
C-ABD	13	3	411	0.032	13	0.0	0.0	9.060	A
C-D	0	0			0				
C-A	971	243			971				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	365	0.018	7	0.0	0.0	10.045	B
B-AD	57	14	167	0.341	57	0.5	0.5	32.626	D
A-BCD	4	1	449	0.010	4	0.0	0.0	8.105	A
A-B	105	26			105				
A-C	1056	264			1056				
D-A	5	1	444	0.012	5	0.0	0.0	8.211	A
D-BC	5	1	150	0.035	5	0.0	0.0	24.807	C
C-ABD	13	3	411	0.032	13	0.0	0.0	9.060	A
C-D	0	0			0				
C-A	971	243			971				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	439	0.012	5	0.0	0.0	8.299	A
B-AD	47	12	243	0.192	48	0.5	0.2	18.524	C
A-BCD	4	0.90	494	0.007	4	0.0	0.0	7.346	A
A-B	86	21			86				
A-C	862	216			862				
D-A	4	1	490	0.009	4	0.0	0.0	7.413	A
D-BC	4	1	225	0.019	4	0.0	0.0	16.303	C
C-ABD	11	3	463	0.024	11	0.0	0.0	7.971	A
C-D	0	0			0				
C-A	793	198			793				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	483	0.009	5	0.0	0.0	7.525	A
B-AD	39	10	298	0.131	39	0.2	0.2	13.954	B
A-BCD	3	0.75	527	0.006	3	0.0	0.0	6.873	A
A-B	72	18			72				
A-C	722	181			722				
D-A	4	0.91	524	0.007	4	0.0	0.0	6.920	A
D-BC	4	0.91	279	0.013	4	0.0	0.0	13.054	B
C-ABD	9	2	500	0.018	9	0.0	0.0	7.332	A
C-D	0	0			0				
C-A	664	166			664				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.15	0.00	0.00	0.15	0.15			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.23	0.00	0.00	0.23	0.23			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-BC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.49	0.03	0.27	0.49	1.17			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.03	0.03	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.50	0.03	0.33	1.49	1.94			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.24	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.15	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	1.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	925	100.000
B - Woodbridge Road West		ONE HOUR	✓	80	100.000
C - A12 North		ONE HOUR	✓	1163	100.000
D - New Road East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	86	836	3
	B - Woodbridge Road West	62	0	11	7
	C - A12 North	1135	24	0	3
	D - New Road East	40	8	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.09	0.90	0.00
	B - Woodbridge Road West	0.78	0.00	0.14	0.09
	C - A12 North	0.98	0.02	0.00	0.00
	D - New Road East	0.80	0.17	0.02	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	10	8	0
	B - Woodbridge Road West	4	0	0	0
	C - A12 North	5	0	0	0
	D - New Road East	3	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.099	1.075	1.000
	B - Woodbridge Road West	1.039	1.000	1.000	1.000
	C - A12 North	1.047	1.000	1.000	1.000
	D - New Road East	1.030	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 South	696	750
	B - Woodbridge Road West	60	62
	C - A12 North	875	915
	D - New Road East	37	38
08:00-08:15	A - A12 South	831	896
	B - Woodbridge Road West	72	74
	C - A12 North	1045	1093
	D - New Road East	45	46
08:15-08:30	A - A12 South	1018	1097
	B - Woodbridge Road West	88	90
	C - A12 North	1280	1339
	D - New Road East	55	56
08:30-08:45	A - A12 South	1018	1097
	B - Woodbridge Road West	88	90
	C - A12 North	1280	1339
	D - New Road East	55	56
08:45-09:00	A - A12 South	831	896
	B - Woodbridge Road West	72	74
	C - A12 North	1045	1093
	D - New Road East	45	46
09:00-09:15	A - A12 South	696	750
	B - Woodbridge Road West	60	62
	C - A12 North	875	915
	D - New Road East	37	38

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	10.75	0.0	0.5	B	10	15
B-AD	0.48	43.96	0.9	4.3	E	63	95
A-BCD	0.01	9.70	0.0	0.5	A	3	4
A-B						79	118
A-C						767	1150
D-A	0.13	12.23	0.1	0.5	B	37	55
D-BC	0.11	43.61	0.1	0.8	E	9	13
C-ABD	0.06	8.64	0.1	0.5	A	22	33
C-D						3	4
C-A						1042	1563

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	500	0.016	8	0.0	0.0	7.320	A
B-AD	52	13	296	0.175	51	0.0	0.2	14.620	B
A-BCD	2	0.56	476	0.005	2	0.0	0.0	7.591	A
A-B	65	16			65				
A-C	629	157			629				
D-A	30	8	441	0.068	30	0.0	0.1	8.754	A
D-BC	7	2	227	0.032	7	0.0	0.0	16.370	C
C-ABD	18	5	523	0.035	18	0.0	0.0	7.131	A
C-D	2	0.56			2				
C-A	855	214			855				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	454	0.022	10	0.0	0.0	8.102	A
B-AD	62	15	238	0.260	61	0.2	0.3	20.330	C
A-BCD	3	0.67	434	0.006	3	0.0	0.0	8.352	A
A-B	77	19			77				
A-C	751	188			751				
D-A	36	9	399	0.090	36	0.1	0.1	9.900	A
D-BC	9	2	171	0.051	9	0.0	0.1	22.164	C
C-ABD	22	5	490	0.044	22	0.0	0.0	7.696	A
C-D	3	0.67			3				
C-A	1021	255			1021				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	352	0.034	12	0.0	0.0	10.585	B
B-AD	76	19	157	0.483	74	0.3	0.9	42.280	E
A-BCD	3	0.83	375	0.009	3	0.0	0.0	9.690	A
A-B	95	24			95				
A-C	920	230			920				
D-A	44	11	339	0.130	44	0.1	0.1	12.175	B
D-BC	11	3	94	0.114	10	0.1	0.1	43.172	E
C-ABD	27	7	444	0.060	27	0.0	0.1	8.633	A
C-D	3	0.83			3				
C-A	1250	313			1250				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	347	0.035	12	0.0	0.0	10.751	B
B-AD	76	19	157	0.483	76	0.9	0.9	43.965	E
A-BCD	3	0.83	374	0.009	3	0.0	0.0	9.703	A
A-B	95	24			95				
A-C	920	230			920				
D-A	44	11	338	0.130	44	0.1	0.1	12.226	B
D-BC	11	3	93	0.114	11	0.1	0.1	43.609	E
C-ABD	27	7	443	0.060	27	0.1	0.1	8.636	A
C-D	3	0.83			3				
C-A	1250	313			1250				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	451	0.022	10	0.0	0.0	8.157	A
B-AD	62	15	238	0.260	64	0.9	0.4	20.939	C
A-BCD	3	0.67	433	0.006	3	0.0	0.0	8.367	A
A-B	77	19			77				
A-C	751	188			751				
D-A	36	9	398	0.090	36	0.1	0.1	9.942	A
D-BC	9	2	171	0.051	9	0.1	0.1	22.307	C
C-ABD	22	5	489	0.044	22	0.1	0.0	7.699	A
C-D	3	0.67			3				
C-A	1021	255			1021				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	499	0.016	8	0.0	0.0	7.336	A
B-AD	52	13	296	0.175	52	0.4	0.2	14.790	B
A-BCD	2	0.56	476	0.005	2	0.0	0.0	7.597	A
A-B	65	16			65				
A-C	629	157			629				
D-A	30	8	440	0.068	30	0.1	0.1	8.782	A
D-BC	7	2	227	0.032	7	0.1	0.0	16.408	C
C-ABD	18	5	523	0.035	18	0.0	0.0	7.138	A
C-D	2	0.56			2				
C-A	855	214			855				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.21	0.00	0.00	0.21	0.21			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.34	0.00	0.00	0.34	0.34			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.05	0.03	0.26	0.46	0.48			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-AD	0.86	0.03	0.28	0.86	2.96			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.15	0.03	0.26	0.47	0.49			N/A	N/A
D-BC	0.12	0.03	0.27	0.48	0.77			N/A	N/A
C-ABD	0.06	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-AD	0.89	0.03	0.33	1.99	4.31			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
D-BC	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.36	0.03	0.33	1.07	1.29			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.22	0.03	0.28	0.50	0.98			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-BC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	3.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1270	100.000
B - Woodbridge Road West		ONE HOUR	✓	72	100.000
C - A12 North		ONE HOUR	✓	1010	100.000
D - New Road East		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	102	1164	4
	B - Woodbridge Road West	57	0	6	9
	C - A12 North	994	11	0	5
	D - New Road East	10	0	1	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.08	0.92	0.00
	B - Woodbridge Road West	0.79	0.00	0.08	0.12
	C - A12 North	0.98	0.01	0.00	0.00
	D - New Road East	0.89	0.00	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	8	4	0
	B - Woodbridge Road West	6	0	0	14
	C - A12 North	5	0	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.083	1.043	1.000
	B - Woodbridge Road West	1.064	1.000	1.000	1.135
	C - A12 North	1.053	1.000	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
14:45-15:00	A - A12 South	956	1001
	B - Woodbridge Road West	54	58
	C - A12 North	761	800
	D - New Road East	8	8
15:00-15:15	A - A12 South	1142	1195
	B - Woodbridge Road West	65	69
	C - A12 North	908	955
	D - New Road East	10	10
15:15-15:30	A - A12 South	1399	1464
	B - Woodbridge Road West	80	85
	C - A12 North	1112	1170
	D - New Road East	12	12
15:30-15:45	A - A12 South	1399	1464
	B - Woodbridge Road West	80	85
	C - A12 North	1112	1170
	D - New Road East	12	12
15:45-16:00	A - A12 South	1142	1195
	B - Woodbridge Road West	65	69
	C - A12 North	908	955
	D - New Road East	10	10
16:00-16:15	A - A12 South	956	1001
	B - Woodbridge Road West	54	58
	C - A12 North	761	800
	D - New Road East	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	26.37	0.0	0.5	D	6	8
B-AD	0.73	120.42	2.2	10.0	F	61	91
A-BCD	0.01	8.90	0.0	0.5	A	4	6
A-B						94	141
A-C						1068	1603
D-A	0.03	9.35	0.0	0.5	A	9	13
D-BC	0.02	48.28	0.0	0.5	E	1	2
C-ABD	0.03	10.26	0.0	0.5	B	10	15
C-D						5	7
C-A						912	1369

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	442	0.010	5	0.0	0.0	8.238	A
B-AD	50	12	251	0.198	49	0.0	0.2	17.712	C
A-BCD	3	0.75	501	0.006	3	0.0	0.0	7.231	A
A-B	77	19			77				
A-C	877	219			877				
D-A	7	2	485	0.015	7	0.0	0.0	7.534	A
D-BC	0.92	0.23	212	0.004	0.90	0.0	0.0	17.037	C
C-ABD	8	2	468	0.018	8	0.0	0.0	7.836	A
C-D	4	0.94			4				
C-A	749	187			749				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	380	0.014	5	0.0	0.0	9.608	A
B-AD	59	15	188	0.317	59	0.2	0.4	27.762	D
A-BCD	4	0.90	463	0.008	4	0.0	0.0	7.841	A
A-B	92	23			92				
A-C	1047	262			1047				
D-A	9	2	448	0.020	9	0.0	0.0	8.189	A
D-BC	1	0.27	155	0.007	1	0.0	0.0	23.322	C
C-ABD	10	2	424	0.023	10	0.0	0.0	8.701	A
C-D	4	1			4				
C-A	894	223			894				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	178	0.038	7	0.0	0.0	21.023	C
B-AD	73	18	99	0.732	67	0.4	1.9	97.965	F
A-BCD	4	1	410	0.011	4	0.0	0.0	8.870	A
A-B	112	28			112				
A-C	1282	320			1282				
D-A	11	3	397	0.027	11	0.0	0.0	9.318	A
D-BC	1	0.33	77	0.017	1	0.0	0.0	47.533	E
C-ABD	12	3	363	0.033	12	0.0	0.0	10.262	B
C-D	6	1			6				
C-A	1095	274			1095				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	143	0.047	7	0.0	0.0	26.369	D
B-AD	73	18	100	0.732	72	1.9	2.2	120.425	F
A-BCD	4	1	409	0.011	4	0.0	0.0	8.902	A
A-B	112	28			112				
A-C	1282	320			1282				
D-A	11	3	396	0.027	11	0.0	0.0	9.353	A
D-BC	1	0.33	76	0.018	1	0.0	0.0	48.277	E
C-ABD	12	3	363	0.033	12	0.0	0.0	10.264	B
C-D	6	1			6				
C-A	1095	274			1095				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	370	0.015	6	0.0	0.0	9.886	A
B-AD	59	15	188	0.317	66	2.2	0.5	31.195	D
A-BCD	4	0.90	461	0.008	4	0.0	0.0	7.876	A
A-B	92	23			92				
A-C	1047	262			1047				
D-A	9	2	446	0.020	9	0.0	0.0	8.227	A
D-BC	1	0.27	154	0.007	1	0.0	0.0	23.545	C
C-ABD	10	2	424	0.023	10	0.0	0.0	8.703	A
C-D	4	1			4				
C-A	894	223			894				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	440	0.010	5	0.0	0.0	8.267	A
B-AD	50	12	251	0.198	51	0.5	0.3	18.041	C
A-BCD	3	0.75	500	0.006	3	0.0	0.0	7.239	A
A-B	77	19			77				
A-C	877	219			877				
D-A	7	2	485	0.015	7	0.0	0.0	7.543	A
D-BC	0.92	0.23	212	0.004	0.93	0.0	0.0	17.064	C
C-ABD	8	2	468	0.018	8	0.0	0.0	7.839	A
C-D	4	0.94			4				
C-A	749	187			749				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.24	0.00	0.00	0.24	0.24			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-AD	0.45	0.04	0.37	1.19	1.35			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D-BC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-ABD	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-AD	1.92	0.04	0.44	5.20	8.74			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.03	0.03	0.25	0.45	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-AD	2.21	0.05	0.46	6.03	10.04			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-BC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.49	0.03	0.33	1.46	1.84			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-AD	0.25	0.03	0.28	0.67	1.44			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J29	A12 / New Road / Woodbridge Road	Right-Left Stagger	Two-way	0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	1221	100.000
B - Woodbridge Road West		ONE HOUR	✓	49	100.000
C - A12 North		ONE HOUR	✓	941	100.000
D - New Road East		ONE HOUR	✓	5	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	91	1123	7
	B - Woodbridge Road West	33	0	11	5
	C - A12 North	912	24	0	4
	D - New Road East	4	1	0	0

Proportions

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0.00	0.07	0.92	0.01
	B - Woodbridge Road West	0.67	0.00	0.22	0.10
	C - A12 North	0.97	0.03	0.00	0.00
	D - New Road East	0.75	0.25	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	0	3	2	0
	B - Woodbridge Road West	7	0	0	0
	C - A12 North	1	5	0	0
	D - New Road East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 South	B - Woodbridge Road West	C - A12 North	D - New Road East
From	A - A12 South	1.000	1.027	1.019	1.000
	B - Woodbridge Road West	1.074	1.000	1.000	1.000
	C - A12 North	1.014	1.050	1.000	1.000
	D - New Road East	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - A12 South	919	937
	B - Woodbridge Road West	37	39
	C - A12 North	708	718
	D - New Road East	0	0
17:00-17:15	A - A12 South	1097	1119
	B - Woodbridge Road West	44	46
	C - A12 North	846	858
	D - New Road East	0	0
17:15-17:30	A - A12 South	1344	1370
	B - Woodbridge Road West	54	56
	C - A12 North	1036	1051
	D - New Road East	0	0
17:30-17:45	A - A12 South	1344	1370
	B - Woodbridge Road West	54	56
	C - A12 North	1036	1051
	D - New Road East	0	0
17:45-18:00	A - A12 South	1097	1119
	B - Woodbridge Road West	44	46
	C - A12 North	846	858
	D - New Road East	0	0
18:00-18:15	A - A12 South	919	937
	B - Woodbridge Road West	37	39
	C - A12 North	708	718
	D - New Road East	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	10.56	0.0	0.5	B	10	15
B-AD	0.31	39.49	0.4	1.5	E	35	52
A-BCD	0.02	8.15	0.0	0.5	A	6	10
A-B						84	126
A-C						1030	1545
D-A	0.00	0.00	0.0	~1	A	0	0
D-BC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.07	10.59	0.1	0.5	B	22	33
C-D						4	6
C-A						837	1256

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	477	0.017	8	0.0	0.0	7.674	A
B-AD	28	7	273	0.104	28	0.0	0.1	14.642	B
A-BCD	5	1	527	0.010	5	0.0	0.0	6.894	A
A-B	69	17			69				
A-C	845	211			845				
D-A	0	0	527	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	268	0.000	0	0.0	0.0	0.000	A
C-ABD	18	5	460	0.040	18	0.0	0.0	8.150	A
C-D	3	0.75			3				
C-A	687	172			687				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	432	0.023	10	0.0	0.0	8.533	A
B-AD	34	9	214	0.159	34	0.1	0.2	19.868	C
A-BCD	6	2	495	0.013	6	0.0	0.0	7.370	A
A-B	82	21			82				
A-C	1009	252			1009				
D-A	0	0	494	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	212	0.000	0	0.0	0.0	0.000	A
C-ABD	22	5	421	0.052	22	0.0	0.1	9.024	A
C-D	4	0.90			4				
C-A	820	205			820				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	355	0.034	12	0.0	0.0	10.502	B
B-AD	42	10	133	0.314	41	0.2	0.4	38.735	E
A-BCD	8	2	449	0.017	8	0.0	0.0	8.149	A
A-B	100	25			100				
A-C	1236	309			1236				
D-A	0	0	450	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	134	0.000	0	0.0	0.0	0.000	A
C-ABD	27	7	367	0.073	27	0.1	0.1	10.586	B
C-D	4	1			4				
C-A	1005	251			1005				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	353	0.034	12	0.0	0.0	10.555	B
B-AD	42	10	133	0.314	42	0.4	0.4	39.485	E
A-BCD	8	2	449	0.017	8	0.0	0.0	8.153	A
A-B	100	25			100				
A-C	1236	309			1236				
D-A	0	0	449	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	134	0.000	0	0.0	0.0	0.000	A
C-ABD	27	7	367	0.073	27	0.1	0.1	10.590	B
C-D	4	1			4				
C-A	1005	251			1005				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	430	0.023	10	0.0	0.0	8.561	A
B-AD	34	9	214	0.159	35	0.4	0.2	20.176	C
A-BCD	6	2	494	0.013	6	0.0	0.0	7.376	A
A-B	82	21			82				
A-C	1009	252			1009				
D-A	0	0	494	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	212	0.000	0	0.0	0.0	0.000	A
C-ABD	22	5	421	0.052	22	0.1	0.1	9.032	A
C-D	4	0.90			4				
C-A	820	205			820				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	477	0.017	8	0.0	0.0	7.686	A
B-AD	28	7	273	0.104	29	0.2	0.1	14.730	B
A-BCD	5	1	527	0.010	5	0.0	0.0	6.897	A
A-B	69	17			69				
A-C	845	211			845				
D-A	0	0	527	0.000	0	0.0	0.0	0.000	A
D-BC	0	0	268	0.000	0	0.0	0.0	0.000	A
C-ABD	18	5	460	0.040	18	0.1	0.0	8.158	A
C-D	3	0.75			3				
C-A	687	172			687				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.11	0.00	0.00	0.11	0.11			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-AD	0.18	0.00	0.00	0.18	0.18			N/A	N/A
A-BCD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-AD	0.43	0.03	0.27	0.48	1.36			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-AD	0.44	0.03	0.34	1.37	1.53			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.19	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.06	0.00	0.00	0.06	0.06			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-AD	0.12	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-BC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922_J30_Model.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J30\Model
Report generation date: 18/12/2020 11:05:31

«2023 Early Years , 8-9 AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-ACD	0.0	0.5	6.32	0.02	A	0.1	0.5	9.38	0.05	A	0.1	0.5	12.13	0.08	B	0.0	0.5	11.34	0.04	B	0.1	0.5	10.50	0.08	B
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	4.68	0.01	A	0.3	1.1	4.48	0.13	A	0.5	1.7	4.46	0.16	A	0.2	1.1	4.46	0.09	A	0.2	1.2	5.00	0.10	A
	2023 Reference Case																								
Stream B-ACD	0.0	0.5	6.41	0.02	A	0.1	0.5	9.89	0.06	A	0.1	0.5	13.54	0.10	B	0.1	0.5	12.30	0.05	B	0.1	0.5	11.70	0.10	B
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	4.52	0.02	A	0.4	1.7	4.40	0.16	A	0.7	2.7	4.33	0.21	A	0.2	1.4	4.40	0.11	A	0.3	1.0	5.00	0.12	A
	2023 Early Years																								
Stream B-ACD	0.0	0.5	6.47	0.02	A	0.1	0.5	11.25	0.07	B	0.1	0.5	15.40	0.12	C	0.1	0.5	13.57	0.06	B	0.1	0.5	14.66	0.12	B
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	4.22	0.02	A	1.1	4.6	3.93	0.26	A	1.2	4.7	4.29	0.26	A	0.3	1.0	4.42	0.12	A	0.4	1.7	5.10	0.15	A
	2028 Reference Case																								
Stream B-ACD	0.0	0.5	6.47	0.02	A	0.1	0.5	10.24	0.06	B	0.1	0.5	14.38	0.11	B	0.1	0.5	13.13	0.06	B	0.1	0.5	12.19	0.11	B
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	4.50	0.02	A	0.6	2.1	4.29	0.18	A	1.0	3.8	4.20	0.24	A	0.3	1.0	4.37	0.12	A	0.3	1.3	4.90	0.14	A
	2028 Peak Construction																								
Stream B-ACD	0.0	0.5	6.55	0.03	A	0.1	0.5	10.86	0.07	B	0.1	0.5	16.72	0.13	C	0.1	0.5	16.04	0.07	C	0.1	0.5	13.85	0.12	B
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	4.45	0.02	A	0.8	3.1	4.25	0.22	A	1.5	6.2	4.41	0.31	A	0.4	1.7	4.33	0.15	A	0.5	1.8	4.91	0.16	A
	2034 Reference Case																								
Stream B-ACD	0.0	0.5	6.52	0.03	A	0.1	0.5	10.32	0.07	B	0.1	0.5	14.19	0.12	B	0.1	0.5	14.38	0.07	B	0.1	0.5	12.24	0.11	B
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	4.47	0.02	A	0.6	2.4	4.21	0.19	A	0.8	3.1	4.44	0.22	A	0.4	1.4	4.28	0.14	A	0.4	1.5	4.82	0.14	A
	2034 Operational Led																								
Stream B-ACD	0.0	0.5	6.53	0.03	A	0.1	0.5	10.41	0.07	B	0.1	0.5	14.90	0.12	B	0.1	0.5	14.54	0.07	B	0.1	0.5	12.30	0.11	B
Stream A-BCD	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-ABD	0.0	0.5	4.47	0.02	A	0.7	2.6	4.15	0.20	A	1.0	4.0	4.28	0.25	A	0.4	1.4	4.27	0.14	A	0.4	1.5	4.81	0.15	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

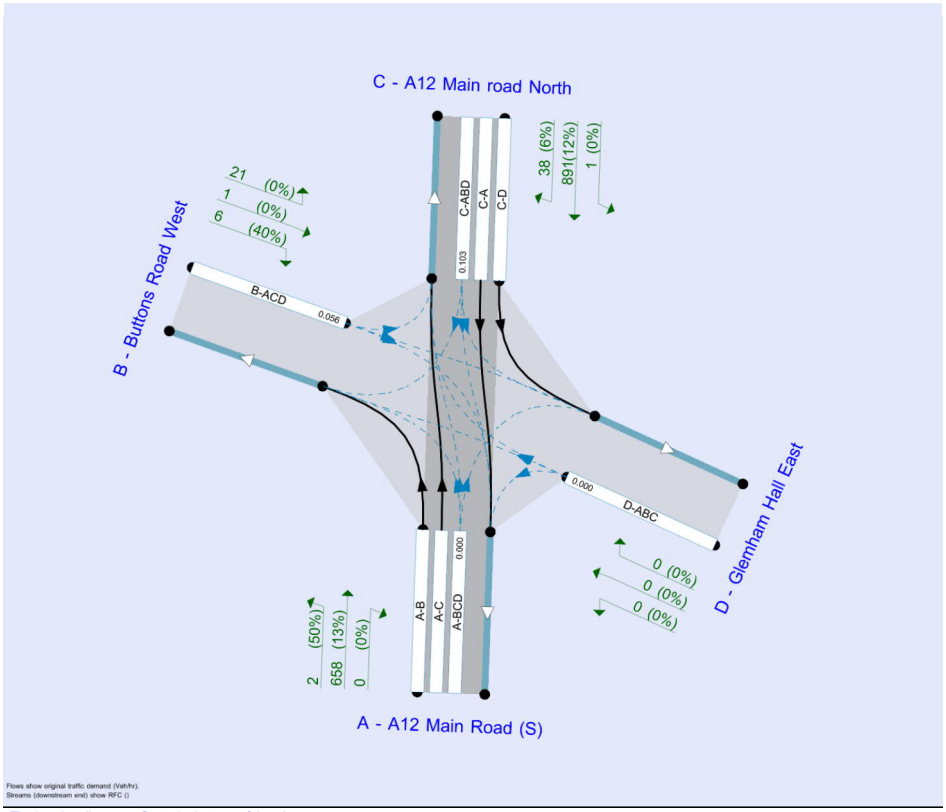
File summary

File Description

Title	A12 / Button's Rd / Glemham Hall
Location	52°10'52.38"N, 1°25'27.33"E
Site number	30
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	NV
Description	The Give way widths on both minor arms has been modelled as 10m as Junctions 9 restricts the give way width to less than 10m.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J30	A12 / Button's Rd / Glemham Hall	Crossroads	Two-way	0.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 Main Road (S)		Major
B	Buttons Road West		Minor
C	A12 Main road North		Major
D	Glemham Hall East		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A12 Main Road (S)	6.85			132.6	✓	0.00
C - A12 Main road North	6.85			110.1	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Buttons Road West	One lane	3.28	17	24
D - Glemham Hall East	One lane	4.70	15	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
J30	A-D	651	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
J30	B-A	509	0.089	0.225	0.225	-	-	-	0.142	0.322	-	0.225	0.225	0.113
J30	B-C	657	0.097	0.245	-	-	-	-	-	-	-	-	-	-
J30	B-D, nearside lane	509	0.089	0.225	0.225	-	-	-	0.142	0.322	0.142	-	-	-
J30	B-D, offside lane	509	0.089	0.225	0.225	-	-	-	0.142	0.322	0.142	-	-	-
J30	C-B	638	0.238	0.238	0.340	-	-	-	-	-	-	-	-	-
J30	D-A	742	-	-	-	-	-	-	0.277	-	0.110	-	-	-
J30	D-B, nearside lane	574	0.160	0.160	0.363	-	-	-	0.254	0.254	0.101	-	-	-
J30	D-B, offside lane	574	0.160	0.160	0.363	-	-	-	0.254	0.254	0.101	-	-	-
J30	D-C	574	-	0.160	0.363	0.127	0.254	0.254	0.254	0.254	0.101	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 Main Road (S)		ONE HOUR	✓	661	100.000
B - Buttons Road West		ONE HOUR	✓	28	100.000
C - A12 Main road North		ONE HOUR	✓	930	100.000
D - Glemham Hall East		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 Main Road (S)	B - Buttons Road West	C - A12 Main road North	D - Glemham Hall East
From	A - A12 Main Road (S)	0	2	658	0
	B - Buttons Road West	6	0	21	1
	C - A12 Main road North	891	38	0	1
	D - Glemham Hall East	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 Main Road (S)	B - Buttons Road West	C - A12 Main road North	D - Glemham Hall East
From	A - A12 Main Road (S)	0	50	13	0
	B - Buttons Road West	40	0	0	0
	C - A12 Main road North	12	6	0	0
	D - Glemham Hall East	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.12	15.40	0.1	0.5	C	25	38
A-BCD	0.00	0.00	0.0	~1	A	0	0
A-B						2	3
A-C						604	906
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.26	4.29	1.2	4.7	A	185	277
C-D						0.83	1
C-A						668	1002

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	21	5	374	0.056	21	0.0	0.1	10.178	B
A-BCD	0	0	394	0.000	0	0.0	0.0	0.000	A
A-B	2	0.42			2				
A-C	496	124			496				
D-ABC	0	0	320	0.000	0	0.0	0.0	0.000	A
C-ABD	98	24	948	0.103	97	0.0	0.2	4.231	A
C-D	0.75	0.19			0.75				
C-A	602	150			602				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	25	6	332	0.075	25	0.1	0.1	11.737	B
A-BCD	0	0	362	0.000	0	0.0	0.0	0.000	A
A-B	2	0.50			2				
A-C	592	148			592				
D-ABC	0	0	261	0.000	0	0.0	0.0	0.000	A
C-ABD	156	39	1028	0.152	155	0.2	0.4	4.123	A
C-D	0.85	0.21			0.85				
C-A	679	170			679				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	31	8	265	0.115	30	0.1	0.1	15.347	C
A-BCD	0	0	317	0.000	0	0.0	0.0	0.000	A
A-B	2	0.61			2				
A-C	725	181			725				
D-ABC	0	0	176	0.000	0	0.0	0.0	0.000	A
C-ABD	298	75	1144	0.260	295	0.4	1.1	4.247	A
C-D	0.90	0.23			0.90				
C-A	725	181			725				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	31	8	264	0.116	31	0.1	0.1	15.404	C
A-BCD	0	0	316	0.000	0	0.0	0.0	0.000	A
A-B	2	0.61			2				
A-C	725	181			725				
D-ABC	0	0	175	0.000	0	0.0	0.0	0.000	A
C-ABD	301	75	1146	0.262	301	1.1	1.2	4.288	A
C-D	0.90	0.23			0.90				
C-A	722	181			722				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	25	6	331	0.075	25	0.1	0.1	11.778	B
A-BCD	0	0	361	0.000	0	0.0	0.0	0.000	A
A-B	2	0.50			2				
A-C	592	148			592				
D-ABC	0	0	260	0.000	0	0.0	0.0	0.000	A
C-ABD	158	39	1030	0.153	161	1.2	0.4	4.182	A
C-D	0.84	0.21			0.84				
C-A	677	169			677				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	21	5	374	0.056	21	0.1	0.1	10.202	B
A-BCD	0	0	394	0.000	0	0.0	0.0	0.000	A
A-B	2	0.42			2				
A-C	496	124			496				
D-ABC	0	0	319	0.000	0	0.0	0.0	0.000	A
C-ABD	99	25	949	0.104	100	0.4	0.2	4.262	A
C-D	0.75	0.19			0.75				
C-A	601	150			601				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.08	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.41	0.00	0.00	0.41	0.41			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.13	0.03	0.26	0.47	0.50			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	1.14	0.03	0.29	1.29	4.72			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.13	0.03	0.25	0.45	0.48			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	1.17	0.55	1.10	1.40	1.70			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.44	0.00	0.00	0.44	0.44			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BCD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.23	0.00	0.00	0.23	0.23			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922_J31_Model_CV_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J31\Model
Report generation date: 18/12/2020 11:07:54

«2023 Early Years , 5-6 PM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-C	0.0	0.5	4.91	0.04	A	0.2	1.1	6.75	0.19	A	0.5	2.5	8.97	0.35	A	0.3	1.3	7.17	0.22	A	0.3	1.3	6.76	0.23	A
Stream B-A	0.1	0.5	7.30	0.10	A	0.5	2.0	10.99	0.32	B	0.5	2.2	11.78	0.33	B	0.2	1.1	10.52	0.19	B	0.2	1.0	8.61	0.18	A
Stream C-AB	0.1	0.5	5.09	0.07	A	0.3	1.3	6.31	0.22	A	0.3	1.3	6.79	0.22	A	0.4	1.5	7.63	0.28	A	0.3	1.4	6.70	0.24	A
	2023 Reference Case																								
Stream B-C	0.0	0.5	5.16	0.04	A	0.2	1.0	6.82	0.19	A	0.5	2.4	8.89	0.34	A	0.2	1.1	7.08	0.20	A	0.2	1.1	6.66	0.19	A
Stream B-A	0.1	0.5	7.23	0.11	A	0.4	1.9	11.03	0.31	B	0.5	2.4	12.14	0.34	B	0.2	1.2	10.83	0.20	B	0.2	0.9	8.89	0.18	A
Stream C-AB	0.1	0.5	5.36	0.06	A	0.2	1.0	6.26	0.19	A	0.2	1.1	6.77	0.20	A	0.4	1.2	7.59	0.27	A	0.3	1.4	6.78	0.24	A
	2023 Early Years																								
Stream B-C	0.0	0.5	5.21	0.04	A	0.2	1.0	7.10	0.19	A	0.5	2.4	8.99	0.34	A	0.2	1.1	7.16	0.20	A	0.2	1.0	6.98	0.19	A
Stream B-A	0.1	0.5	7.60	0.13	A	0.7	3.1	13.75	0.40	B	0.6	2.7	12.75	0.36	B	0.3	1.2	11.26	0.21	B	0.2	1.1	9.64	0.19	A
Stream C-AB	0.1	0.5	5.38	0.06	A	0.2	1.1	6.35	0.19	A	0.2	1.1	6.80	0.20	A	0.4	1.3	7.69	0.27	A	0.3	1.5	7.39	0.25	A
	2028 Reference Case																								
Stream B-C	0.0	0.5	5.16	0.04	A	0.2	1.1	6.96	0.20	A	0.6	2.6	9.25	0.36	A	0.3	1.3	7.40	0.23	A	0.2	1.1	6.69	0.19	A
Stream B-A	0.1	0.5	7.44	0.11	A	0.5	1.9	11.28	0.31	B	0.5	2.5	12.50	0.35	B	0.3	1.3	11.32	0.22	B	0.2	1.0	9.05	0.18	A
Stream C-AB	0.1	0.5	5.33	0.06	A	0.2	1.1	6.41	0.20	A	0.3	1.2	6.90	0.20	A	0.4	1.5	7.79	0.28	A	0.3	1.4	6.84	0.24	A
	2028 Peak Construction																								
Stream B-C	0.0	0.5	5.24	0.04	A	0.3	1.2	7.16	0.20	A	0.6	2.7	9.42	0.37	A	0.3	1.4	7.92	0.24	A	0.2	1.1	6.92	0.20	A
Stream B-A	0.2	0.5	8.12	0.16	A	0.6	2.7	13.03	0.37	B	0.6	2.7	13.34	0.37	B	0.3	1.4	12.65	0.24	B	0.2	1.2	9.71	0.20	A
Stream C-AB	0.1	0.5	5.35	0.06	A	0.3	1.2	6.48	0.20	A	0.3	1.2	6.98	0.21	A	0.4	1.7	8.36	0.29	A	0.3	1.4	7.15	0.25	A
	2034 Reference Case																								
Stream B-C	0.0	0.5	5.20	0.05	A	0.3	1.2	7.15	0.21	A	0.6	2.9	9.87	0.39	A	0.3	1.5	7.77	0.25	A	0.3	1.4	7.04	0.25	A
Stream B-A	0.1	0.5	7.50	0.12	A	0.5	2.0	11.57	0.32	B	0.5	2.3	12.41	0.34	B	0.3	1.4	11.71	0.24	B	0.3	1.2	9.19	0.21	A
Stream C-AB	0.1	0.5	5.33	0.07	A	0.3	1.2	6.57	0.21	A	0.3	1.3	7.13	0.22	A	0.4	1.8	8.17	0.30	A	0.3	1.5	6.79	0.25	A
	2034 Operational Led																								
Stream B-C	0.0	0.5	5.19	0.05	A	0.3	1.2	7.12	0.21	A	0.6	2.9	9.83	0.39	A	0.3	1.5	7.76	0.25	A	0.3	1.4	7.03	0.25	A
Stream B-A	0.1	0.5	7.49	0.11	A	0.4	1.9	11.40	0.31	B	0.5	2.2	12.28	0.33	B	0.3	1.4	11.67	0.23	B	0.3	1.2	9.16	0.20	A
Stream C-AB	0.1	0.5	5.33	0.07	A	0.3	1.2	6.57	0.21	A	0.3	1.3	7.14	0.22	A	0.4	1.8	8.17	0.30	A	0.3	1.5	6.79	0.25	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12/A145
Location	52°19'41.02"N, 1°35'45.38"E
Site number	31
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	NV
Description	The minor arm has been modelled as two lane, by taking average widths of giveway, 5m, 10m, 15m, 20m.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J31	A12 / A145	T-Junction	Two-way	2.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 South		Major
B	A145 West		Minor
C	A12 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 North	10.70	✓	8.00	✓	4.70	179.8	✓	14.40

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - A145 West	Two lanes	4.48	3.32	68	179

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J31	B-A	717	0.088	0.223	0.140	0.318
J31	B-C	845	0.103	0.261	-	-
J31	C-B	863	0.266	0.266	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	666	100.000
B - A145 West		ONE HOUR	✓	189	100.000
C - A12 North		ONE HOUR	✓	444	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - A145 West	C - A12 North
From	A - A12 South	0	151	515
	B - A145 West	81	0	107
	C - A12 North	295	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - A145 West	C - A12 North
From	A - A12 South	0	4	4
	B - A145 West	2	0	1
	C - A12 North	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.19	6.98	0.2	1.0	A	99	148
B-A	0.19	9.64	0.2	1.1	A	75	112
C-AB	0.25	7.39	0.3	1.5	A	137	205
C-A						271	406
A-B						138	207
A-C						473	709

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	700	0.116	80	0.0	0.1	5.809	A
B-A	61	15	540	0.113	61	0.0	0.1	7.502	A
C-AB	112	28	714	0.157	111	0.0	0.2	5.962	A
C-A	222	56			222				
A-B	113	28			113				
A-C	388	97			388				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	97	24	672	0.144	96	0.1	0.2	6.251	A
B-A	73	18	508	0.144	73	0.1	0.2	8.279	A
C-AB	134	33	688	0.194	134	0.2	0.2	6.491	A
C-A	265	66			265				
A-B	135	34			135				
A-C	463	116			463				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	30	634	0.187	118	0.2	0.2	6.974	A
B-A	90	22	463	0.193	89	0.2	0.2	9.622	A
C-AB	164	41	651	0.252	163	0.2	0.3	7.381	A
C-A	325	81			325				
A-B	166	41			166				
A-C	567	142			567				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	30	634	0.187	118	0.2	0.2	6.981	A
B-A	90	22	463	0.193	90	0.2	0.2	9.638	A
C-AB	164	41	651	0.252	164	0.3	0.3	7.385	A
C-A	325	81			325				
A-B	166	41			166				
A-C	567	142			567				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	97	24	672	0.144	97	0.2	0.2	6.260	A
B-A	73	18	508	0.144	73	0.2	0.2	8.297	A
C-AB	134	33	688	0.194	134	0.3	0.2	6.505	A
C-A	265	66			265				
A-B	135	34			135				
A-C	463	116			463				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	699	0.116	81	0.2	0.1	5.825	A
B-A	61	15	540	0.114	61	0.2	0.1	7.530	A
C-AB	112	28	714	0.157	112	0.2	0.2	5.980	A
C-A	222	56			222				
A-B	113	28			113				
A-C	388	97			388				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

B-C	0.23	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.33	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.03	0.28	0.50	0.96			N/A	N/A
B-A	0.24	0.03	0.29	0.70	1.11			N/A	N/A
C-AB	0.33	0.03	0.32	1.16	1.46			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922 J32a_Model_CV_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J32a\Model
Report generation date: 18/12/2020 11:10:53

«2028 Reference Case , 7-8 AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2023 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2023 Early Years																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2028 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2028 Peak Construction																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2034 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2034 Operational Led																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

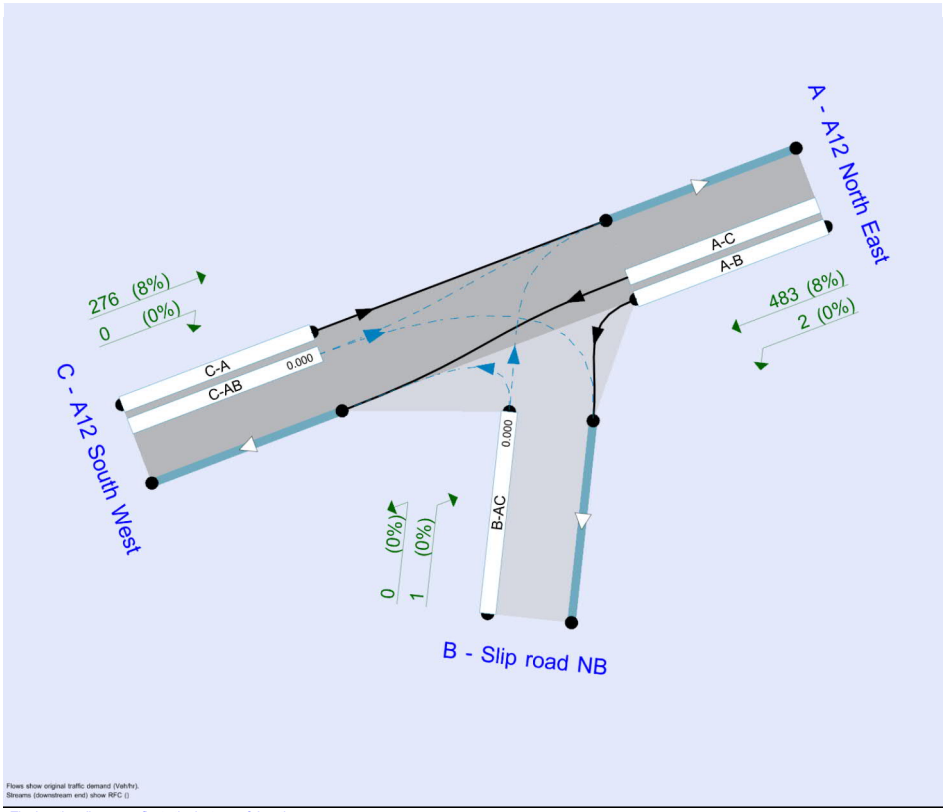
File summary

File Description

Title	A12/A1095 priority junctions
Location	52°19'52.34"N, 1°36'3.95"E
Site number	32a
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
Description	The width of minor arm cannot be higher than 5m as per junctions 9 restriction. Hence, 5m has been used. Right turn visibility of minor arm has been provided, even though right turn movement is restricted in reality.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J32a	A12 / A1095 East	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 North East		Major
B	Slip road NB		Minor
C	A12 South West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 South West	7.20			120.7	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Slip road NB	One lane	5.00	125	110

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J32a	B-A	690	0.119	0.301	0.189	0.430
J32a	B-C	832	0.121	0.306	-	-
J32a	C-B	644	0.236	0.236	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	485	100.000
B - Slip road NB		ONE HOUR	✓	1	100.000
C - A12 South West		ONE HOUR	✓	276	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - Slip road NB	C - A12 South West
From	A - A12 North East	0	2	483
	B - Slip road NB	1	0	0
	C - A12 South West	276	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - Slip road NB	C - A12 South West
From	A - A12 North East	0	0	8
	B - Slip road NB	0	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						253	379
A-B						2	3
A-C						443	665

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	607	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
C-A	207	52			207				
A-B	2	0.38			2				
A-C	363	91			363				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	578	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	511	0.000	0	0.0	0.0	0.000	A
C-A	248	62			248				
A-B	2	0.45			2				
A-C	434	109			434				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	537	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	303	76			303				
A-B	2	0.55			2				
A-C	532	133			532				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	537	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	303	76			303				
A-B	2	0.55			2				
A-C	532	133			532				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	578	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	511	0.000	0	0.0	0.0	0.000	A
C-A	248	62			248				
A-B	2	0.45			2				
A-C	434	109			434				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	607	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
C-A	207	52			207				
A-B	2	0.38			2				
A-C	363	91			363				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922 J32b_Model_CV_Adjusted_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J32b\Model
Report generation date: 18/12/2020 11:12:38

«2028 Reference Case , 5-6 PM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-AC	0.1	0.5	6.99	0.11	A	0.3	1.2	8.27	0.21	A	0.3	1.2	7.45	0.21	A	0.6	2.7	8.59	0.37	A	0.5	2.2	7.79	0.33	A
Stream C-AB	0.0	0.5	6.24	0.05	A	0.3	1.4	8.49	0.24	A	0.9	3.1	11.63	0.48	B	0.6	2.7	8.81	0.37	A	0.3	1.3	6.77	0.22	A
	2023 Reference Case																								
Stream B-AC	0.1	0.5	7.08	0.12	A	0.3	1.2	8.21	0.21	A	0.3	1.3	7.61	0.21	A	0.6	2.7	8.70	0.38	A	0.5	2.2	7.83	0.33	A
Stream C-AB	0.1	0.5	6.43	0.05	A	0.3	1.4	8.48	0.25	A	0.9	3.1	11.94	0.49	B	0.6	2.7	8.90	0.37	A	0.3	1.3	6.82	0.22	A
	2023 Early Years																								
Stream B-AC	0.1	0.5	7.32	0.13	A	0.3	1.5	9.37	0.25	A	0.3	1.3	7.74	0.22	A	0.6	2.7	8.75	0.38	A	0.5	2.3	7.84	0.33	A
Stream C-AB	0.1	0.5	6.64	0.05	A	0.4	1.4	9.59	0.27	A	1.0	3.2	12.28	0.50	B	0.6	2.7	8.96	0.37	A	0.3	1.4	6.97	0.24	A
	2028 Reference Case																								
Stream B-AC	0.1	0.5	7.13	0.12	A	0.3	1.2	8.24	0.21	A	0.3	1.3	7.58	0.21	A	0.6	2.8	9.01	0.39	A	0.5	2.4	8.03	0.34	A
Stream C-AB	0.1	0.5	6.41	0.05	A	0.3	1.1	8.67	0.26	A	1.0	3.2	12.18	0.50	B	0.6	2.8	9.10	0.38	A	0.3	1.3	6.91	0.23	A
	2028 Peak Construction																								
Stream B-AC	0.2	0.5	7.81	0.15	A	0.3	1.4	9.20	0.25	A	0.3	1.3	7.74	0.22	A	0.7	2.8	9.14	0.40	A	0.5	2.4	8.06	0.35	A
Stream C-AB	0.1	0.5	6.97	0.06	A	0.4	1.5	9.52	0.28	A	1.0	3.3	12.59	0.51	B	0.7	2.8	9.36	0.40	A	0.3	1.4	7.01	0.24	A
	2034 Reference Case																								
Stream B-AC	0.1	0.5	7.15	0.12	A	0.3	1.2	8.20	0.21	A	0.3	1.3	7.49	0.22	A	0.7	2.9	9.57	0.42	A	0.6	2.7	8.52	0.37	A
Stream C-AB	0.1	0.5	6.44	0.06	A	0.4	1.4	8.81	0.28	A	1.1	3.2	12.43	0.52	B	0.7	2.8	9.55	0.40	A	0.3	1.4	7.12	0.24	A
	2034 Operational Led																								
Stream B-AC	0.1	0.5	7.15	0.12	A	0.3	1.2	8.21	0.21	A	0.3	1.3	7.49	0.22	A	0.7	2.9	9.56	0.42	A	0.6	2.7	8.52	0.37	A
Stream C-AB	0.1	0.5	6.44	0.06	A	0.4	1.4	8.83	0.28	A	1.1	3.2	12.43	0.52	B	0.7	2.8	9.54	0.40	A	0.3	1.4	7.11	0.24	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

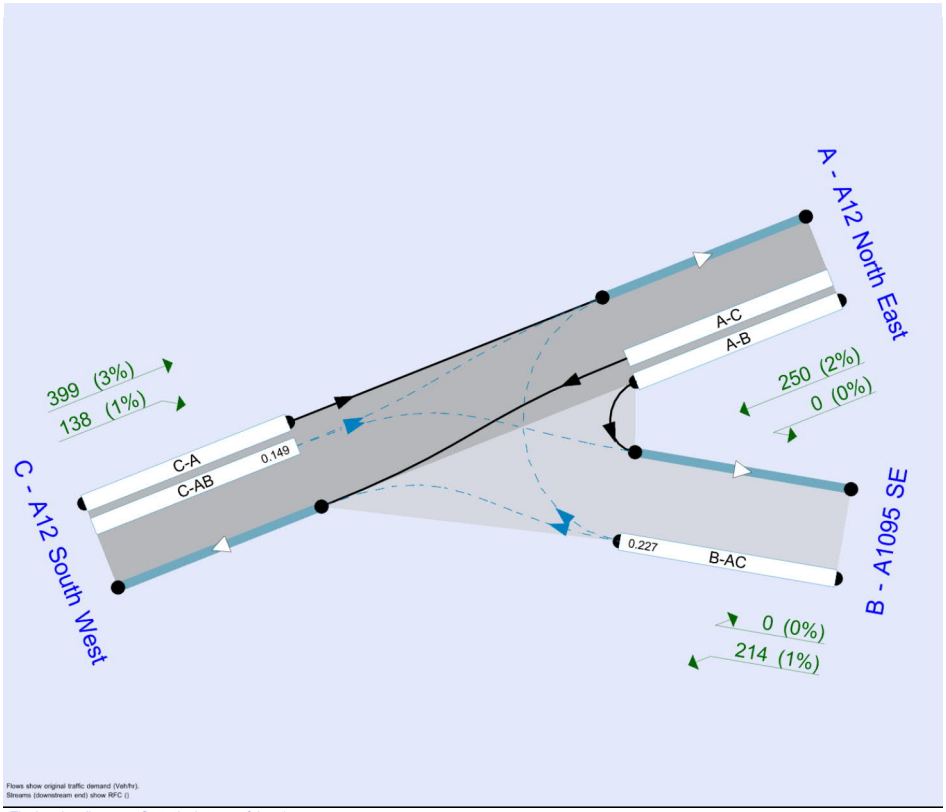
File summary

File Description

Title	A12/A1095 priority junctions
Location	52°19'52.34"N, 1°36'3.95"E
Site number	32b
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
Description	Right turn visibility of minor arm has been provided, even though right turn movement is restricted in in reality.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J32b	A12 / A1095 West	T-Junction	Two-way	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 North East		Major
B	A1095 SE		Minor
C	A12 South West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 South West	6.70		✓	2.88	234.4	✓	22.43

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - A1095 SE	One lane	4.28	62	100

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J32b	B-A	618	0.109	0.276	0.173	0.394
J32b	B-C	775	0.115	0.291	-	-
J32b	C-B	762	0.286	0.286	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	250	100.000
B - A1095 SE		ONE HOUR	✓	214	100.000
C - A12 South West		ONE HOUR	✓	537	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	**B - A1095 SE**	**C - A12 South West**
From	**A - A12 North East**	0	0	250
	B - A1095 SE	0	0	214
	C - A12 South West	399	138	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	**B - A1095 SE**	**C - A12 South West**
From	**A - A12 North East**	0	0	2
	B - A1095 SE	0	0	1
	C - A12 South West	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.34	8.03	0.5	2.4	A	196	295
C-AB	0.23	6.91	0.3	1.3	A	127	190
C-A						366	549
A-B						0	0
A-C						229	344

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	161	40	710	0.227	160	0.0	0.3	6.537	A
C-AB	104	26	698	0.149	103	0.0	0.2	6.048	A
C-A	300	75			300				
A-B	0	0			0				
A-C	188	47			188				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	192	48	699	0.275	192	0.3	0.4	7.098	A
C-AB	124	31	687	0.181	124	0.2	0.2	6.387	A
C-A	359	90			359				
A-B	0	0			0				
A-C	224	56			224				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	236	59	684	0.344	235	0.4	0.5	8.006	A
C-AB	152	38	673	0.226	152	0.2	0.3	6.905	A
C-A	439	110			439				
A-B	0	0			0				
A-C	275	69			275				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	236	59	684	0.344	236	0.5	0.5	8.026	A
C-AB	152	38	673	0.226	152	0.3	0.3	6.910	A
C-A	439	110			439				
A-B	0	0			0				
A-C	275	69			275				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	192	48	699	0.275	193	0.5	0.4	7.122	A
C-AB	124	31	687	0.181	124	0.3	0.2	6.396	A
C-A	359	90			359				
A-B	0	0			0				
A-C	224	56			224				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	161	40	710	0.227	161	0.4	0.3	6.571	A
C-AB	104	26	698	0.149	104	0.2	0.2	6.064	A
C-A	300	75			300				
A-B	0	0			0				
A-C	188	47			188				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.03	0.25	0.52	0.52			N/A	N/A
C-AB	0.29	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.03	0.30	1.30	2.42			N/A	N/A
C-AB	0.29	0.03	0.31	1.02	1.32			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 201020 J32c_Model_CV.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J32c\Model
Report generation date: 18/12/2020 11:15:15

«Base Year, 6-7 AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.31	0.01	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	0.5	5.81	0.00	A	0.0	0.5	8.39	0.01	A	0.0	0.5	5.38	0.00	A	0.0	0.5	6.65	0.01	A
	2023 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.31	0.01	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	0.5	5.82	0.00	A	0.0	0.5	8.36	0.01	A	0.0	0.5	5.37	0.00	A	0.0	0.5	6.64	0.01	A
	2023 Early Years																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.32	0.01	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	0.5	5.76	0.00	A	0.0	0.5	8.34	0.01	A	0.0	0.5	5.37	0.00	A	0.0	0.5	6.66	0.01	A
	2028 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.33	0.01	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	0.5	5.83	0.00	A	0.0	0.5	8.38	0.01	A	0.0	0.5	5.36	0.00	A	0.0	0.5	6.32	0.01	A
	2028 Peak Construction																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.33	0.01	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	0.5	5.78	0.00	A	0.0	0.5	8.36	0.01	A	0.0	0.5	5.36	0.00	A	0.0	0.5	6.32	0.01	A
	2034 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.38	0.01	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	0.5	5.84	0.00	A	0.0	0.5	8.38	0.01	A	0.0	0.5	5.31	0.00	A	0.0	0.5	6.23	0.01	A
	2034 Operational Led																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.38	0.01	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	0.5	5.84	0.00	A	0.0	0.5	8.38	0.01	A	0.0	0.5	5.31	0.00	A	0.0	0.5	6.23	0.01	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

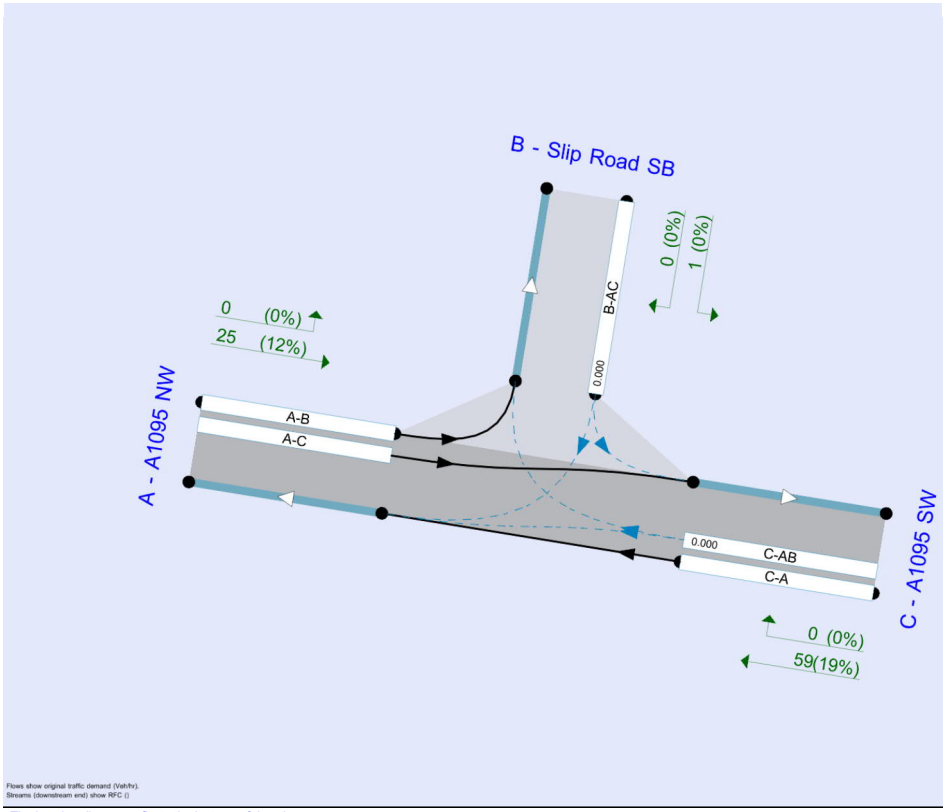
File summary

File Description

Title	A12/A1095 priority junctions
Location	52°19'52.34"N, 1°36'3.95"E
Site number	32c
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J32c	A1095 / Slip Road	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A1095 NW		Major
B	Slip Road SB		Minor
C	A1095 SW		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A1095 SW	6.85			29.4	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Slip Road SB	One lane	5.00	18	31

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J32c	B-A	598	0.105	0.265	0.167	0.379
J32c	B-C	772	0.114	0.288	-	-
J32c	C-B	591	0.221	0.221	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1095 NW		ONE HOUR	✓	25	100.000
B - Slip Road SB		ONE HOUR	✓	1	100.000
C - A1095 SW		ONE HOUR	✓	59	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1095 NW	B - Slip Road SB	C - A1095 SW
From	A - A1095 NW	0	0	25
	B - Slip Road SB	0	0	1
	C - A1095 SW	59	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1095 NW	B - Slip Road SB	C - A1095 SW
From	A - A1095 NW	0	0	12
	B - Slip Road SB	0	0	0
	C - A1095 SW	19	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						54	81
A-B						0	0
A-C						23	34

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	663	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	19	5			19				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	661	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
A-B	0	0			0				
A-C	22	6			22				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	657	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	534	0.000	0	0.0	0.0	0.000	A
C-A	65	16			65				
A-B	0	0			0				
A-C	28	7			28				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	657	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	534	0.000	0	0.0	0.0	0.000	A
C-A	65	16			65				
A-B	0	0			0				
A-C	28	7			28				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	661	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
A-B	0	0			0				
A-C	22	6			22				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	663	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	19	5			19				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922 J34a_Model_peaky_HPC_profile.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\TN04 Peaky Models\J34a
Report generation date: 18/12/2020 14:07:45

»- - 2028 Peak Construction, 6-7 AM peaky
»- - 2028 Peak Construction, 7-8 AM peaky
»- - 2028 Peak Construction, 8-9 AM peaky
»- - 2028 Peak Construction, 3-4 PM peaky
»- - 2028 Peak Construction, 5-6 PM peaky

Summary of junction performance

	6-7 AM peaky					7-8 AM peaky					8-9 AM peaky					3-4 PM peaky					5-6 PM peaky				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	- - 2028 Peak Construction																								
Stream B-AC	1.7	?	14.66	0.64	B	1.4	?	13.89	0.59	B	1.2	?	15.33	0.56	C	1.1	?	13.33	0.52	B	0.9	~1	12.23	0.49	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

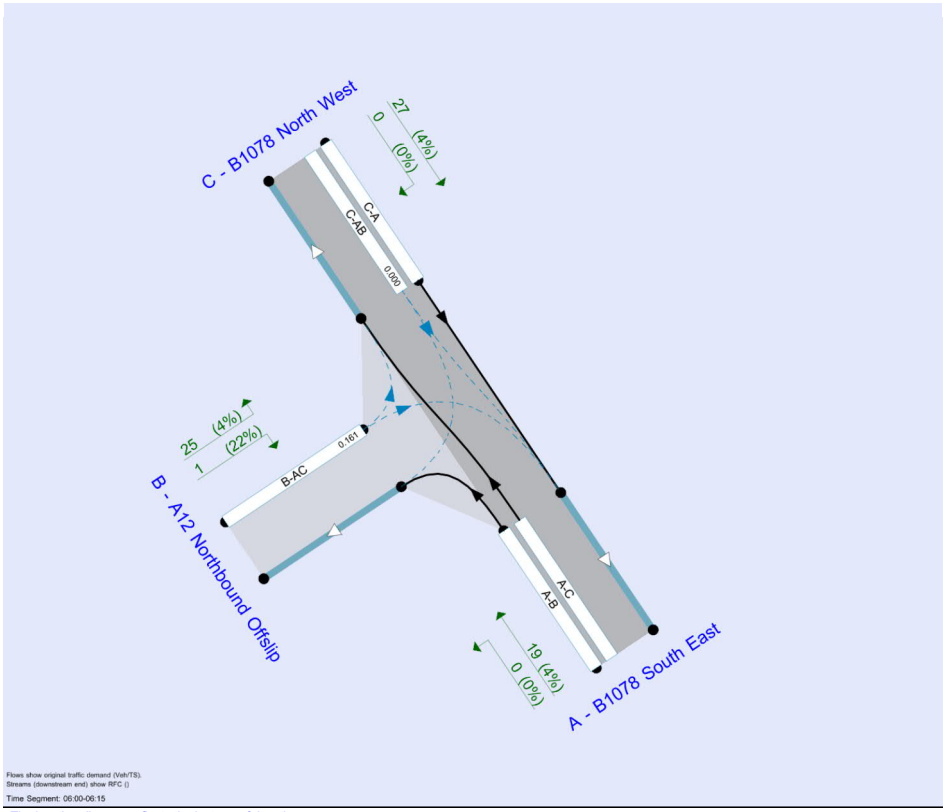
File summary

File Description

Title	A12 Northbound off slip / B1078
Location	52° 9'37.46"N, 1°22'46.88"E
Site number	34a
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INSR01910
Description	Give way width of the minor arm is 10m, due to the junctions 9 restriction.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perTimeSegment	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15		15	
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15		15	
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15		15	
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15		15	
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	
D21	2028 Peak Construction	6-7 AM peaky	DIRECT	06:00	07:00	60	15	✓
D22	2028 Peak Construction	7-8 AM peaky	DIRECT	07:00	08:00	60	15	✓
D23	2028 Peak Construction	8-9 AM peaky	DIRECT	08:00	09:00	60	15	✓
D24	2028 Peak Construction	3-4 PM peaky	DIRECT	15:00	16:00	60	15	✓
D25	2028 Peak Construction	5-6 PM peaky	DIRECT	17:00	18:00	60	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15		15	
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15		15	
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15		15	
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15		15	

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	-	✓	100.000	100.000

- - 2028 Peak Construction, 6-7 AM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	7.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1078 South East		Major
B	A12 Northbound Offslip		Minor
C	B1078 North West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B1078 North West	7.55			90.5	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - A12 Northbound Offslip	One lane	4.00	90	18

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/TS)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J34a	B-A	141.750	0.096	0.243	0.153	0.348
J34a	B-C	174.717	0.100	0.253	-	-
J34a	C-B	156.593	0.226	0.226	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM peaky	DIRECT	06:00	07:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 South East		DIRECT	✓	100.000
B - A12 Northbound Offslip		DIRECT	✓	100.000
C - B1078 North West		DIRECT	✓	100.000

Origin-Destination Data

06:00 - 06:15

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	19.24
B - A12 Northbound Offslip	1.01	0.00	24.88
C - B1078 North West	27.41	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.04	0.00	0.96
C - B1078 North West	1.00	0.00	0.00

06:15 - 06:30

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	24.82
B - A12 Northbound Offslip	1.24	0.00	55.27

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.02	0.00	0.98

	C - B1078 North West	33.99	0.00	0.00

	C - B1078 North West	1.00	0.00	0.00

06:30 - 06:45

Demand (Veh/TS)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0.00	0.00	24.78
	B - A12 Northbound Offslip	1.24	0.00	54.47
	C - B1078 North West	33.97	0.00	0.00

Proportions

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0.00	0.00	1.00
	B - A12 Northbound Offslip	0.02	0.00	0.98
	C - B1078 North West	1.00	0.00	0.00

06:45 - 07:00

Demand (Veh/TS)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0.00	0.00	23.29
	B - A12 Northbound Offslip	1.01	0.00	104.94
	C - B1078 North West	28.76	0.00	0.00

Proportions

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0.00	0.00	1.00
	B - A12 Northbound Offslip	0.01	0.00	0.99
	C - B1078 North West	1.00	0.00	0.00

Vehicle Mix

06:00 - 06:15

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	22	0	4
	C - B1078 North West	4	0	0

Average PCU Per Veh

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	1.000	1.000	1.036
	B - A12 Northbound Offslip	1.222	1.000	1.036
	C - B1078 North West	1.040	1.000	1.000

06:15 - 06:30

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	6
	B - A12 Northbound Offslip	22	0	2
	C - B1078 North West	4	0	0

Average PCU Per Veh

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	1.000	1.000	1.062
	B - A12 Northbound Offslip	1.222	1.000	1.020
	C - B1078 North West	1.039	1.000	1.000

06:30 - 06:45

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	6
	B - A12 Northbound Offslip	22	0	2
	C - B1078 North West	4	0	0

Average PCU Per Veh

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	1.000	1.000	1.061
	B - A12 Northbound Offslip	1.222	1.000	1.020
	C - B1078 North West	1.039	1.000	1.000

06:45 - 07:00

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	13
	B - A12 Northbound Offslip	22	0	1
	C - B1078 North West	4	0	0

Average PCU Per Veh

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	1.000	1.000	1.126
	B - A12 Northbound Offslip	1.222	1.000	1.008
	C - B1078 North West	1.038	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
06:00-06:15	A - B1078 South East	19.24	19.93
	B - A12 Northbound Offslip	25.89	27.00
	C - B1078 North West	27.41	28.50
06:15-06:30	A - B1078 South East	24.82	26.36
	B - A12 Northbound Offslip	56.52	57.88
	C - B1078 North West	33.99	35.32
06:30-06:45	A - B1078 South East	24.78	26.30
	B - A12 Northbound Offslip	55.72	57.08
	C - B1078 North West	33.97	35.30
06:45-07:00	A - B1078 South East	23.29	26.23
	B - A12 Northbound Offslip	105.95	107.06
	C - B1078 North West	28.76	29.85

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-AC	0.64	14.66	1.7	?	B	61.02	244.06
C-AB	0.00	0.00	0.0	~1	A	0.00	0.00
C-A						31.03	124.13
A-B						0.00	0.00
A-C						23.03	92.13

Main Results for each time segment

06:00 - 06:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	25.89	25.89	160.65	0.161	25.70	0.0	0.2	6.659	A
C-AB	0.00	0.00	149.13	0.000	0.00	0.0	0.0	0.000	A
C-A	27.41	27.41			27.41				
A-B	0.00	0.00			0.00				
A-C	19.24	19.24			19.24				

06:15 - 06:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	56.52	56.52	162.85	0.347	56.18	0.2	0.5	8.484	A
C-AB	0.00	0.00	147.72	0.000	0.00	0.0	0.0	0.000	A
C-A	33.99	33.99			33.99				
A-B	0.00	0.00			0.00				
A-C	24.82	24.82			24.82				

06:30 - 06:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55.72	55.72	162.81	0.342	55.72	0.5	0.5	8.404	A
C-AB	0.00	0.00	147.74	0.000	0.00	0.0	0.0	0.000	A
C-A	33.97	33.97			33.97				
A-B	0.00	0.00			0.00				
A-C	24.78	24.78			24.78				

06:45 - 07:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	105.95	105.95	165.79	0.639	104.76	0.5	1.7	14.658	B
C-AB	0.00	0.00	147.81	0.000	0.00	0.0	0.0	0.000	A
C-A	28.76	28.76			28.76				
A-B	0.00	0.00			0.00				
A-C	23.29	23.29			23.29				

Queue Variation Results for each time segment

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.72	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

- - 2028 Peak Construction, 7-8 AM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM peaky	DIRECT	07:00	08:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 South East		DIRECT	✓	100.000
B - A12 Northbound Offslip		DIRECT	✓	100.000
C - B1078 North West		DIRECT	✓	100.000

Origin-Destination Data

07:00 - 07:15

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	51.90
B - A12 Northbound Offslip	3.71	0.00	85.97
C - B1078 North West	79.90	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.04	0.00	0.96
C - B1078 North West	1.00	0.00	0.00

07:15 - 07:30

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	60.95
B - A12 Northbound Offslip	4.55	0.00	76.20
C - B1078 North West	91.64	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.06	0.00	0.94
C - B1078 North West	1.00	0.00	0.00

07:30 - 07:45

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	61.14
B - A12 Northbound Offslip	4.55	0.00	78.30
C - B1078 North West	92.09	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.05	0.00	0.95
C - B1078 North West	1.00	0.00	0.00

07:45 - 08:00

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	48.87
B - A12 Northbound Offslip	3.71	0.00	52.28
C - B1078 North West	72.71	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.07	0.00	0.93
C - B1078 North West	1.00	0.00	0.00

Vehicle Mix

07:00 - 07:15

Heavy Vehicle Percentages

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0	0	6
B - A12 Northbound Offslip	12	0	3
C - B1078 North West	2	0	0

Average PCU Per Veh

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	1.000	1.000	1.062
B - A12 Northbound Offslip	1.119	1.000	1.033
C - B1078 North West	1.024	1.000	1.000

Heavy Vehicle Percentages

From \ To	A - B1078	B - A12	C - B1078

Average PCU Per Veh

From \ To	A - B1078	B - A12	C - B1078

07:15 - 07:30

		South East	Northbound Offslip	North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	12	0	5
	C - B1078 North West	3	0	0

		South East	Northbound Offslip	North West
From	A - B1078 South East	1.000	1.000	1.043
	B - A12 Northbound Offslip	1.119	1.000	1.046
	C - B1078 North West	1.026	1.000	1.000

07:30 - 07:45

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	12	0	4
	C - B1078 North West	3	0	0

Average PCU Per Veh

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	1.000	1.000	1.044
	B - A12 Northbound Offslip	1.119	1.000	1.045
	C - B1078 North West	1.026	1.000	1.000

07:45 - 08:00

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	12	0	5
	C - B1078 North West	3	0	0

Average PCU Per Veh

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	1.000	1.000	1.035
	B - A12 Northbound Offslip	1.119	1.000	1.055
	C - B1078 North West	1.027	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
07:00-07:15	A - B1078 South East	51.90	55.10
	B - A12 Northbound Offslip	89.68	92.97
	C - B1078 North West	79.90	81.85
07:15-07:30	A - B1078 South East	60.95	63.56
	B - A12 Northbound Offslip	80.74	84.77
	C - B1078 North West	91.64	94.03
07:30-07:45	A - B1078 South East	61.14	63.85
	B - A12 Northbound Offslip	82.85	86.88
	C - B1078 North West	92.09	94.48
07:45-08:00	A - B1078 South East	48.87	50.56
	B - A12 Northbound Offslip	55.99	59.29
	C - B1078 North West	72.71	74.66

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-AC	0.59	13.89	1.4	?	B	77.32	309.27
C-AB	0.00	0.00	0.0	~1	A	0.00	0.00
C-A						84.08	336.34
A-B						0.00	0.00
A-C						55.71	222.85

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	89.68	89.68	152.46	0.588	88.30	0.0	1.4	13.752	B
C-AB	0.00	0.00	142.38	0.000	0.00	0.0	0.0	0.000	A
C-A	79.90	79.90			79.90				
A-B	0.00	0.00			0.00				
A-C	51.90	51.90			51.90				

07:15 - 07:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	80.74	80.74	147.47	0.548	80.89	1.4	1.2	13.365	B
C-AB	0.00	0.00	140.44	0.000	0.00	0.0	0.0	0.000	A
C-A	91.64	91.64			91.64				
A-B	0.00	0.00			0.00				
A-C	60.95	60.95			60.95				

07:30 - 07:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	82.85	82.85	147.60	0.561	82.81	1.2	1.3	13.893	B
C-AB	0.00	0.00	140.35	0.000	0.00	0.0	0.0	0.000	A
C-A	92.09	92.09			92.09				
A-B	0.00	0.00			0.00				
A-C	61.14	61.14			61.14				

07:45 - 08:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55.99	55.99	149.11	0.376	56.64	1.3	0.6	9.711	A
C-AB	0.00	0.00	143.27	0.000	0.00	0.0	0.0	0.000	A
C-A	72.71	72.71			72.71				

A-B	0.00	0.00			0.00				
A-C	48.87	48.87			48.87				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.38	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.23	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.26	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

- - 2028 Peak Construction, 8-9 AM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM peaky	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 South East		DIRECT	✓	100.000
B - A12 Northbound Offslip		DIRECT	✓	100.000
C - B1078 North West		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	86.21
B - A12 Northbound Offslip	11.69	0.00	61.32
C - B1078 North West	124.58	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.16	0.00	0.84
C - B1078 North West	1.00	0.00	0.00

08:15 - 08:30

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	81.88
B - A12 Northbound Offslip	14.32	0.00	60.29
C - B1078 North West	129.86	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.19	0.00	0.81
C - B1078 North West	1.00	0.00	0.00

08:30 - 08:45

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	79.32
B - A12 Northbound Offslip	14.32	0.00	58.69
C - B1078 North West	127.41	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.20	0.00	0.80
C - B1078 North West	1.00	0.00	0.00

08:45 - 09:00

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	64.76
B - A12 Northbound Offslip	11.69	0.00	47.92
C - B1078 North West	104.03	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.20	0.00	0.80
C - B1078 North West	1.00	0.00	0.00

Vehicle Mix

08:00 - 08:15

Heavy Vehicle Percentages

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0	0	6
B - A12 Northbound Offslip	4	0	4
C - B1078 North West	3	0	0

Average PCU Per Veh

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	1.000	1.000	1.062
B - A12 Northbound Offslip	1.037	1.000	1.043
C - B1078 North West	1.034	1.000	1.000

Heavy Vehicle Percentages

From \ To	A - B1078	B - A12	C - B1078

Average PCU Per Veh

From \ To	A - B1078	B - A12	C - B1078

08:15 - 08:30

From		To: South East	To: Northbound Offslip	To: North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	5
	C - B1078 North West	4	0	0

Heavy Vehicle Percentages

From		To: A - B1078 South East	To: B - A12 Northbound Offslip	To: C - B1078 North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	6
	C - B1078 North West	4	0	0

Average PCU Per Veh

From		To: South East	To: Northbound Offslip	To: North West
	A - B1078 South East	1.000	1.000	1.044
	B - A12 Northbound Offslip	1.037	1.000	1.054
	C - B1078 North West	1.039	1.000	1.000

08:30 - 08:45

From		To: South East	To: Northbound Offslip	To: North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	6
	C - B1078 North West	4	0	0

Heavy Vehicle Percentages

From		To: A - B1078 South East	To: B - A12 Northbound Offslip	To: C - B1078 North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	6
	C - B1078 North West	4	0	0

Average PCU Per Veh

From		To: A - B1078 South East	To: B - A12 Northbound Offslip	To: C - B1078 North West
	A - B1078 South East	1.000	1.000	1.041
	B - A12 Northbound Offslip	1.037	1.000	1.055
	C - B1078 North West	1.040	1.000	1.000

08:45 - 09:00

From		To: A - B1078 South East	To: B - A12 Northbound Offslip	To: C - B1078 North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	6
	C - B1078 North West	4	0	0

Average PCU Per Veh

From		To: A - B1078 South East	To: B - A12 Northbound Offslip	To: C - B1078 North West
	A - B1078 South East	1.000	1.000	1.041
	B - A12 Northbound Offslip	1.037	1.000	1.055
	C - B1078 North West	1.040	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
08:00-08:15	A - B1078 South East	86.21	91.54
	B - A12 Northbound Offslip	73.02	76.10
	C - B1078 North West	124.58	128.76
08:15-08:30	A - B1078 South East	81.88	85.44
	B - A12 Northbound Offslip	74.61	78.39
	C - B1078 North West	129.86	134.99
08:30-08:45	A - B1078 South East	79.32	82.56
	B - A12 Northbound Offslip	73.01	76.79
	C - B1078 North West	127.41	132.53
08:45-09:00	A - B1078 South East	64.76	67.41
	B - A12 Northbound Offslip	59.62	62.70
	C - B1078 North West	104.03	108.21

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-AC	0.56	15.33	1.2	?	C	70.07	280.26
C-AB	0.00	0.00	0.0	~1	A	0.00	0.00
C-A						121.47	485.88
A-B						0.00	0.00
A-C						78.04	312.17

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73.02	73.02	134.34	0.544	71.87	0.0	1.2	14.163	B
C-AB	0.00	0.00	133.63	0.000	0.00	0.0	0.0	0.000	A
C-A	124.58	124.58			124.58				
A-B	0.00	0.00			0.00				
A-C	86.21	86.21			86.21				

08:15 - 08:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	74.61	74.61	132.58	0.563	74.52	1.2	1.2	15.331	C
C-AB	0.00	0.00	134.79	0.000	0.00	0.0	0.0	0.000	A
C-A	129.86	129.86			129.86				
A-B	0.00	0.00			0.00				
A-C	81.88	81.88			81.88				

08:30 - 08:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73.01	73.01	132.99	0.549	73.02	1.2	1.2	14.999	B
C-AB	0.00	0.00	135.31	0.000	0.00	0.0	0.0	0.000	A
C-A	127.41	127.41			127.41				
A-B	0.00	0.00			0.00				
A-C	79.32	79.32			79.32				

08:45 - 09:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59.62	59.62	137.94	0.432	60.07	1.2	0.8	11.625	B
C-AB	0.00	0.00	138.61	0.000	0.00	0.0	0.0	0.000	A
C-A	104.03	104.03			104.03				

A-B	0.00	0.00			0.00				
A-C	64.76	64.76			64.76				

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.15	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.24	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.23	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.78	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

- - 2028 Peak Construction, 3-4 PM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM peaky	DIRECT	15:00	16:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 South East		DIRECT	✓	100.000
B - A12 Northbound Offslip		DIRECT	✓	100.000
C - B1078 North West		DIRECT	✓	100.000

Origin-Destination Data

15:00 - 15:15

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	62.62
B - A12 Northbound Offslip	8.12	0.00	51.71
C - B1078 North West	78.79	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.14	0.00	0.86
C - B1078 North West	1.00	0.00	0.00

15:15 - 15:30

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	75.53
B - A12 Northbound Offslip	10.56	0.00	63.17
C - B1078 North West	92.75	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.14	0.00	0.86
C - B1078 North West	1.00	0.00	0.00

15:30 - 15:45

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	77.50
B - A12 Northbound Offslip	9.53	0.00	63.45
C - B1078 North West	99.13	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.13	0.00	0.87
C - B1078 North West	1.00	0.00	0.00

15:45 - 16:00

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	62.23
B - A12 Northbound Offslip	8.33	0.00	51.65
C - B1078 North West	77.52	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.14	0.00	0.86
C - B1078 North West	1.00	0.00	0.00

Vehicle Mix

15:00 - 15:15

Heavy Vehicle Percentages

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0	0	4
B - A12 Northbound Offslip	0	0	5
C - B1078 North West	3	0	0

Average PCU Per Veh

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	1.000	1.000	1.043
B - A12 Northbound Offslip	1.000	1.000	1.046
C - B1078 North West	1.028	1.000	1.000

Heavy Vehicle Percentages

From \ To	A - B1078	B - A12	C - B1078

Average PCU Per Veh

From \ To	A - B1078	B - A12	C - B1078

15:15 - 15:30

From		South East	Northbound Offslip	North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	3	0	0

From		South East	Northbound Offslip	North West
	A - B1078 South East	1.000	1.000	1.041
	B - A12 Northbound Offslip	1.000	1.000	1.046
	C - B1078 North West	1.029	1.000	1.000

15:30 - 15:45

Heavy Vehicle Percentages

From	To			
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	3	0	0

Average PCU Per Veh

From	To			
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	1.000	1.000	1.045
	B - A12 Northbound Offslip	1.000	1.000	1.046
	C - B1078 North West	1.027	1.000	1.000

15:45 - 16:00

Heavy Vehicle Percentages

From	To			
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	3	0	0

Average PCU Per Veh

From	To			
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	1.000	1.000	1.042
	B - A12 Northbound Offslip	1.000	1.000	1.046
	C - B1078 North West	1.029	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
15:00-15:15	A - B1078 South East	62.62	65.34
	B - A12 Northbound Offslip	59.84	62.21
	C - B1078 North West	78.79	81.01
15:15-15:30	A - B1078 South East	75.53	78.64
	B - A12 Northbound Offslip	73.72	76.63
	C - B1078 North West	92.75	95.46
15:30-15:45	A - B1078 South East	77.50	80.99
	B - A12 Northbound Offslip	72.97	75.88
	C - B1078 North West	99.13	101.84
15:45-16:00	A - B1078 South East	62.23	64.87
	B - A12 Northbound Offslip	59.99	62.36
	C - B1078 North West	77.52	79.74

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-AC	0.52	13.33	1.1	?	B	66.63	266.52
C-AB	0.00	0.00	0.0	~1	A	0.00	0.00
C-A						87.05	348.18
A-B						0.00	0.00
A-C						69.47	277.88

Main Results for each time segment

15:00 - 15:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59.83	59.83	144.72	0.413	59.14	0.0	0.7	10.435	B
C-AB	0.00	0.00	139.84	0.000	0.00	0.0	0.0	0.000	A
C-A	78.79	78.79			78.79				
A-B	0.00	0.00			0.00				
A-C	62.62	62.62			62.62				

15:15 - 15:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73.72	73.72	140.58	0.524	73.34	0.7	1.1	13.310	B
C-AB	0.00	0.00	136.83	0.000	0.00	0.0	0.0	0.000	A
C-A	92.75	92.75			92.75				
A-B	0.00	0.00			0.00				
A-C	75.53	75.53			75.53				

15:30 - 15:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72.97	72.97	140.43	0.520	72.97	1.1	1.1	13.333	B
C-AB	0.00	0.00	136.35	0.000	0.00	0.0	0.0	0.000	A
C-A	99.13	99.13			99.13				
A-B	0.00	0.00			0.00				
A-C	77.50	77.50			77.50				

15:45 - 16:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59.99	59.99	144.74	0.414	60.34	1.1	0.7	10.709	B
C-AB	0.00	0.00	139.93	0.000	0.00	0.0	0.0	0.000	A
C-A	77.52	77.52			77.52				

A-B	0.00	0.00			0.00				
A-C	62.22	62.22			62.22				

Queue Variation Results for each time segment

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.07	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.07	?	?	?	?			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.72	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

- - 2028 Peak Construction, 5-6 PM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM peaky	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 South East		DIRECT	✓	100.000
B - A12 Northbound Offslip		DIRECT	✓	100.000
C - B1078 North West		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	60.03
B - A12 Northbound Offslip	9.22	0.00	47.71
C - B1078 North West	71.92	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.16	0.00	0.84
C - B1078 North West	1.00	0.00	0.00

17:15 - 17:30

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	74.41
B - A12 Northbound Offslip	11.29	0.00	58.52
C - B1078 North West	91.06	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.16	0.00	0.84
C - B1078 North West	1.00	0.00	0.00

17:30 - 17:45

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	75.88
B - A12 Northbound Offslip	11.29	0.00	58.65
C - B1078 North West	96.01	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.16	0.00	0.84
C - B1078 North West	1.00	0.00	0.00

17:45 - 18:00

Demand (Veh/TS)

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	63.49
B - A12 Northbound Offslip	9.22	0.00	48.03
C - B1078 North West	83.55	0.00	0.00

Proportions

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0.00	0.00	1.00
B - A12 Northbound Offslip	0.16	0.00	0.84
C - B1078 North West	1.00	0.00	0.00

Vehicle Mix

17:00 - 17:15

Heavy Vehicle Percentages

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	0	0	3
B - A12 Northbound Offslip	2	0	0
C - B1078 North West	2	0	0

Average PCU Per Veh

From \ To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
A - B1078 South East	1.000	1.000	1.030
B - A12 Northbound Offslip	1.023	1.000	1.004
C - B1078 North West	1.019	1.000	1.000

Heavy Vehicle Percentages

From \ To	A - B1078	B - A12	C - B1078

Average PCU Per Veh

From \ To	A - B1078	B - A12	C - B1078

17:15 - 17:30

From		South East	Northbound Offslip	North West
	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

From		South East	Northbound Offslip	North West
	A - B1078 South East	1.000	1.000	1.032
	B - A12 Northbound Offslip	1.023	1.000	1.004
	C - B1078 North West	1.018	1.000	1.000

17:30 - 17:45

Heavy Vehicle Percentages

From	To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Average PCU Per Veh

From	To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	1.000	1.000	1.035
	B - A12 Northbound Offslip	1.023	1.000	1.004
	C - B1078 North West	1.017	1.000	1.000

17:45 - 18:00

Heavy Vehicle Percentages

From	To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Average PCU Per Veh

From	To	A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
	A - B1078 South East	1.000	1.000	1.039
	B - A12 Northbound Offslip	1.023	1.000	1.004
	C - B1078 North West	1.016	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
17:00-17:15	A - B1078 South East	60.03	61.85
	B - A12 Northbound Offslip	56.93	57.33
	C - B1078 North West	71.92	73.26
17:15-17:30	A - B1078 South East	74.41	76.79
	B - A12 Northbound Offslip	69.81	70.30
	C - B1078 North West	91.06	92.70
17:30-17:45	A - B1078 South East	75.88	78.53
	B - A12 Northbound Offslip	69.94	70.43
	C - B1078 North West	96.01	97.66
17:45-18:00	A - B1078 South East	63.49	65.93
	B - A12 Northbound Offslip	57.25	57.65
	C - B1078 North West	83.55	84.89

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-AC	0.49	12.23	0.9	~1	B	63.48	253.93
C-AB	0.00	0.00	0.0	~1	A	0.00	0.00
C-A						85.63	342.54
A-B						0.00	0.00
A-C						68.45	273.80

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	56.93	56.93	148.74	0.383	56.32	0.0	0.6	9.678	A
C-AB	0.00	0.00	141.28	0.000	0.00	0.0	0.0	0.000	A
C-A	71.92	71.92			71.92				
A-B	0.00	0.00			0.00				
A-C	60.03	60.03			60.03				

17:15 - 17:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69.81	69.81	144.13	0.484	69.50	0.6	0.9	12.009	B
C-AB	0.00	0.00	137.95	0.000	0.00	0.0	0.0	0.000	A
C-A	91.06	91.06			91.06				
A-B	0.00	0.00			0.00				
A-C	74.41	74.41			74.41				

17:30 - 17:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69.94	69.94	143.49	0.487	69.92	0.9	0.9	12.227	B
C-AB	0.00	0.00	137.60	0.000	0.00	0.0	0.0	0.000	A
C-A	96.01	96.01			96.01				
A-B	0.00	0.00			0.00				
A-C	75.88	75.88			75.88				

17:45 - 18:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	57.25	57.25	147.27	0.389	57.54	0.9	0.6	10.062	B
C-AB	0.00	0.00	140.48	0.000	0.00	0.0	0.0	0.000	A
C-A	83.55	83.55			83.55				

A-B	0.00	0.00			0.00				
A-C	63.49	63.49			63.49				

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.94	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	~1	~1	~1	~1			N/A	N/A
C-AB	0.00	~1	~1	~1	~1			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922 J34a_Model.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J34a\Model
Report generation date: 18/12/2020 11:17:25

»- - Base Year, 6-7 AM
»- - Base Year, 7-8 AM
»- - Base Year, 8-9 AM
»- - Base Year, 3-4 PM
»- - Base Year, 5-6 PM
»- - 2023 Reference Case , 6-7 AM
»- - 2023 Reference Case , 7-8 AM
»- - 2023 Reference Case , 8-9 AM
»- - 2023 Reference Case , 3-4 PM
»- - 2023 Reference Case , 5-6 PM
»- - 2023 Early Years , 6-7 AM
»- - 2023 Early Years , 7-8 AM
»- - 2023 Early Years , 8-9 AM
»- - 2023 Early Years , 3-4 PM
»- - 2023 Early Years , 5-6 PM
»- - 2028 Reference Case , 6-7 AM
»- - 2028 Reference Case , 7-8 AM
»- - 2028 Reference Case , 8-9 AM
»- - 2028 Reference Case , 3-4 PM
»- - 2028 Reference Case , 5-6 PM
»- - 2028 Peak Construction, 6-7 AM
»- - 2028 Peak Construction, 7-8 AM
»- - 2028 Peak Construction, 8-9 AM
»- - 2028 Peak Construction, 3-4 PM
»- - 2028 Peak Construction, 5-6 PM
»- - 2034 Reference Case , 6-7 AM
»- - 2034 Reference Case , 7-8 AM
»- - 2034 Reference Case , 8-9 AM
»- - 2034 Reference Case , 3-4 PM
»- - 2034 Reference Case , 5-6 PM
»- - 2034 Operational Led, 6-7 AM
»- - 2034 Operational Led, 7-8 AM
»- - 2034 Operational Led, 8-9 AM
»- - 2034 Operational Led, 3-4 PM
»- - 2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	- - Base Year																								
Stream B-AC	0.1	0.5	6.60	0.11	A	0.6	2.7	10.00	0.38	A	1.0	3.4	13.55	0.50	B	0.8	2.9	11.03	0.44	B	0.8	2.9	10.75	0.43	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	- - 2023 Reference Case																								
Stream B-AC	0.1	0.5	6.63	0.11	A	0.7	2.8	10.34	0.40	B	1.1	3.6	14.73	0.53	B	0.9	3.1	12.07	0.48	B	0.9	3.0	11.61	0.47	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	- - 2023 Early Years																								
Stream B-AC	0.1	0.5	6.76	0.12	A	0.8	3.0	11.24	0.44	B	1.2	3.8	15.45	0.55	C	0.9	3.1	12.11	0.48	B	0.9	3.2	12.61	0.49	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	- - 2028 Reference Case																								
Stream B-AC	0.1	0.5	6.64	0.12	A	0.7	2.9	10.69	0.42	B	1.2	3.7	14.99	0.55	B	1.1	3.4	13.71	0.54	B	0.9	3.1	11.93	0.48	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	- - 2028 Peak Construction																								
Stream B-AC	0.7	2.8	9.35	0.41	A	1.3	3.5	14.34	0.58	B	1.4	4.3	16.44	0.59	C	1.1	3.3	13.39	0.52	B	0.9	3.1	12.18	0.49	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	- - 2034 Reference Case																								
Stream B-AC	0.1	0.5	6.67	0.12	A	0.8	2.9	10.99	0.44	B	1.4	4.3	16.60	0.58	C	1.4	4.0	15.56	0.59	C	1.1	3.3	13.23	0.53	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	- - 2034 Operational Led																								
Stream B-AC	0.1	0.5	6.68	0.12	A	0.8	2.9	10.97	0.43	B	1.3	4.3	16.56	0.58	C	1.4	4.0	15.57	0.59	C	1.1	3.3	13.29	0.53	B
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

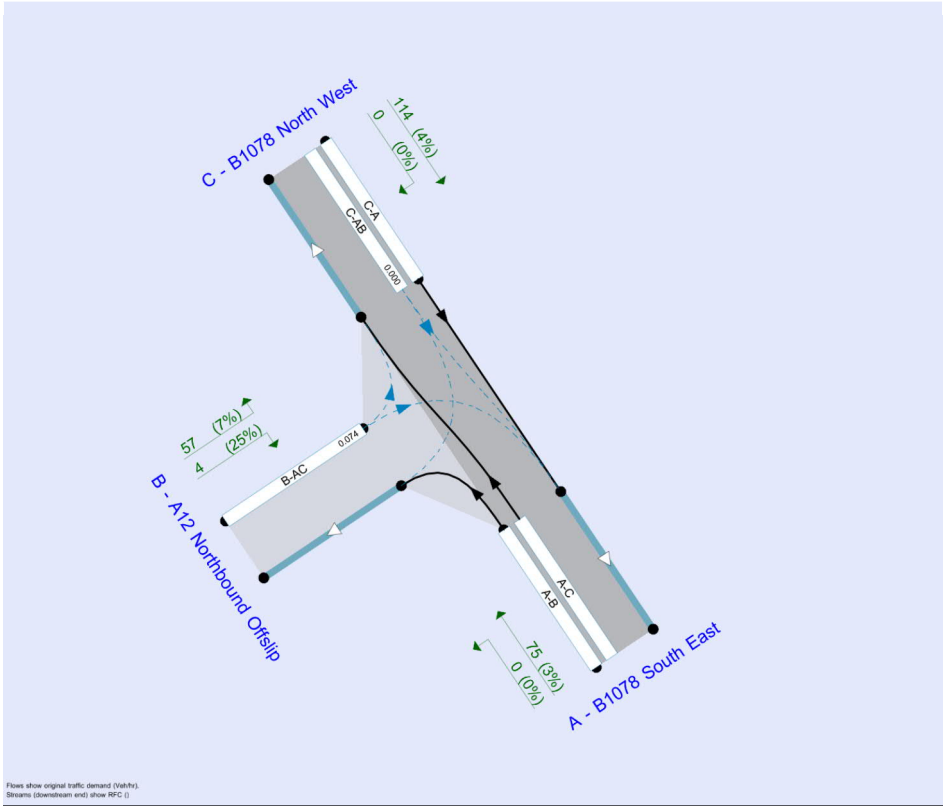
File Description

Title	A12 Northbound off slip / B1078
Location	52° 9'37.46"N, 1°22'46.88"E

Site number	34a
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INSR01910
Description	Give way width of the minor arm is 10m, due to the junctions 9 restriction.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	-	✓	100.000	100.000

- - Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1078 South East		Major
B	A12 Northbound Offslip		Minor
C	B1078 North West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B1078 North West	7.55			90.5	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - A12 Northbound Offslip	One lane	4.00	90	18

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J34a	B-A	567	0.096	0.243	0.153	0.348
J34a	B-C	699	0.100	0.253	-	-
J34a	C-B	626	0.226	0.226	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	75	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	61	100.000
C - B1078 North West		ONE HOUR	✓	114	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	75
	B - A12 Northbound Offslip	4	0	57
	C - B1078 North West	114	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	25	0	7
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	6.60	0.1	0.5	A	56	84
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						105	157
A-B						0	0
A-C						69	103

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	46	11	620	0.074	46	0.0	0.1	6.267	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	86	21			86				
A-B	0	0			0				
A-C	56	14			56				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55	14	617	0.089	55	0.1	0.1	6.404	A
C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	102	26			102				
A-B	0	0			0				
A-C	67	17			67				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	613	0.110	67	0.1	0.1	6.596	A
C-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
C-A	126	31			126				
A-B	0	0			0				
A-C	83	21			83				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	613	0.110	67	0.1	0.1	6.596	A
C-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
C-A	126	31			126				
A-B	0	0			0				
A-C	83	21			83				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55	14	617	0.089	55	0.1	0.1	6.407	A
C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	102	26			102				
A-B	0	0			0				
A-C	67	17			67				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	46	11	620	0.074	46	0.1	0.1	6.276	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	86	21			86				
A-B	0	0			0				
A-C	56	14			56				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	187	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	202	100.000
C - B1078 North West		ONE HOUR	✓	298	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	187
	B - A12 Northbound Offslip	15	0	187
	C - B1078 North West	298	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	13	0	7
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	10.00	0.6	2.7	A	185	278
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						273	410
A-B						0	0
A-C						172	257

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	152	38	600	0.253	151	0.0	0.3	7.980	A
C-AB	0	0	584	0.000	0	0.0	0.0	0.000	A
C-A	224	56			224				
A-B	0	0			0				
A-C	141	35			141				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	182	45	593	0.306	181	0.3	0.4	8.734	A

C-AB	0	0	578	0.000	0	0.0	0.0	0.000	A
C-A	268	67			268				
A-B	0	0			0				
A-C	168	42			168				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	222	56	582	0.382	222	0.4	0.6	9.961	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	328	82			328				
A-B	0	0			0				
A-C	206	51			206				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	222	56	582	0.382	222	0.6	0.6	9.996	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	328	82			328				
A-B	0	0			0				
A-C	206	51			206				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	182	45	593	0.306	182	0.6	0.4	8.781	A
C-AB	0	0	578	0.000	0	0.0	0.0	0.000	A
C-A	268	67			268				
A-B	0	0			0				
A-C	168	42			168				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	152	38	600	0.253	152	0.4	0.3	8.044	A
C-AB	0	0	584	0.000	0	0.0	0.0	0.000	A
C-A	224	56			224				
A-B	0	0			0				
A-C	141	35			141				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.03	0.26	0.61	0.61			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.03	0.29	1.17	2.73			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	271	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	241	100.000
C - B1078 North West		ONE HOUR	✓	437	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	271
	B - A12 Northbound Offslip	51	0	190
	C - B1078 North West	437	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	5
	B - A12 Northbound Offslip	4	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.50	13.55	1.0	3.4	B	221	332
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						401	601
A-B						0	0
A-C						249	373

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	181	45	563	0.322	180	0.0	0.5	9.342	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
A-B	0	0			0				
A-C	204	51			204				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	217	54	550	0.394	216	0.5	0.6	10.766	B

C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	393	98			393				
A-B	0	0			0				
A-C	244	61			244				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	265	66	531	0.500	264	0.6	1.0	13.427	B
C-AB	0	0	544	0.000	0	0.0	0.0	0.000	A
C-A	481	120			481				
A-B	0	0			0				
A-C	298	75			298				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	265	66	531	0.500	265	1.0	1.0	13.550	B
C-AB	0	0	544	0.000	0	0.0	0.0	0.000	A
C-A	481	120			481				
A-B	0	0			0				
A-C	298	75			298				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	217	54	550	0.394	218	1.0	0.7	10.897	B
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	393	98			393				
A-B	0	0			0				
A-C	244	61			244				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	181	45	563	0.322	182	0.7	0.5	9.470	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	329	82			329				
A-B	0	0			0				
A-C	204	51			204				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.21	0.93	1.39	1.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.97	0.03	0.27	0.97	1.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.99	0.03	0.28	0.99	3.36			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.07	0.74	1.37	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.04	0.42	1.26	1.38			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	209	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	232	100.000
C - B1078 North West		ONE HOUR	✓	252	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	209
	B - A12 Northbound Offslip	31	0	201
	C - B1078 North West	252	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.44	11.03	0.8	2.9	B	213	319
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						231	347
A-B						0	0
A-C						192	288

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	175	44	603	0.290	173	0.0	0.4	8.347	A
C-AB	0	0	578	0.000	0	0.0	0.0	0.000	A
C-A	190	47			190				
A-B	0	0			0				
A-C	157	39			157				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	209	52	594	0.351	208	0.4	0.5	9.315	A

C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	227	57			227				
A-B	0	0			0				
A-C	188	47			188				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	255	64	582	0.439	255	0.5	0.8	10.974	B
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	277	69			277				
A-B	0	0			0				
A-C	230	58			230				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	255	64	582	0.439	255	0.8	0.8	11.035	B
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	277	69			277				
A-B	0	0			0				
A-C	230	58			230				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	209	52	594	0.351	209	0.8	0.5	9.387	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	227	57			227				
A-B	0	0			0				
A-C	188	47			188				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	175	44	603	0.290	175	0.5	0.4	8.429	A
C-AB	0	0	578	0.000	0	0.0	0.0	0.000	A
C-A	190	47			190				
A-B	0	0			0				
A-C	157	39			157				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.77	0.03	0.26	0.77	0.77			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.77	0.03	0.28	0.86	2.94			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.06	0.66	1.33	1.42			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.03	0.33	1.07	1.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	220	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	231	100.000
C - B1078 North West		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	220
	B - A12 Northbound Offslip	40	0	191
	C - B1078 North West	294	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	3	0	1
	C - B1078 North West	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	10.75	0.8	2.9	B	212	318
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						270	405
A-B						0	0
A-C						202	303

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	174	43	614	0.283	172	0.0	0.4	8.131	A
C-AB	0	0	582	0.000	0	0.0	0.0	0.000	A
C-A	221	55			221				
A-B	0	0			0				
A-C	166	41			166				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	208	52	603	0.344	207	0.4	0.5	9.075	A

C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	264	66			264				
A-B	0	0			0				
A-C	198	49			198				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	254	64	589	0.432	253	0.5	0.7	10.697	B
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	324	81			324				
A-B	0	0			0				
A-C	242	61			242				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	254	64	589	0.432	254	0.7	0.8	10.754	B
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	324	81			324				
A-B	0	0			0				
A-C	242	61			242				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	208	52	603	0.344	209	0.8	0.5	9.138	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	264	66			264				
A-B	0	0			0				
A-C	198	49			198				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	174	43	614	0.283	174	0.5	0.4	8.207	A
C-AB	0	0	582	0.000	0	0.0	0.0	0.000	A
C-A	221	55			221				
A-B	0	0			0				
A-C	166	41			166				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.52	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.74	0.03	0.26	0.74	0.74			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.75	0.03	0.28	0.91	2.94			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.06	0.62	1.32	1.41			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.03	0.31	0.96	1.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	80	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	64	100.000
C - B1078 North West		ONE HOUR	✓	119	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	80
	B - A12 Northbound Offslip	5	0	60
	C - B1078 North West	119	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	2
	B - A12 Northbound Offslip	22	0	7
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	6.63	0.1	0.5	A	59	88
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						109	164
A-B						0	0
A-C						74	110

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	48	12	621	0.078	48	0.0	0.1	6.279	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
A-B	0	0			0				
A-C	60	15			60				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	58	14	618	0.093	58	0.1	0.1	6.424	A

C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	72	18			72				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	71	18	614	0.115	70	0.1	0.1	6.626	A
C-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
C-A	131	33			131				
A-B	0	0			0				
A-C	88	22			88				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	71	18	614	0.115	71	0.1	0.1	6.628	A
C-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
C-A	131	33			131				
A-B	0	0			0				
A-C	88	22			88				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	58	14	618	0.093	58	0.1	0.1	6.426	A
C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	72	18			72				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	48	12	621	0.078	48	0.1	0.1	6.286	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
A-B	0	0			0				
A-C	60	15			60				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	201	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	212	100.000
C - B1078 North West		ONE HOUR	✓	311	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	201
	B - A12 Northbound Offslip	16	0	197
	C - B1078 North West	311	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	13	0	6
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	10.34	0.7	2.8	B	195	292
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						286	429
A-B						0	0
A-C						184	276

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	160	40	601	0.266	158	0.0	0.4	8.105	A
C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
C-A	234	59			234				
A-B	0	0			0				
A-C	151	38			151				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	191	48	593	0.322	190	0.4	0.5	8.929	A

C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	280	70			280				
A-B	0	0			0				
A-C	181	45			181				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	234	58	582	0.402	233	0.5	0.7	10.294	B
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	343	86			343				
A-B	0	0			0				
A-C	221	55			221				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	234	58	582	0.402	234	0.7	0.7	10.336	B
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	343	86			343				
A-B	0	0			0				
A-C	221	55			221				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	191	48	593	0.322	192	0.7	0.5	8.981	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	280	70			280				
A-B	0	0			0				
A-C	181	45			181				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	160	40	601	0.266	160	0.5	0.4	8.173	A
C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
C-A	234	59			234				
A-B	0	0			0				
A-C	151	38			151				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.03	0.26	0.66	0.66			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.03	0.29	1.07	2.81			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.04	0.41	1.25	1.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.03	0.27	0.48	0.63			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	317	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	251	100.000
C - B1078 North West		ONE HOUR	✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	317
	B - A12 Northbound Offslip	52	0	199
	C - B1078 North West	452	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.53	14.73	1.1	3.6	B	231	346
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						415	622
A-B						0	0
A-C						291	437

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	557	0.339	187	0.0	0.5	9.675	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	340	85			340				
A-B	0	0			0				
A-C	239	60			239				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	226	56	542	0.417	225	0.5	0.7	11.327	B

C-AB	0	0	548	0.000	0	0.0	0.0	0.000	A
C-A	406	102			406				
A-B	0	0			0				
A-C	285	71			285				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	277	69	521	0.531	275	0.7	1.1	14.551	B
C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	498	124			498				
A-B	0	0			0				
A-C	349	87			349				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	277	69	521	0.531	277	1.1	1.1	14.729	B
C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	498	124			498				
A-B	0	0			0				
A-C	349	87			349				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	226	56	542	0.417	227	1.1	0.7	11.496	B
C-AB	0	0	548	0.000	0	0.0	0.0	0.000	A
C-A	406	102			406				
A-B	0	0			0				
A-C	285	71			285				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	557	0.339	190	0.7	0.5	9.824	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	340	85			340				
A-B	0	0			0				
A-C	239	60			239				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.51	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.21	0.93	1.39	1.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.10	0.03	0.27	1.10	1.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.11	0.03	0.28	1.11	3.65			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.73	0.07	0.75	1.19	1.19			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.04	0.44	1.31	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	244	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	253	100.000
C - B1078 North West		ONE HOUR	✓	259	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	244
	B - A12 Northbound Offslip	33	0	220
	C - B1078 North West	259	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.48	12.07	0.9	3.1	B	232	348
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						238	357
A-B						0	0
A-C						224	336

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	190	48	600	0.317	188	0.0	0.5	8.697	A
C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	195	49			195				
A-B	0	0			0				
A-C	184	46			184				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	227	57	590	0.385	226	0.5	0.6	9.874	A

C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	233	58			233				
A-B	0	0			0				
A-C	219	55			219				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	278	70	576	0.483	277	0.6	0.9	11.976	B
C-AB	0	0	553	0.000	0	0.0	0.0	0.000	A
C-A	285	71			285				
A-B	0	0			0				
A-C	269	67			269				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	278	70	576	0.483	278	0.9	0.9	12.068	B
C-AB	0	0	553	0.000	0	0.0	0.0	0.000	A
C-A	285	71			285				
A-B	0	0			0				
A-C	269	67			269				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	227	57	590	0.385	228	0.9	0.6	9.971	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	233	58			233				
A-B	0	0			0				
A-C	219	55			219				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	190	48	600	0.317	191	0.6	0.5	8.803	A
C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	195	49			195				
A-B	0	0			0				
A-C	184	46			184				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.91	0.03	0.26	0.91	0.91			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.03	0.28	0.92	3.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.08	0.76	1.36	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.04	0.41	1.24	1.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	252	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	248	100.000
C - B1078 North West		ONE HOUR	✓	296	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	252
	B - A12 Northbound Offslip	41	0	207
	C - B1078 North West	296	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.47	11.61	0.9	3.0	B	228	341
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						271	407
A-B						0	0
A-C						231	347

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	187	47	610	0.306	185	0.0	0.4	8.433	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	222	56			222				
A-B	0	0			0				
A-C	190	47			190				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	223	56	599	0.372	222	0.4	0.6	9.548	A

C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	266	66			266				
A-B	0	0			0				
A-C	226	57			226				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	273	68	583	0.468	272	0.6	0.9	11.532	B
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	325	81			325				
A-B	0	0			0				
A-C	277	69			277				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	273	68	583	0.468	273	0.9	0.9	11.612	B
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	325	81			325				
A-B	0	0			0				
A-C	277	69			277				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	223	56	599	0.372	224	0.9	0.6	9.633	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	266	66			266				
A-B	0	0			0				
A-C	226	57			226				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	187	47	610	0.306	187	0.6	0.4	8.526	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	222	56			222				
A-B	0	0			0				
A-C	190	47			190				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.86	0.03	0.26	0.86	0.86			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.03	0.28	0.87	3.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.07	0.74	1.35	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.04	0.38	1.20	1.35			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	1.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	86	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	66	100.000
C - B1078 North West		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	86
	B - A12 Northbound Offslip	5	0	62
	C - B1078 North West	120	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	2
	B - A12 Northbound Offslip	22	0	8
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.12	6.76	0.1	0.5	A	61	91
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						110	165
A-B						0	0
A-C						79	119

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	12	613	0.081	49	0.0	0.1	6.380	A
C-AB	0	0	599	0.000	0	0.0	0.0	0.000	A
C-A	90	23			90				
A-B	0	0			0				
A-C	65	16			65				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59	15	610	0.097	59	0.1	0.1	6.538	A

C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	108	27			108				
A-B	0	0			0				
A-C	77	19			77				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	605	0.120	73	0.1	0.1	6.755	A
C-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
C-A	132	33			132				
A-B	0	0			0				
A-C	95	24			95				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	605	0.120	73	0.1	0.1	6.758	A
C-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
C-A	132	33			132				
A-B	0	0			0				
A-C	95	24			95				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59	15	610	0.097	60	0.1	0.1	6.543	A
C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	108	27			108				
A-B	0	0			0				
A-C	77	19			77				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	12	613	0.081	50	0.1	0.1	6.392	A
C-AB	0	0	599	0.000	0	0.0	0.0	0.000	A
C-A	90	23			90				
A-B	0	0			0				
A-C	65	16			65				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	234	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	229	100.000
C - B1078 North West		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	234
	B - A12 Northbound Offslip	16	0	214
	C - B1078 North West	312	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	13	0	7
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.44	11.24	0.8	3.0	B	210	316
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						287	430
A-B						0	0
A-C						215	322

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	173	43	594	0.290	171	0.0	0.4	8.473	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	235	59			235				
A-B	0	0			0				
A-C	176	44			176				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	206	52	585	0.352	206	0.4	0.5	9.471	A

C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	281	70			281				
A-B	0	0			0				
A-C	210	53			210				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	572	0.441	251	0.5	0.8	11.184	B
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	344	86			344				
A-B	0	0			0				
A-C	257	64			257				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	572	0.441	252	0.8	0.8	11.244	B
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	344	86			344				
A-B	0	0			0				
A-C	257	64			257				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	206	52	585	0.352	207	0.8	0.6	9.545	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	281	70			281				
A-B	0	0			0				
A-C	210	53			210				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	173	43	594	0.290	173	0.6	0.4	8.561	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	235	59			235				
A-B	0	0			0				
A-C	176	44			176				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.77	0.03	0.26	0.77	0.77			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.78	0.03	0.28	0.87	2.96			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.06	0.67	1.33	1.42			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.03	0.33	1.09	1.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	328	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	257	100.000
C - B1078 North West		ONE HOUR	✓	454	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	328
	B - A12 Northbound Offslip	52	0	205
	C - B1078 North West	454	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	7
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.55	15.45	1.2	3.8	C	236	354
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						416	625
A-B						0	0
A-C						301	452

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	194	48	553	0.350	192	0.0	0.5	9.904	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	342	85			342				
A-B	0	0			0				
A-C	247	62			247				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	231	58	538	0.430	230	0.5	0.7	11.686	B

C-AB	0	0	545	0.000	0	0.0	0.0	0.000	A
C-A	408	102			408				
A-B	0	0			0				
A-C	295	74			295				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	283	71	516	0.549	282	0.7	1.2	15.238	C
C-AB	0	0	530	0.000	0	0.0	0.0	0.000	A
C-A	500	125			500				
A-B	0	0			0				
A-C	361	90			361				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	283	71	516	0.549	283	1.2	1.2	15.451	C
C-AB	0	0	530	0.000	0	0.0	0.0	0.000	A
C-A	500	125			500				
A-B	0	0			0				
A-C	361	90			361				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	231	58	538	0.430	233	1.2	0.8	11.883	B
C-AB	0	0	545	0.000	0	0.0	0.0	0.000	A
C-A	408	102			408				
A-B	0	0			0				
A-C	295	74			295				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	194	48	553	0.350	195	0.8	0.5	10.070	B
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	342	85			342				
A-B	0	0			0				
A-C	247	62			247				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.74	0.21	0.93	1.39	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.18	0.03	0.27	1.18	2.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.20	0.03	0.28	1.20	3.84			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.77	0.07	0.76	1.49	1.53			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.04	0.44	1.35	1.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	249	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	250	100.000
C - B1078 North West		ONE HOUR	✓	258	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	249
	B - A12 Northbound Offslip	33	0	217
	C - B1078 North West	258	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.48	12.11	0.9	3.1	B	229	343
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						237	355
A-B						0	0
A-C						228	343

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	188	47	597	0.315	186	0.0	0.5	8.731	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	194	49			194				
A-B	0	0			0				
A-C	187	47			187				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	224	56	586	0.383	224	0.5	0.6	9.910	A

C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	232	58			232				
A-B	0	0			0				
A-C	224	56			224				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	275	69	572	0.480	274	0.6	0.9	12.018	B
C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	284	71			284				
A-B	0	0			0				
A-C	274	69			274				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	275	69	572	0.480	275	0.9	0.9	12.108	B
C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	284	71			284				
A-B	0	0			0				
A-C	274	69			274				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	224	56	586	0.383	225	0.9	0.6	10.008	B
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	232	58			232				
A-B	0	0			0				
A-C	224	56			224				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	188	47	597	0.315	189	0.6	0.5	8.837	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	194	49			194				
A-B	0	0			0				
A-C	187	47			187				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.90	0.03	0.26	0.90	0.90			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.91	0.03	0.28	0.91	3.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.08	0.75	1.36	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.04	0.40	1.24	1.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	333	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	249	100.000
C - B1078 North West		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	333
	B - A12 Northbound Offslip	41	0	208
	C - B1078 North West	315	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	2
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.49	12.61	0.9	3.2	B	228	343
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						289	433
A-B						0	0
A-C						305	458

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	187	47	594	0.315	186	0.0	0.5	8.772	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	237	59			237				
A-B	0	0			0				
A-C	251	63			251				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	224	56	580	0.386	223	0.5	0.6	10.076	B

C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	283	71			283				
A-B	0	0			0				
A-C	299	75			299				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	274	69	559	0.490	273	0.6	0.9	12.501	B
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	346	87			346				
A-B	0	0			0				
A-C	366	92			366				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	274	69	559	0.490	274	0.9	0.9	12.607	B
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	346	87			346				
A-B	0	0			0				
A-C	366	92			366				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	224	56	580	0.386	225	0.9	0.6	10.186	B
C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	283	71			283				
A-B	0	0			0				
A-C	299	75			299				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	187	47	594	0.315	188	0.6	0.5	8.878	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	237	59			237				
A-B	0	0			0				
A-C	251	63			251				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.19	0.92	1.38	1.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.94	0.03	0.26	0.94	0.94			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.95	0.03	0.28	0.95	3.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.07	0.75	1.36	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.04	0.40	1.24	1.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	1.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	83	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	66	100.000
C - B1078 North West		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	83
	B - A12 Northbound Offslip	5	0	62
	C - B1078 North West	121	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	2
	B - A12 Northbound Offslip	22	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.12	6.64	0.1	0.5	A	61	91
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						111	167
A-B						0	0
A-C						76	114

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	12	622	0.080	49	0.0	0.1	6.280	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	91	23			91				
A-B	0	0			0				
A-C	63	16			63				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59	15	619	0.096	59	0.1	0.1	6.433	A

C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	0	0			0				
A-C	75	19			75				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	614	0.118	73	0.1	0.1	6.642	A
C-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	92	23			92				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	614	0.118	73	0.1	0.1	6.644	A
C-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	92	23			92				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59	15	619	0.096	60	0.1	0.1	6.435	A
C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	0	0			0				
A-C	75	19			75				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	12	622	0.080	50	0.1	0.1	6.290	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	91	23			91				
A-B	0	0			0				
A-C	63	16			63				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	215	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	220	100.000
C - B1078 North West		ONE HOUR	✓	317	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	215
	B - A12 Northbound Offslip	17	0	204
	C - B1078 North West	317	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	12	0	6
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	10.69	0.7	2.9	B	202	303
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						291	437
A-B						0	0
A-C						197	296

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	166	41	600	0.277	164	0.0	0.4	8.242	A
C-AB	0	0	581	0.000	0	0.0	0.0	0.000	A
C-A	239	60			239				
A-B	0	0			0				
A-C	162	40			162				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	198	50	591	0.335	198	0.4	0.5	9.137	A

C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	285	71			285				
A-B	0	0			0				
A-C	193	48			193				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	243	61	579	0.419	242	0.5	0.7	10.641	B
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	349	87			349				
A-B	0	0			0				
A-C	237	59			237				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	243	61	579	0.419	242	0.7	0.7	10.693	B
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	349	87			349				
A-B	0	0			0				
A-C	237	59			237				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	198	50	591	0.335	199	0.7	0.5	9.198	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	285	71			285				
A-B	0	0			0				
A-C	193	48			193				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	166	41	600	0.277	166	0.5	0.4	8.316	A
C-AB	0	0	581	0.000	0	0.0	0.0	0.000	A
C-A	239	60			239				
A-B	0	0			0				
A-C	162	40			162				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.03	0.26	0.71	0.71			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.03	0.28	0.98	2.89			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.52	1.30	1.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.39	0.03	0.29	0.75	1.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	288	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	265	100.000
C - B1078 North West		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	288
	B - A12 Northbound Offslip	52	0	213
	C - B1078 North West	463	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	4	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.55	14.99	1.2	3.7	B	243	365
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						425	637
A-B						0	0
A-C						264	397

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	200	50	566	0.353	198	0.0	0.5	9.719	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	348	87			348				
A-B	0	0			0				
A-C	217	54			217				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	238	60	552	0.432	238	0.5	0.7	11.432	B

C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	416	104			416				
A-B	0	0			0				
A-C	259	65			259				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	292	73	532	0.549	290	0.7	1.2	14.790	B
C-AB	0	0	541	0.000	0	0.0	0.0	0.000	A
C-A	510	127			510				
A-B	0	0			0				
A-C	317	79			317				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	292	73	532	0.549	292	1.2	1.2	14.989	B
C-AB	0	0	541	0.000	0	0.0	0.0	0.000	A
C-A	510	127			510				
A-B	0	0			0				
A-C	317	79			317				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	238	60	552	0.432	240	1.2	0.8	11.612	B
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	416	104			416				
A-B	0	0			0				
A-C	259	65			259				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	200	50	566	0.353	201	0.8	0.6	9.881	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	348	87			348				
A-B	0	0			0				
A-C	217	54			217				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.75	0.21	0.93	1.39	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.18	0.03	0.27	1.18	2.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.20	0.03	0.28	1.20	3.72			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.78	0.07	0.77	1.49	1.53			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.04	0.45	1.35	1.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	257	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	275	100.000
C - B1078 North West		ONE HOUR	✓	280	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	257
	B - A12 Northbound Offslip	48	0	227
	C - B1078 North West	280	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.54	13.71	1.1	3.4	B	252	378
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						257	386
A-B						0	0
A-C						236	354

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	207	52	591	0.350	205	0.0	0.5	9.261	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	211	53			211				
A-B	0	0			0				
A-C	193	48			193				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	247	62	580	0.425	246	0.5	0.7	10.748	B

C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	252	63			252				
A-B	0	0			0				
A-C	231	58			231				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	302	76	565	0.535	301	0.7	1.1	13.558	B
C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	308	77			308				
A-B	0	0			0				
A-C	283	71			283				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	302	76	565	0.535	302	1.1	1.1	13.709	B
C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	308	77			308				
A-B	0	0			0				
A-C	283	71			283				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	247	62	580	0.425	248	1.1	0.8	10.898	B
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	252	63			252				
A-B	0	0			0				
A-C	231	58			231				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	207	52	591	0.350	208	0.8	0.5	9.403	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	211	53			211				
A-B	0	0			0				
A-C	193	48			193				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.73	0.21	0.93	1.39	1.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.12	0.03	0.27	1.12	1.34			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.13	0.03	0.28	1.13	3.36			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.08	0.78	1.29	1.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.05	0.46	1.33	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	263	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	253	100.000
C - B1078 North West		ONE HOUR	✓	306	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	263
	B - A12 Northbound Offslip	41	0	212
	C - B1078 North West	306	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.48	11.93	0.9	3.1	B	232	348
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						280	421
A-B						0	0
A-C						241	362

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	190	48	608	0.313	189	0.0	0.4	8.539	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	230	58			230				
A-B	0	0			0				
A-C	198	49			198				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	227	57	597	0.381	227	0.4	0.6	9.717	A

C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	275	69			275				
A-B	0	0			0				
A-C	236	59			236				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	278	70	580	0.480	277	0.6	0.9	11.840	B
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	336	84			336				
A-B	0	0			0				
A-C	289	72			289				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	278	70	580	0.480	278	0.9	0.9	11.929	B
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	336	84			336				
A-B	0	0			0				
A-C	289	72			289				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	227	57	597	0.381	229	0.9	0.6	9.812	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	275	69			275				
A-B	0	0			0				
A-C	236	59			236				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	190	48	608	0.313	191	0.6	0.5	8.640	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	230	58			230				
A-B	0	0			0				
A-C	198	49			198				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.90	0.03	0.26	0.90	0.90			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.91	0.03	0.28	0.91	3.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.08	0.75	1.35	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.04	0.40	1.23	1.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	92	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	244	100.000
C - B1078 North West		ONE HOUR	✓	124	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	92
	B - A12 Northbound Offslip	5	0	240
	C - B1078 North West	124	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	7
	B - A12 Northbound Offslip	22	0	2
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.41	9.35	0.7	2.8	A	224	336
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						114	171
A-B						0	0
A-C						85	127

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	184	46	663	0.277	182	0.0	0.4	7.473	A
C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	93	23			93				
A-B	0	0			0				
A-C	69	17			69				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	219	55	659	0.333	219	0.4	0.5	8.174	A

C-AB	0	0	595	0.000	0	0.0	0.0	0.000	A
C-A	112	28			112				
A-B	0	0			0				
A-C	83	21			83				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	269	67	654	0.411	268	0.5	0.7	9.311	A
C-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
C-A	137	34			137				
A-B	0	0			0				
A-C	101	25			101				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	269	67	654	0.411	269	0.7	0.7	9.346	A
C-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
C-A	137	34			137				
A-B	0	0			0				
A-C	101	25			101				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	219	55	659	0.333	220	0.7	0.5	8.218	A
C-AB	0	0	595	0.000	0	0.0	0.0	0.000	A
C-A	112	28			112				
A-B	0	0			0				
A-C	83	21			83				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	184	46	663	0.277	184	0.5	0.4	7.535	A
C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	93	23			93				
A-B	0	0			0				
A-C	69	17			69				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.03	0.26	0.69	0.69			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.03	0.28	0.93	2.78			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.50	1.30	1.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.39	0.03	0.28	0.50	0.98			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	5.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	223	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	309	100.000
C - B1078 North West		ONE HOUR	✓	336	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	223
	B - A12 Northbound Offslip	17	0	293
	C - B1078 North West	336	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	5
	B - A12 Northbound Offslip	12	0	4
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	14.34	1.3	3.5	B	284	426
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						309	463
A-B						0	0
A-C						204	307

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	233	58	613	0.380	230	0.0	0.6	9.360	A
C-AB	0	0	579	0.000	0	0.0	0.0	0.000	A
C-A	253	63			253				
A-B	0	0			0				
A-C	168	42			168				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	278	70	604	0.461	277	0.6	0.8	10.987	B

C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	302	76			302				
A-B	0	0			0				
A-C	200	50			200				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	341	85	591	0.576	339	0.8	1.3	14.139	B
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	370	93			370				
A-B	0	0			0				
A-C	245	61			245				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	341	85	591	0.576	340	1.3	1.3	14.339	B
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	370	93			370				
A-B	0	0			0				
A-C	245	61			245				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	278	70	604	0.461	280	1.3	0.9	11.179	B
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	302	76			302				
A-B	0	0			0				
A-C	200	50			200				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	233	58	613	0.380	234	0.9	0.6	9.527	A
C-AB	0	0	579	0.000	0	0.0	0.0	0.000	A
C-A	253	63			253				
A-B	0	0			0				
A-C	168	42			168				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.84	0.18	0.94	1.42	1.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.31	0.03	0.27	1.31	2.84			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.33	0.03	0.28	1.33	3.54			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.07	0.81	1.43	1.83			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.05	0.47	1.43	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	312	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	280	100.000
C - B1078 North West		ONE HOUR	✓	486	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	312
	B - A12 Northbound Offslip	52	0	228
	C - B1078 North West	486	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	5
	B - A12 Northbound Offslip	4	0	5
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.59	16.44	1.4	4.3	C	257	386
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						446	669
A-B						0	0
A-C						286	430

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	211	53	564	0.374	209	0.0	0.6	10.073	B
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	366	91			366				
A-B	0	0			0				
A-C	235	59			235				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	549	0.459	251	0.6	0.8	12.055	B

C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
C-A	437	109			437				
A-B	0	0			0				
A-C	281	70			281				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	309	77	527	0.585	306	0.8	1.4	16.152	C
C-AB	0	0	535	0.000	0	0.0	0.0	0.000	A
C-A	535	134			535				
A-B	0	0			0				
A-C	344	86			344				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	309	77	527	0.585	308	1.4	1.4	16.436	C
C-AB	0	0	535	0.000	0	0.0	0.0	0.000	A
C-A	535	134			535				
A-B	0	0			0				
A-C	344	86			344				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	549	0.459	254	1.4	0.9	12.306	B
C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
C-A	437	109			437				
A-B	0	0			0				
A-C	281	70			281				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	211	53	564	0.374	212	0.9	0.6	10.268	B
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	366	91			366				
A-B	0	0			0				
A-C	235	59			235				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.83	0.18	0.94	1.42	1.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.36	0.03	0.28	1.36	3.87			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.38	0.03	0.28	1.38	4.28			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.07	0.76	1.51	1.91			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.04	0.44	1.46	1.53			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	278	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	267	100.000
C - B1078 North West		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	278
	B - A12 Northbound Offslip	37	0	230
	C - B1078 North West	348	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.52	13.39	1.1	3.3	B	245	367
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						319	479
A-B						0	0
A-C						255	382

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	201	50	591	0.340	199	0.0	0.5	9.129	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	262	66			262				
A-B	0	0			0				
A-C	209	52			209				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	240	60	579	0.414	239	0.5	0.7	10.561	B

C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	313	78			313				
A-B	0	0			0				
A-C	250	62			250				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	293	73	562	0.522	292	0.7	1.1	13.256	B
C-AB	0	0	546	0.000	0	0.0	0.0	0.000	A
C-A	383	96			383				
A-B	0	0			0				
A-C	306	76			306				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	293	73	562	0.522	293	1.1	1.1	13.392	B
C-AB	0	0	546	0.000	0	0.0	0.0	0.000	A
C-A	383	96			383				
A-B	0	0			0				
A-C	306	76			306				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	240	60	579	0.414	241	1.1	0.7	10.700	B
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	313	78			313				
A-B	0	0			0				
A-C	250	62			250				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	201	50	591	0.340	201	0.7	0.5	9.261	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	262	66			262				
A-B	0	0			0				
A-C	209	52			209				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.51	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.22	0.93	1.39	1.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.06	0.03	0.27	1.06	1.41			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.08	0.03	0.28	1.08	3.31			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.72	0.08	0.77	1.41	1.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.04	0.45	1.30	1.42			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	274	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	254	100.000
C - B1078 North West		ONE HOUR	✓	343	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	274
	B - A12 Northbound Offslip	41	0	213
	C - B1078 North West	343	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.49	12.18	0.9	3.1	B	233	350
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						314	471
A-B						0	0
A-C						251	377

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	191	48	605	0.316	189	0.0	0.5	8.624	A
C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	258	64			258				
A-B	0	0			0				
A-C	206	52			206				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	228	57	592	0.385	228	0.5	0.6	9.851	A

C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	308	77			308				
A-B	0	0			0				
A-C	246	62			246				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	280	70	575	0.486	278	0.6	0.9	12.089	B
C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	377	94			377				
A-B	0	0			0				
A-C	301	75			301				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	280	70	575	0.486	280	0.9	0.9	12.184	B
C-AB	0	0	551	0.000	0	0.0	0.0	0.000	A
C-A	377	94			377				
A-B	0	0			0				
A-C	301	75			301				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	228	57	592	0.385	229	0.9	0.6	9.950	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	308	77			308				
A-B	0	0			0				
A-C	246	62			246				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	191	48	605	0.316	192	0.6	0.5	8.729	A
C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	258	64			258				
A-B	0	0			0				
A-C	206	52			206				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.03	0.26	0.92	0.92			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.93	0.03	0.28	0.93	3.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.08	0.75	1.36	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.04	0.41	1.24	1.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	1.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	88	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	69	100.000
C - B1078 North West		ONE HOUR	✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	88
	B - A12 Northbound Offslip	5	0	65
	C - B1078 North West	127	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	2
	B - A12 Northbound Offslip	22	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.12	6.67	0.1	0.5	A	63	95
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						117	175
A-B						0	0
A-C						81	121

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	624	0.083	52	0.0	0.1	6.289	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	96	24			96				
A-B	0	0			0				
A-C	66	17			66				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	62	16	620	0.100	62	0.1	0.1	6.449	A

C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	114	29			114				
A-B	0	0			0				
A-C	79	20			79				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	615	0.124	76	0.1	0.1	6.670	A
C-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
C-A	140	35			140				
A-B	0	0			0				
A-C	97	24			97				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	615	0.124	76	0.1	0.1	6.673	A
C-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
C-A	140	35			140				
A-B	0	0			0				
A-C	97	24			97				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	62	16	620	0.100	62	0.1	0.1	6.454	A
C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	114	29			114				
A-B	0	0			0				
A-C	79	20			79				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	624	0.083	52	0.1	0.1	6.299	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	96	24			96				
A-B	0	0			0				
A-C	66	17			66				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	218	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	229	100.000
C - B1078 North West		ONE HOUR	✓	331	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	218
	B - A12 Northbound Offslip	17	0	213
	C - B1078 North West	331	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	12	0	6
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.44	10.99	0.8	2.9	B	210	316
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						304	456
A-B						0	0
A-C						200	300

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	173	43	601	0.287	171	0.0	0.4	8.346	A
C-AB	0	0	580	0.000	0	0.0	0.0	0.000	A
C-A	249	62			249				
A-B	0	0			0				
A-C	164	41			164				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	206	52	592	0.348	206	0.4	0.5	9.305	A

C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	298	74			298				
A-B	0	0			0				
A-C	196	49			196				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	580	0.435	252	0.5	0.8	10.933	B
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	365	91			365				
A-B	0	0			0				
A-C	240	60			240				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	580	0.435	252	0.8	0.8	10.993	B
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	365	91			365				
A-B	0	0			0				
A-C	240	60			240				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	206	52	592	0.348	207	0.8	0.5	9.371	A
C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	298	74			298				
A-B	0	0			0				
A-C	196	49			196				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	173	43	601	0.287	173	0.5	0.4	8.428	A
C-AB	0	0	580	0.000	0	0.0	0.0	0.000	A
C-A	249	62			249				
A-B	0	0			0				
A-C	164	41			164				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.03	0.26	0.76	0.76			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.03	0.28	0.89	2.94			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.06	0.65	1.33	1.42			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.03	0.32	1.04	1.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	299	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	271	100.000
C - B1078 North West		ONE HOUR	✓	499	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	299
	B - A12 Northbound Offslip	65	0	206
	C - B1078 North West	499	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	3	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	16.60	1.4	4.3	C	249	373
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						458	687
A-B						0	0
A-C						275	412

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	204	51	552	0.370	202	0.0	0.6	10.207	B
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	376	94			376				
A-B	0	0			0				
A-C	225	56			225				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	244	61	537	0.454	243	0.6	0.8	12.202	B

C-AB	0	0	552	0.000	0	0.0	0.0	0.000	A
C-A	448	112			448				
A-B	0	0			0				
A-C	269	67			269				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	299	75	515	0.580	297	0.8	1.3	16.318	C
C-AB	0	0	538	0.000	0	0.0	0.0	0.000	A
C-A	549	137			549				
A-B	0	0			0				
A-C	329	82			329				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	299	75	515	0.580	299	1.3	1.4	16.602	C
C-AB	0	0	538	0.000	0	0.0	0.0	0.000	A
C-A	549	137			549				
A-B	0	0			0				
A-C	329	82			329				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	244	61	537	0.454	246	1.4	0.9	12.450	B
C-AB	0	0	552	0.000	0	0.0	0.0	0.000	A
C-A	448	112			448				
A-B	0	0			0				
A-C	269	67			269				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	204	51	552	0.370	205	0.9	0.6	10.401	B
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	376	94			376				
A-B	0	0			0				
A-C	225	56			225				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.81	0.18	0.93	1.41	1.47			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.33	0.03	0.28	1.33	3.71			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.35	0.03	0.28	1.35	4.28			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.07	0.76	1.45	1.86			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.04	0.44	1.45	1.47			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	5.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	277	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	297	100.000
C - B1078 North West		ONE HOUR	✓	317	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	277
	B - A12 Northbound Offslip	51	0	246
	C - B1078 North West	317	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.59	15.56	1.4	4.0	C	272	408
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						291	437
A-B						0	0
A-C						254	381

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	223	56	587	0.381	221	0.0	0.6	9.779	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	239	60			239				
A-B	0	0			0				
A-C	208	52			208				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	267	67	574	0.464	266	0.6	0.8	11.618	B

C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	285	71			285				
A-B	0	0			0				
A-C	249	62			249				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	326	82	557	0.586	324	0.8	1.4	15.307	C
C-AB	0	0	547	0.000	0	0.0	0.0	0.000	A
C-A	349	87			349				
A-B	0	0			0				
A-C	305	76			305				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	326	82	557	0.586	326	1.4	1.4	15.558	C
C-AB	0	0	547	0.000	0	0.0	0.0	0.000	A
C-A	349	87			349				
A-B	0	0			0				
A-C	305	76			305				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	267	67	574	0.464	269	1.4	0.9	11.848	B
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	285	71			285				
A-B	0	0			0				
A-C	249	62			249				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	223	56	587	0.381	224	0.9	0.6	9.968	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	239	60			239				
A-B	0	0			0				
A-C	208	52			208				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.17	0.94	1.43	1.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.36	0.03	0.28	1.36	3.63			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.39	0.03	0.28	1.39	3.96			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.89	0.07	0.79	1.53	1.91			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.05	0.46	1.47	1.56			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	250	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	278	100.000
C - B1078 North West		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	250
	B - A12 Northbound Offslip	50	0	228
	C - B1078 North West	350	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.53	13.23	1.1	3.3	B	255	383
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						321	481
A-B						0	0
A-C						229	344

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	209	52	606	0.345	207	0.0	0.5	8.973	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	263	66			263				
A-B	0	0			0				
A-C	188	47			188				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	250	62	594	0.420	249	0.5	0.7	10.399	B

C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	314	79			314				
A-B	0	0			0				
A-C	225	56			225				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	306	77	578	0.530	304	0.7	1.1	13.091	B
C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
C-A	385	96			385				
A-B	0	0			0				
A-C	275	69			275				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	306	77	578	0.530	306	1.1	1.1	13.231	B
C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
C-A	385	96			385				
A-B	0	0			0				
A-C	275	69			275				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	250	62	594	0.420	251	1.1	0.7	10.538	B
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	314	79			314				
A-B	0	0			0				
A-C	225	56			225				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	209	52	606	0.345	210	0.7	0.5	9.104	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	263	66			263				
A-B	0	0			0				
A-C	188	47			188				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.52	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.21	0.93	1.39	1.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.09	0.03	0.27	1.09	1.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.11	0.03	0.28	1.11	3.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.74	0.08	0.78	1.09	1.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.05	0.45	1.31	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	89	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	69	100.000
C - B1078 North West		ONE HOUR	✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	89
	B - A12 Northbound Offslip	5	0	65
	C - B1078 North West	127	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	2
	B - A12 Northbound Offslip	22	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.12	6.68	0.1	0.5	A	63	95
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						117	175
A-B						0	0
A-C						82	123

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	623	0.083	52	0.0	0.1	6.291	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	96	24			96				
A-B	0	0			0				
A-C	67	17			67				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	62	16	620	0.100	62	0.1	0.1	6.452	A

C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	114	29			114				
A-B	0	0			0				
A-C	80	20			80				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	615	0.124	76	0.1	0.1	6.673	A
C-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
C-A	140	35			140				
A-B	0	0			0				
A-C	98	25			98				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	615	0.124	76	0.1	0.1	6.676	A
C-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
C-A	140	35			140				
A-B	0	0			0				
A-C	98	25			98				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	62	16	620	0.100	62	0.1	0.1	6.457	A
C-AB	0	0	597	0.000	0	0.0	0.0	0.000	A
C-A	114	29			114				
A-B	0	0			0				
A-C	80	20			80				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	623	0.083	52	0.1	0.1	6.303	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	96	24			96				
A-B	0	0			0				
A-C	67	17			67				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	3.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	216	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	229	100.000
C - B1078 North West		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	216
	B - A12 Northbound Offslip	17	0	213
	C - B1078 North West	333	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	12	0	6
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	10.97	0.8	2.9	B	210	316
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						306	459
A-B						0	0
A-C						198	297

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	173	43	601	0.287	171	0.0	0.4	8.336	A
C-AB	0	0	581	0.000	0	0.0	0.0	0.000	A
C-A	251	63			251				
A-B	0	0			0				
A-C	163	41			163				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	206	52	593	0.348	206	0.4	0.5	9.289	A

C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	300	75			300				
A-B	0	0			0				
A-C	194	49			194				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	581	0.435	252	0.5	0.8	10.908	B
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	367	92			367				
A-B	0	0			0				
A-C	238	59			238				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	252	63	581	0.435	252	0.8	0.8	10.968	B
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	367	92			367				
A-B	0	0			0				
A-C	238	59			238				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	206	52	593	0.348	207	0.8	0.5	9.356	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	300	75			300				
A-B	0	0			0				
A-C	194	49			194				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	173	43	601	0.287	173	0.5	0.4	8.418	A
C-AB	0	0	581	0.000	0	0.0	0.0	0.000	A
C-A	251	63			251				
A-B	0	0			0				
A-C	163	41			163				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.75	0.03	0.26	0.75	0.75			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.03	0.28	0.89	2.93			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.06	0.64	1.33	1.41			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.03	0.32	1.03	1.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	296	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	271	100.000
C - B1078 North West		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	296
	B - A12 Northbound Offslip	65	0	206
	C - B1078 North West	503	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	4
	B - A12 Northbound Offslip	3	0	6
	C - B1078 North West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	16.56	1.3	4.3	C	249	373
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						461	692
A-B						0	0
A-C						272	408

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	204	51	553	0.369	202	0.0	0.6	10.196	B
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	379	95			379				
A-B	0	0			0				
A-C	223	56			223				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	244	61	537	0.454	243	0.6	0.8	12.184	B

C-AB	0	0	553	0.000	0	0.0	0.0	0.000	A
C-A	452	113			452				
A-B	0	0			0				
A-C	266	67			266				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	299	75	516	0.579	297	0.8	1.3	16.279	C
C-AB	0	0	539	0.000	0	0.0	0.0	0.000	A
C-A	554	138			554				
A-B	0	0			0				
A-C	326	82			326				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	299	75	516	0.579	299	1.3	1.3	16.561	C
C-AB	0	0	539	0.000	0	0.0	0.0	0.000	A
C-A	554	138			554				
A-B	0	0			0				
A-C	326	82			326				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	244	61	537	0.454	246	1.3	0.9	12.432	B
C-AB	0	0	553	0.000	0	0.0	0.0	0.000	A
C-A	452	113			452				
A-B	0	0			0				
A-C	266	67			266				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	204	51	553	0.369	205	0.9	0.6	10.390	B
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	379	95			379				
A-B	0	0			0				
A-C	223	56			223				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.81	0.18	0.93	1.41	1.47			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.32	0.03	0.28	1.32	3.67			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.35	0.03	0.28	1.35	4.26			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.07	0.76	1.44	1.86			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.04	0.44	1.44	1.46			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	5.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	278	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	297	100.000
C - B1078 North West		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	278
	B - A12 Northbound Offslip	51	0	246
	C - B1078 North West	316	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	0	0	5
	C - B1078 North West	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.59	15.57	1.4	4.0	C	272	408
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						290	435
A-B						0	0
A-C						255	382

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	223	56	586	0.381	221	0.0	0.6	9.785	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	238	60			238				
A-B	0	0			0				
A-C	209	52			209				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	267	67	574	0.464	266	0.6	0.8	11.625	B

C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	284	71			284				
A-B	0	0			0				
A-C	250	62			250				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	326	82	557	0.586	324	0.8	1.4	15.322	C
C-AB	0	0	546	0.000	0	0.0	0.0	0.000	A
C-A	348	87			348				
A-B	0	0			0				
A-C	306	76			306				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	326	82	557	0.586	326	1.4	1.4	15.573	C
C-AB	0	0	546	0.000	0	0.0	0.0	0.000	A
C-A	348	87			348				
A-B	0	0			0				
A-C	306	76			306				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	267	67	574	0.464	269	1.4	0.9	11.853	B
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	284	71			284				
A-B	0	0			0				
A-C	250	62			250				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	223	56	586	0.381	224	0.9	0.6	9.970	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	238	60			238				
A-B	0	0			0				
A-C	209	52			209				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.17	0.94	1.43	1.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.36	0.03	0.28	1.36	3.65			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.39	0.03	0.28	1.39	3.97			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.89	0.07	0.79	1.53	1.92			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.05	0.46	1.47	1.56			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

- - 2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34a	A12 Northbound off slip / B1078	T-Junction	Two-way	4.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 South East		ONE HOUR	✓	255	100.000
B - A12 Northbound Offslip		ONE HOUR	✓	278	100.000
C - B1078 North West		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	255
	B - A12 Northbound Offslip	50	0	228
	C - B1078 North West	348	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1078 South East	B - A12 Northbound Offslip	C - B1078 North West
From	A - B1078 South East	0	0	3
	B - A12 Northbound Offslip	2	0	0
	C - B1078 North West	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.53	13.29	1.1	3.3	B	255	383
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						319	478
A-B						0	0
A-C						234	351

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	209	52	605	0.346	207	0.0	0.5	8.993	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	262	65			262				
A-B	0	0			0				
A-C	192	48			192				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	250	62	593	0.421	249	0.5	0.7	10.431	B

C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	312	78			312				
A-B	0	0			0				
A-C	229	57			229				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	306	77	577	0.531	304	0.7	1.1	13.154	B
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	383	96			383				
A-B	0	0			0				
A-C	281	70			281				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	306	77	577	0.531	306	1.1	1.1	13.294	B
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	383	96			383				
A-B	0	0			0				
A-C	281	70			281				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	250	62	593	0.421	251	1.1	0.7	10.569	B
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	312	78			312				
A-B	0	0			0				
A-C	229	57			229				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	209	52	605	0.346	210	0.7	0.5	9.125	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	262	65			262				
A-B	0	0			0				
A-C	192	48			192				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.52	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.21	0.93	1.39	1.44			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.10	0.03	0.27	1.10	1.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.11	0.03	0.28	1.11	3.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.74	0.08	0.78	1.12	1.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.05	0.45	1.32	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J34bc\Model
Report generation date: 18/12/2020 11:21:14

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-CD	0.0	0.5	5.77	0.00	A	0.0	0.5	6.77	0.01	A	0.1	0.5	8.70	0.06	A	0.0	0.5	9.14	0.02	A	0.0	0.5	6.84	0.01	A
Stream B-A	0.1	0.5	7.93	0.09	A	0.4	1.3	10.93	0.27	B	0.6	2.9	15.32	0.38	C	0.4	1.5	11.29	0.28	B	0.4	1.4	11.50	0.27	B
Stream AB-CD	0.2	~1	7.22	0.17	A	1.0	?	11.24	0.49	B	3.7	?	22.92	0.77	C	0.7	~1	8.92	0.37	A	0.7	~1	8.41	0.38	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2023 Reference Case																								
Stream B-CD	0.0	0.5	5.79	0.00	A	0.0	0.5	6.88	0.01	A	0.1	0.5	9.59	0.07	A	0.0	0.5	9.60	0.03	A	0.0	0.5	7.07	0.01	A
Stream B-A	0.1	0.5	7.95	0.10	A	0.4	1.6	11.26	0.29	B	0.9	3.8	17.90	0.48	C	0.5	2.4	12.30	0.34	B	0.5	2.1	12.34	0.33	B
Stream AB-CD	0.2	~1	7.36	0.18	A	1.1	?	11.89	0.51	B	4.5	?	26.59	0.80	D	0.7	~1	9.02	0.38	A	0.8	~1	8.40	0.38	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2023 Early Years																								
Stream B-CD	0.0	0.5	5.82	0.00	A	0.0	0.5	7.22	0.02	A	0.1	0.5	9.92	0.07	A	0.0	0.5	9.69	0.03	A	0.0	0.5	8.56	0.02	A
Stream B-A	0.1	0.5	8.04	0.12	A	0.6	2.6	12.62	0.36	B	1.0	4.1	18.87	0.50	C	0.5	2.6	12.60	0.36	B	1.1	4.0	17.27	0.52	C
Stream AB-CD	0.2	~1	7.37	0.18	A	1.2	?	11.95	0.52	B	4.6	?	27.33	0.81	D	0.7	~1	8.96	0.38	A	0.9	~1	8.91	0.42	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2028 Reference Case																								
Stream B-CD	0.0	0.5	5.81	0.00	A	0.0	0.5	7.00	0.01	A	0.1	0.5	8.90	0.06	A	0.0	0.5	9.96	0.03	A	0.0	0.5	7.21	0.01	A
Stream B-A	0.1	0.5	7.99	0.11	A	0.4	1.9	11.69	0.31	B	0.6	3.0	15.80	0.39	C	0.6	2.7	13.07	0.37	B	0.5	2.5	12.93	0.35	B
Stream AB-CD	0.2	~1	7.40	0.18	A	1.2	?	12.08	0.52	B	5.1	?	29.71	0.82	D	0.9	~1	9.39	0.42	A	0.8	~1	8.60	0.39	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2028 Peak Construction																								
Stream B-CD	0.0	0.5	5.87	0.00	A	0.0	0.5	7.21	0.02	A	0.1	0.5	9.61	0.07	A	0.0	0.5	10.94	0.03	B	0.0	0.5	7.46	0.01	A
Stream B-A	0.2	0.5	8.92	0.14	A	0.5	2.4	12.75	0.34	B	0.8	3.7	18.23	0.46	C	0.8	3.3	15.52	0.44	C	0.6	2.7	13.79	0.37	B
Stream AB-CD	0.2	~1	7.44	0.19	A	1.4	?	13.12	0.56	B	6.8	?	38.84	0.87	E	1.4	?	12.20	0.55	B	1.1	?	9.85	0.47	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2034 Reference Case																								
Stream B-CD	0.0	0.5	5.84	0.00	A	0.0	0.5	7.06	0.01	A	0.1	0.5	9.04	0.07	A	0.0	0.5	10.16	0.03	B	0.0	0.5	7.16	0.01	A

Stream B-A	0.1	0.5	8.25	0.12	A	0.5	2.0	11.85	0.31	B	0.6	2.8	16.19	0.38	C	0.7	3.0	14.07	0.40	B	0.4	1.8	12.55	0.30	B
Stream AB-CD	0.3	~1	7.46	0.19	A	1.3	?	12.79	0.55	B	9.8	?	53.13	0.92	F	1.1	?	10.11	0.47	B	1.1	?	9.34	0.46	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2034 Operational Led																								
Stream B-CD	0.0	0.5	5.84	0.00	A	0.0	0.5	7.04	0.01	A	0.1	0.5	9.00	0.07	A	0.0	0.5	10.18	0.03	B	0.0	0.5	7.19	0.01	A
Stream B-A	0.1	0.5	8.25	0.12	A	0.4	1.9	11.79	0.31	B	0.6	2.7	16.04	0.37	C	0.7	3.0	14.12	0.40	B	0.4	1.9	12.67	0.31	B
Stream AB-CD	0.3	~1	7.46	0.19	A	1.3	?	12.78	0.55	B	10.2	?	55.28	0.92	F	1.1	?	10.08	0.47	B	1.0	?	9.26	0.45	A
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

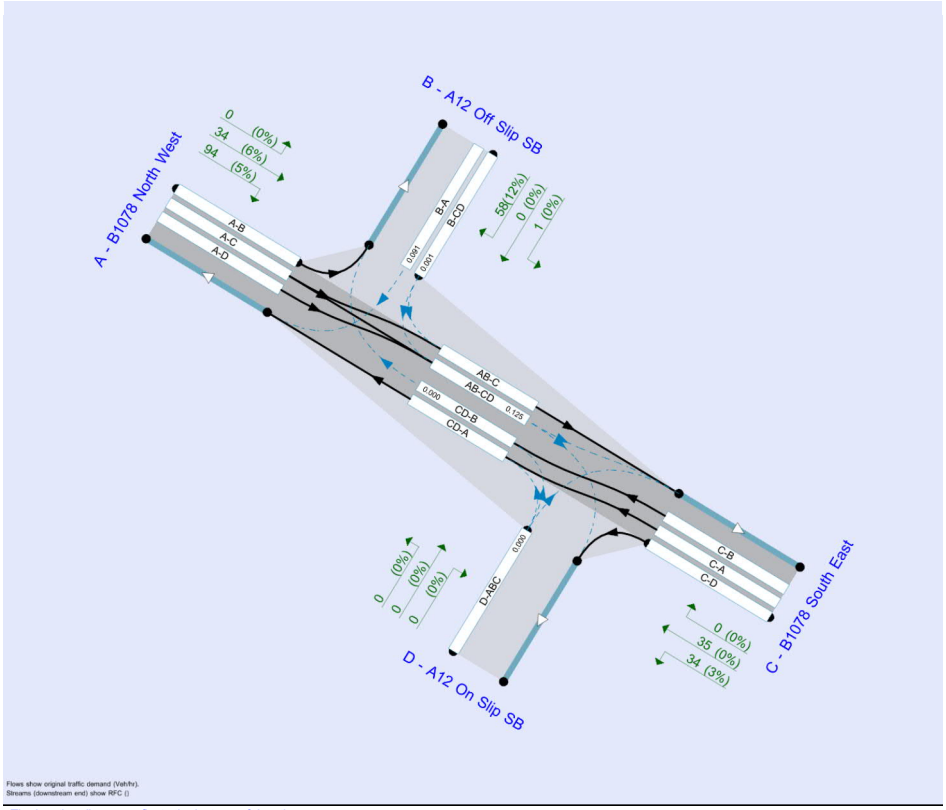
File summary

File Description

Title	A12 Southbound on slip / B1078 / Station Road
Location	52° 9'34.11"N, 1°22'50.74"E
Site number	34c
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INSR01910
Description	Give way width of the minor arm is 10m, due to the junctions 9 restriction.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	

							✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	2.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1078 North West		Major
B	A12 Off Slip SB		Minor
C	B1078 South East		Major
D	A12 On Slip SB		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - B1078 North West	8.25			71.0	✓	0.00
C - B1078 South East	7.80			100.4		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - A12 Off Slip SB	One lane plus flare		10.00	7.00	4.20	3.50	3.10	✓	1.00	38	28
D - A12 On Slip SB	One lane	2.20								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
J34c	AB-D	615	-	-	-	-	-	0.215	0.215	0.215	-	-
J34c	B-A	562	0.094	0.239	0.239	-	-	0.150	0.341	-	0.150	0.341
J34c	B-CD	674	0.095	0.241	0.241	-	-	-	-	-	-	-
J34c	CD-B	632	0.226	0.226	0.226	-	-	-	-	-	-	-
J34c	D-AB	574	-	-	-	-	-	0.201	0.201	0.079	-	-
J34c	D-C	440	-	0.115	0.261	0.115	0.261	0.183	0.183	0.072	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	117	100.000
B - A12 Off Slip SB		ONE HOUR	✓	44	100.000
C - B1078 South East		ONE HOUR	✓	59	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	32	85
	B - A12 Off Slip SB	43	0	1	0
	C - B1078 South East	32	0	0	27
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	5.77	0.0	0.5	A	0.92	1
B-A	0.09	7.93	0.1	0.5	A	39	59
A-B						0	0
A-C						29	44
A-D						78	117
AB-CD	0.17	7.22	0.2	~1	A	82	123
AB-C						26	39
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						25	37
C-A						29	44
C-B						0	0
CD-A						29	44
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	641	0.001	0.75	0.0	0.0	5.622	A
B-A	32	8	513	0.063	32	0.0	0.1	7.489	A
A-B	0	0			0				
A-C	24	6			24				
A-D	64	16			64				
AB-CD	67	17	595	0.112	66	0.0	0.1	6.809	A
AB-C	22	6			22				
D-ABC	0	0	478	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	24	6			24				
C-B	0	0			0				
CD-A	24	6			24				
CD-B	0	0	611	0.000	0	0.0	0.0	0.000	A

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	634	0.001	0.90	0.0	0.0	5.682	A
B-A	39	10	508	0.076	39	0.1	0.1	7.671	A
A-B	0	0			0				
A-C	29	7			29				
A-D	76	19			76				
AB-CD	80	20	596	0.135	80	0.1	0.2	6.981	A
AB-C	26	6			26				
D-ABC	0	0	474	0.000	0	0.0	0.0	0.000	A
C-D	24	6			24				
C-A	29	7			29				
C-B	0	0			0				
CD-A	29	7			29				
CD-B	0	0	607	0.000	0	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	625	0.002	1	0.0	0.0	5.766	A
B-A	47	12	501	0.094	47	0.1	0.1	7.926	A
A-B	0	0			0				
A-C	35	9			35				
A-D	94	23			94				
AB-CD	100	25	598	0.167	99	0.2	0.2	7.220	A
AB-C	30	8			30				
D-ABC	0	0	469	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	35	9			35				
C-B	0	0			0				
CD-A	35	9			35				
CD-B	0	0	602	0.000	0	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	625	0.002	1	0.0	0.0	5.766	A

B-A	47	12	501	0.094	47	0.1	0.1	7.930	A
A-B	0	0			0				
A-C	35	9			35				
A-D	94	23			94				
AB-CD	100	25	598	0.167	100	0.2	0.2	7.225	A
AB-C	30	8			30				
D-ABC	0	0	469	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	35	9			35				
C-B	0	0			0				
CD-A	35	9			35				
CD-B	0	0	602	0.000	0	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	634	0.001	0.90	0.0	0.0	5.684	A
B-A	39	10	508	0.076	39	0.1	0.1	7.677	A
A-B	0	0			0				
A-C	29	7			29				
A-D	76	19			76				
AB-CD	80	20	596	0.135	81	0.2	0.2	6.988	A
AB-C	26	6			26				
D-ABC	0	0	474	0.000	0	0.0	0.0	0.000	A
C-D	24	6			24				
C-A	29	7			29				
C-B	0	0			0				
CD-A	29	7			29				
CD-B	0	0	607	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	641	0.001	0.75	0.0	0.0	5.623	A
B-A	32	8	513	0.063	32	0.1	0.1	7.497	A
A-B	0	0			0				
A-C	24	6			24				
A-D	64	16			64				
AB-CD	67	17	595	0.112	67	0.2	0.1	6.824	A
AB-C	22	6			22				
D-ABC	0	0	478	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	24	6			24				
C-B	0	0			0				
CD-A	24	6			24				
CD-B	0	0	611	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-CD	0.13	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.08	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.16	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.03	0.26	0.47	0.49			N/A	N/A
AB-CD	0.21	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.21	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-CD	0.17	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-CD	0.13	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	4.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	307	100.000
B - A12 Off Slip SB		ONE HOUR	✓	115	100.000
C - B1078 South East		ONE HOUR	✓	131	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	70	237
	B - A12 Off Slip SB	108	0	7	0
	C - B1078 South East	80	0	0	51
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	3
	B - A12 Off Slip SB	4	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	6.77	0.0	0.5	A	6	10
B-A	0.27	10.93	0.4	1.3	B	99	149
A-B						0	0
A-C						64	96
A-D						217	326
AB-CD	0.49	11.24	1.0	?	B	247	370
AB-C						41	62
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						47	70
C-A						73	110
C-B						0	0
CD-A						73	110
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	587	0.009	5	0.0	0.0	6.186	A
B-A	81	20	478	0.170	80	0.0	0.2	9.040	A
A-B	0	0			0				
A-C	53	13			53				
A-D	178	45			178				
AB-CD	197	49	615	0.321	195	0.0	0.5	8.545	A
AB-C	39	10			39				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A
C-D	38	10			38				
C-A	60	15			60				
C-B	0	0			0				
CD-A	60	15			60				
CD-B	0	0	578	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	568	0.011	6	0.0	0.0	6.408	A
B-A	97	24	466	0.209	97	0.2	0.3	9.759	A
A-B	0	0			0				
A-C	63	16			63				
A-D	213	53			213				
AB-CD	240	60	618	0.388	239	0.5	0.7	9.491	A
AB-C	42	11			42				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	46	11			46				
C-A	72	18			72				
C-B	0	0			0				
CD-A	72	18			72				
CD-B	0	0	568	0.000	0	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	540	0.014	8	0.0	0.0	6.762	A
B-A	119	30	448	0.265	119	0.3	0.4	10.903	B
A-B	0	0			0				
A-C	77	19			77				
A-D	261	65			261				
AB-CD	302	76	623	0.485	301	0.7	1.0	11.143	B
AB-C	43	11			43				
D-ABC	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	88	22			88				
C-B	0	0			0				
CD-A	88	22			88				
CD-B	0	0	553	0.000	0	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	540	0.014	8	0.0	0.0	6.765	A
B-A	119	30	448	0.265	119	0.4	0.4	10.928	B
A-B	0	0			0				
A-C	77	19			77				
A-D	261	65			261				
AB-CD	303	76	623	0.485	303	1.0	1.0	11.236	B
AB-C	43	11			43				
D-ABC	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	88	22			88				
C-B	0	0			0				
CD-A	88	22			88				
CD-B	0	0	553	0.000	0	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	568	0.011	6	0.0	0.0	6.414	A
B-A	97	24	466	0.209	97	0.4	0.3	9.790	A
A-B	0	0			0				
A-C	63	16			63				
A-D	213	53			213				
AB-CD	240	60	619	0.389	242	1.0	0.7	9.600	A
AB-C	42	10			42				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	46	11			46				
C-A	72	18			72				
C-B	0	0			0				
CD-A	72	18			72				
CD-B	0	0	568	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	587	0.009	5	0.0	0.0	6.191	A
B-A	81	20	478	0.170	82	0.3	0.2	9.088	A
A-B	0	0			0				
A-C	53	13			53				
A-D	178	45			178				
AB-CD	197	49	615	0.321	198	0.7	0.5	8.662	A
AB-C	39	10			39				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A

C-D	38	10			38				
C-A	60	15			60				
C-B	0	0			0				
CD-A	60	15			60				
CD-B	0	0	578	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
AB-CD	0.50	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.26	0.00	0.00	0.26	0.26			N/A	N/A
AB-CD	0.68	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.36	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	1.01	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.36	0.03	0.31	1.21	1.31			N/A	N/A
AB-CD	1.02	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.27	0.00	0.00	0.27	0.27			N/A	N/A
AB-CD	0.70	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
AB-CD	0.52	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	8.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	491	100.000
B - A12 Off Slip SB		ONE HOUR	✓	157	100.000
C - B1078 South East		ONE HOUR	✓	204	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	162	329
	B - A12 Off Slip SB	132	0	25	0
	C - B1078 South East	139	0	0	65
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	6	0	4	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.06	8.70	0.1	0.5	A	23	34
B-A	0.38	15.32	0.6	2.9	C	121	182
A-B						0	0
A-C						149	223
A-D						302	453
AB-CD	0.77	22.92	3.7	?	C	413	620
AB-C						60	91
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						60	89
C-A						128	191
C-B						0	0
CD-A						128	191
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	19	5	520	0.036	19	0.0	0.0	7.181	A
B-A	99	25	428	0.232	98	0.0	0.3	10.884	B
A-B	0	0			0				
A-C	122	30			122				
A-D	248	62			248				
AB-CD	316	79	649	0.488	312	0.0	1.1	10.597	B
AB-C	72	18			72				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	105	26			105				
C-B	0	0			0				
CD-A	105	26			105				
CD-B	0	0	545	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	489	0.046	22	0.0	0.0	7.708	A
B-A	119	30	408	0.291	118	0.3	0.4	12.412	B
A-B	0	0			0				
A-C	146	36			146				
A-D	296	74			296				
AB-CD	398	99	662	0.600	395	1.1	1.7	13.449	B
AB-C	66	17			66				
D-ABC	0	0	394	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	125	31			125				
C-B	0	0			0				
CD-A	125	31			125				
CD-B	0	0	528	0.000	0	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	442	0.062	27	0.0	0.1	8.680	A
B-A	145	36	380	0.382	145	0.4	0.6	15.226	C
A-B	0	0			0				
A-C	178	45			178				
A-D	362	91			362				
AB-CD	522	130	681	0.766	514	1.7	3.5	21.234	C
AB-C	46	12			46				
D-ABC	0	0	368	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	153	38			153				
C-B	0	0			0				
CD-A	153	38			153				
CD-B	0	0	505	0.000	0	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	441	0.062	28	0.1	0.1	8.696	A
B-A	145	36	380	0.382	145	0.6	0.6	15.325	C
A-B	0	0			0				
A-C	178	45			178				
A-D	362	91			362				
AB-CD	524	131	683	0.768	523	3.5	3.7	22.923	C
AB-C	44	11			44				
D-ABC	0	0	366	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	153	38			153				
C-B	0	0			0				
CD-A	153	38			153				
CD-B	0	0	505	0.000	0	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	489	0.046	23	0.1	0.0	7.723	A
B-A	119	30	408	0.291	119	0.6	0.4	12.518	B
A-B	0	0			0				
A-C	146	36			146				
A-D	296	74			296				
AB-CD	400	100	665	0.602	408	3.7	1.9	14.498	B
AB-C	64	16			64				
D-ABC	0	0	392	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	125	31			125				
C-B	0	0			0				
CD-A	125	31			125				
CD-B	0	0	528	0.000	0	0.0	0.0	0.000	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	19	5	519	0.036	19	0.0	0.0	7.200	A
B-A	99	25	428	0.232	100	0.4	0.3	10.994	B
A-B	0	0			0				
A-C	122	30			122				
A-D	248	62			248				
AB-CD	318	79	650	0.489	321	1.9	1.1	11.058	B
AB-C	71	18			71				
D-ABC	0	0	412	0.000	0	0.0	0.0	0.000	A

C-D	49	12			49				
C-A	105	26			105				
C-B	0	0			0				
CD-A	105	26			105				
CD-B	0	0	545	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
AB-CD	1.07	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.40	0.00	0.00	0.40	0.40			N/A	N/A
AB-CD	1.70	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.60	0.03	0.26	0.60	0.60			N/A	N/A
AB-CD	3.54	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.61	0.03	0.30	1.37	2.86			N/A	N/A
AB-CD	3.74	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.42	0.03	0.31	0.97	1.24			N/A	N/A
AB-CD	1.86	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.31	0.03	0.26	0.46	0.48			N/A	N/A
AB-CD	1.14	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	285	100.000
B - A12 Off Slip SB		ONE HOUR	✓	119	100.000
C - B1078 South East		ONE HOUR	✓	142	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	114	171
	B - A12 Off Slip SB	110	0	9	0
	C - B1078 South East	99	0	0	43
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	5
	B - A12 Off Slip SB	6	0	33	0
	C - B1078 South East	2	0	0	14
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.02	9.14	0.0	0.5	A	8	12
B-A	0.28	11.29	0.4	1.5	B	101	151
A-B						0	0
A-C						105	157
A-D						157	235
AB-CD	0.37	8.92	0.7	~1	A	192	288
AB-C						77	116
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						39	59
C-A						91	136
C-B						0	0
CD-A						91	136
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	7	2	441	0.015	7	0.0	0.0	8.288	A
B-A	83	21	468	0.177	82	0.0	0.2	9.307	A
A-B	0	0			0				
A-C	86	21			86				
A-D	129	32			129				
AB-CD	151	38	624	0.242	150	0.0	0.4	7.573	A
AB-C	70	18			70				
D-ABC	0	0	449	0.000	0	0.0	0.0	0.000	A
C-D	32	8			32				
C-A	75	19			75				
C-B	0	0			0				
CD-A	75	19			75				
CD-B	0	0	582	0.000	0	0.0	0.0	0.000	A

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	426	0.019	8	0.0	0.0	8.610	A
B-A	99	25	456	0.217	99	0.2	0.3	10.062	B
A-B	0	0			0				
A-C	102	26			102				
A-D	154	38			154				
AB-CD	187	47	632	0.295	186	0.4	0.5	8.073	A
AB-C	78	19			78				
D-ABC	0	0	439	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	89	22			89				
C-B	0	0			0				
CD-A	89	22			89				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	404	0.025	10	0.0	0.0	9.134	A
B-A	121	30	440	0.275	121	0.3	0.4	11.266	B
A-B	0	0			0				
A-C	126	31			126				
A-D	188	47			188				
AB-CD	239	60	643	0.371	238	0.5	0.7	8.883	A
AB-C	85	21			85				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	109	27			109				
C-B	0	0			0				
CD-A	109	27			109				
CD-B	0	0	559	0.000	0	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	404	0.025	10	0.0	0.0	9.138	A
B-A	121	30	440	0.275	121	0.4	0.4	11.294	B
A-B	0	0			0				
A-C	126	31			126				
A-D	188	47			188				
AB-CD	239	60	644	0.371	239	0.7	0.7	8.915	A
AB-C	85	21			85				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	109	27			109				
C-B	0	0			0				
CD-A	109	27			109				
CD-B	0	0	559	0.000	0	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	426	0.019	8	0.0	0.0	8.617	A
B-A	99	25	456	0.217	99	0.4	0.3	10.098	B
A-B	0	0			0				
A-C	102	26			102				
A-D	154	38			154				
AB-CD	187	47	632	0.295	188	0.7	0.5	8.113	A
AB-C	78	19			78				
D-ABC	0	0	439	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	89	22			89				
C-B	0	0			0				
CD-A	89	22			89				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	441	0.015	7	0.0	0.0	8.300	A
B-A	83	21	468	0.177	83	0.3	0.2	9.359	A
A-B	0	0			0				
A-C	86	21			86				
A-D	129	32			129				
AB-CD	151	38	624	0.243	152	0.5	0.4	7.631	A
AB-C	70	17			70				
D-ABC	0	0	449	0.000	0	0.0	0.0	0.000	A

C-D	32	8			32				
C-A	75	19			75				
C-B	0	0			0				
CD-A	75	19			75				
CD-B	0	0	582	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
AB-CD	0.36	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.27	0.00	0.00	0.27	0.27			N/A	N/A
AB-CD	0.48	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.37	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.68	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.38	0.03	0.31	1.25	1.48			N/A	N/A
AB-CD	0.69	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
AB-CD	0.49	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
AB-CD	0.37	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	335	100.000
B - A12 Off Slip SB		ONE HOUR	✓	111	100.000
C - B1078 South East		ONE HOUR	✓	145	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	160	175
	B - A12 Off Slip SB	105	0	6	0
	C - B1078 South East	115	0	0	30
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - A12 Off Slip SB	6	0	0	0
	C - B1078 South East	2	0	0	7
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	6.84	0.0	0.5	A	6	8
B-A	0.27	11.50	0.4	1.4	B	96	145
A-B						0	0
A-C						147	220
A-D						161	241
AB-CD	0.38	8.41	0.7	~1	A	209	314
AB-C						104	155
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						28	41
C-A						106	158
C-B						0	0
CD-A						106	158
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	583	0.008	4	0.0	0.0	6.225	A
B-A	79	20	461	0.171	78	0.0	0.2	9.382	A
A-B	0	0			0				
A-C	120	30			120				
A-D	132	33			132				
AB-CD	162	41	662	0.245	161	0.0	0.4	7.173	A
AB-C	94	24			94				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	87	22			87				
C-B	0	0			0				
CD-A	87	22			87				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	563	0.010	5	0.0	0.0	6.460	A
B-A	94	24	447	0.211	94	0.2	0.3	10.182	B
A-B	0	0			0				
A-C	144	36			144				
A-D	157	39			157				
AB-CD	202	51	674	0.300	202	0.4	0.5	7.624	A
AB-C	104	26			104				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	103	26			103				
C-B	0	0			0				
CD-A	103	26			103				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	533	0.012	7	0.0	0.0	6.839	A
B-A	116	29	429	0.270	115	0.3	0.4	11.475	B
A-B	0	0			0				
A-C	176	44			176				
A-D	193	48			193				
AB-CD	263	66	691	0.380	262	0.5	0.7	8.382	A
AB-C	113	28			113				
D-ABC	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	33	8			33				
C-A	127	32			127				
C-B	0	0			0				
CD-A	127	32			127				
CD-B	0	0	547	0.000	0	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	533	0.012	7	0.0	0.0	6.842	A
B-A	116	29	429	0.270	116	0.4	0.4	11.504	B
A-B	0	0			0				
A-C	176	44			176				
A-D	193	48			193				
AB-CD	263	66	692	0.380	263	0.7	0.7	8.415	A
AB-C	113	28			113				
D-ABC	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	33	8			33				
C-A	127	32			127				
C-B	0	0			0				
CD-A	127	32			127				
CD-B	0	0	547	0.000	0	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	562	0.010	5	0.0	0.0	6.464	A
B-A	94	24	447	0.211	95	0.4	0.3	10.220	B
A-B	0	0			0				
A-C	144	36			144				
A-D	157	39			157				
AB-CD	203	51	675	0.301	204	0.7	0.5	7.667	A
AB-C	104	26			104				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	103	26			103				
C-B	0	0			0				
CD-A	103	26			103				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	582	0.008	5	0.0	0.0	6.233	A
B-A	79	20	461	0.171	79	0.3	0.2	9.435	A
A-B	0	0			0				
A-C	120	30			120				
A-D	132	33			132				
AB-CD	163	41	662	0.246	163	0.5	0.4	7.229	A
AB-C	94	23			94				
D-ABC	0	0	445	0.000	0	0.0	0.0	0.000	A

C-D	23	6			23				
C-A	87	22			87				
C-B	0	0			0				
CD-A	87	22			87				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
AB-CD	0.38	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.26	0.00	0.00	0.26	0.26			N/A	N/A
AB-CD	0.51	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.36	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.74	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.37	0.03	0.31	1.23	1.38			N/A	N/A
AB-CD	0.75	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.27	0.00	0.00	0.27	0.27			N/A	N/A
AB-CD	0.53	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
AB-CD	0.39	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	2.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	122	100.000
B - A12 Off Slip SB		ONE HOUR	✓	48	100.000
C - B1078 South East		ONE HOUR	✓	61	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	33	89
	B - A12 Off Slip SB	47	0	1	0
	C - B1078 South East	34	0	0	28
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	4	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	5.79	0.0	0.5	A	0.92	1
B-A	0.10	7.95	0.1	0.5	A	43	64
A-B						0	0
A-C						30	45
A-D						82	123
AB-CD	0.18	7.36	0.2	~1	A	86	130
AB-C						26	39
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						25	38
C-A						31	46
C-B						0	0
CD-A						31	46
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	0.75	0.19	639	0.001	0.75	0.0	0.0	5.638	A
B-A	35	9	516	0.068	35	0.0	0.1	7.470	A
A-B	0	0			0				
A-C	24	6			24				
A-D	67	17			67				
AB-CD	70	18	590	0.119	70	0.0	0.1	6.906	A
AB-C	22	6			22				
D-ABC	0	0	477	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	25	6			25				
C-B	0	0			0				
CD-A	25	6			25				
CD-B	0	0	610	0.000	0	0.0	0.0	0.000	A

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	632	0.001	0.90	0.0	0.0	5.701	A
B-A	42	10	511	0.082	42	0.1	0.1	7.667	A
A-B	0	0			0				
A-C	29	7			29				
A-D	80	20			80				
AB-CD	84	21	592	0.143	84	0.1	0.2	7.093	A
AB-C	26	6			26				
D-ABC	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	8			30				
C-B	0	0			0				
CD-A	30	8			30				
CD-B	0	0	606	0.000	0	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	623	0.002	1	0.0	0.0	5.791	A
B-A	51	13	504	0.102	51	0.1	0.1	7.942	A
A-B	0	0			0				
A-C	36	9			36				
A-D	98	25			98				
AB-CD	105	26	594	0.176	104	0.2	0.2	7.357	A
AB-C	30	8			30				
D-ABC	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	37	9			37				
C-B	0	0			0				
CD-A	37	9			37				
CD-B	0	0	600	0.000	0	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	623	0.002	1	0.0	0.0	5.792	A
B-A	51	13	504	0.102	51	0.1	0.1	7.945	A
A-B	0	0			0				
A-C	36	9			36				
A-D	98	25			98				
AB-CD	105	26	594	0.176	105	0.2	0.2	7.361	A
AB-C	30	8			30				
D-ABC	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	37	9			37				
C-B	0	0			0				
CD-A	37	9			37				
CD-B	0	0	600	0.000	0	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	632	0.001	0.90	0.0	0.0	5.702	A
B-A	42	10	511	0.082	42	0.1	0.1	7.670	A
A-B	0	0			0				
A-C	29	7			29				
A-D	80	20			80				
AB-CD	84	21	592	0.143	85	0.2	0.2	7.105	A
AB-C	26	6			26				
D-ABC	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	8			30				
C-B	0	0			0				
CD-A	30	8			30				
CD-B	0	0	606	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	639	0.001	0.75	0.0	0.0	5.639	A
B-A	35	9	516	0.068	35	0.1	0.1	7.481	A
A-B	0	0			0				
A-C	24	6			24				
A-D	67	17			67				
AB-CD	70	18	590	0.119	70	0.2	0.1	6.924	A
AB-C	22	6			22				
D-ABC	0	0	477	0.000	0	0.0	0.0	0.000	A

C-D	21	5			21				
C-A	25	6			25				
C-B	0	0			0				
CD-A	25	6			25				
CD-B	0	0	610	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-CD	0.14	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.09	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.17	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.03	0.26	0.47	0.49			N/A	N/A
AB-CD	0.22	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.23	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
AB-CD	0.14	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	4.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	321	100.000
B - A12 Off Slip SB		ONE HOUR	✓	124	100.000
C - B1078 South East		ONE HOUR	✓	144	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	72	250
	B - A12 Off Slip SB	117	0	7	0
	C - B1078 South East	86	0	0	58
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	3
	B - A12 Off Slip SB	3	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	6.88	0.0	0.5	A	6	10
B-A	0.29	11.26	0.4	1.6	B	107	161
A-B						0	0
A-C						66	98
A-D						229	344
AB-CD	0.51	11.89	1.1	?	B	261	391
AB-C						41	61
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						53	80
C-A						79	118
C-B						0	0
CD-A						79	118
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	582	0.009	5	0.0	0.0	6.241	A
B-A	88	22	479	0.183	87	0.0	0.2	9.154	A
A-B	0	0			0				
A-C	54	13			54				
A-D	188	47			188				
AB-CD	208	52	615	0.338	206	0.0	0.5	8.762	A
AB-C	39	10			39				
D-ABC	0	0	442	0.000	0	0.0	0.0	0.000	A
C-D	44	11			44				
C-A	64	16			64				
C-B	0	0			0				
CD-A	64	16			64				
CD-B	0	0	576	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	561	0.011	6	0.0	0.0	6.484	A
B-A	105	26	466	0.225	105	0.2	0.3	9.948	A
A-B	0	0			0				
A-C	64	16			64				
A-D	225	56			225				
AB-CD	254	63	618	0.410	253	0.5	0.7	9.839	A
AB-C	41	10			41				
D-ABC	0	0	430	0.000	0	0.0	0.0	0.000	A
C-D	52	13			52				
C-A	77	19			77				
C-B	0	0			0				
CD-A	77	19			77				
CD-B	0	0	565	0.000	0	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	531	0.015	8	0.0	0.0	6.881	A
B-A	129	32	448	0.287	128	0.3	0.4	11.234	B
A-B	0	0			0				
A-C	79	20			79				
A-D	275	69			275				
AB-CD	320	80	623	0.513	318	0.7	1.1	11.781	B
AB-C	42	10			42				
D-ABC	0	0	414	0.000	0	0.0	0.0	0.000	A
C-D	64	16			64				
C-A	94	24			94				
C-B	0	0			0				
CD-A	94	24			94				
CD-B	0	0	550	0.000	0	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	530	0.015	8	0.0	0.0	6.885	A
B-A	129	32	448	0.287	128	0.4	0.4	11.265	B
A-B	0	0			0				
A-C	79	20			79				
A-D	275	69			275				
AB-CD	320	80	623	0.513	320	1.1	1.1	11.893	B
AB-C	41	10			41				
D-ABC	0	0	414	0.000	0	0.0	0.0	0.000	A
C-D	64	16			64				
C-A	94	24			94				
C-B	0	0			0				
CD-A	94	24			94				
CD-B	0	0	550	0.000	0	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	561	0.011	6	0.0	0.0	6.491	A
B-A	105	26	466	0.225	105	0.4	0.3	9.987	A
A-B	0	0			0				
A-C	64	16			64				
A-D	225	56			225				
AB-CD	254	64	619	0.411	256	1.1	0.8	9.974	A
AB-C	41	10			41				
D-ABC	0	0	430	0.000	0	0.0	0.0	0.000	A
C-D	52	13			52				
C-A	77	19			77				
C-B	0	0			0				
CD-A	77	19			77				
CD-B	0	0	565	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	581	0.009	5	0.0	0.0	6.249	A
B-A	88	22	479	0.183	88	0.3	0.2	9.208	A
A-B	0	0			0				
A-C	54	13			54				
A-D	188	47			188				
AB-CD	208	52	615	0.339	209	0.8	0.6	8.898	A
AB-C	39	10			39				
D-ABC	0	0	442	0.000	0	0.0	0.0	0.000	A

C-D	44	11			44				
C-A	64	16			64				
C-B	0	0			0				
CD-A	64	16			64				
CD-B	0	0	576	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
AB-CD	0.54	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.29	0.00	0.00	0.29	0.29			N/A	N/A
AB-CD	0.74	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.40	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	1.12	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.40	0.03	0.31	1.28	1.64			N/A	N/A
AB-CD	1.14	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.29	0.00	0.00	0.29	0.29			N/A	N/A
AB-CD	0.77	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
AB-CD	0.56	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	9.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	506	100.000
B - A12 Off Slip SB		ONE HOUR	✓	191	100.000
C - B1078 South East		ONE HOUR	✓	215	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	165	342
	B - A12 Off Slip SB	166	0	25	0
	C - B1078 South East	151	0	0	63
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	3	0	4	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.07	9.59	0.1	0.5	A	23	34
B-A	0.48	17.90	0.9	3.8	C	153	229
A-B						0	0
A-C						151	227
A-D						314	470
AB-CD	0.80	26.59	4.5	?	D	431	647
AB-C						56	84
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						58	87
C-A						139	208
C-B						0	0
CD-A						139	208
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	19	5	504	0.037	19	0.0	0.0	7.413	A
B-A	125	31	435	0.288	124	0.0	0.4	11.509	B
A-B	0	0			0				
A-C	124	31			124				
A-D	257	64			257				
AB-CD	330	82	650	0.507	325	0.0	1.2	10.971	B
AB-C	70	18			70				
D-ABC	0	0	409	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	114	28			114				
C-B	0	0			0				
CD-A	114	28			114				
CD-B	0	0	543	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	466	0.048	22	0.0	0.1	8.107	A
B-A	150	37	414	0.362	149	0.4	0.6	13.567	B
A-B	0	0			0				
A-C	148	37			148				
A-D	307	77			307				
AB-CD	415	104	664	0.625	412	1.2	1.9	14.272	B
AB-C	63	16			63				
D-ABC	0	0	390	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	136	34			136				
C-B	0	0			0				
CD-A	136	34			136				
CD-B	0	0	525	0.000	0	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	404	0.068	27	0.1	0.1	9.555	A
B-A	183	46	384	0.477	182	0.6	0.9	17.686	C
A-B	0	0			0				
A-C	181	45			181				
A-D	376	94			376				
AB-CD	545	136	682	0.799	536	1.9	4.2	23.957	C
AB-C	40	10			40				
D-ABC	0	0	362	0.000	0	0.0	0.0	0.000	A
C-D	70	17			70				
C-A	167	42			167				
C-B	0	0			0				
CD-A	167	42			167				
CD-B	0	0	501	0.000	0	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	403	0.068	28	0.1	0.1	9.594	A
B-A	183	46	384	0.477	183	0.9	0.9	17.902	C
A-B	0	0			0				
A-C	181	45			181				
A-D	376	94			376				
AB-CD	548	137	684	0.801	547	4.2	4.5	26.589	D
AB-C	37	9			37				
D-ABC	0	0	360	0.000	0	0.0	0.0	0.000	A
C-D	70	17			70				
C-A	167	42			167				
C-B	0	0			0				
CD-A	167	42			167				
CD-B	0	0	501	0.000	0	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	465	0.048	23	0.1	0.1	8.141	A
B-A	150	37	414	0.362	151	0.9	0.6	13.765	B
A-B	0	0			0				
A-C	148	37			148				
A-D	307	77			307				
AB-CD	418	105	666	0.628	428	4.5	2.1	15.771	C
AB-C	60	15			60				
D-ABC	0	0	387	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	136	34			136				
C-B	0	0			0				
CD-A	136	34			136				
CD-B	0	0	525	0.000	0	0.0	0.0	0.000	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	19	5	503	0.037	19	0.1	0.0	7.439	A
B-A	125	31	435	0.288	126	0.6	0.4	11.678	B
A-B	0	0			0				
A-C	124	31			124				
A-D	257	64			257				
AB-CD	332	83	651	0.509	335	2.1	1.2	11.532	B
AB-C	69	17			69				
D-ABC	0	0	408	0.000	0	0.0	0.0	0.000	A

C-D	48	12			48				
C-A	114	28			114				
C-B	0	0			0				
CD-A	114	28			114				
CD-B	0	0	543	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.40	0.00	0.00	0.40	0.40			N/A	N/A
AB-CD	1.16	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.55	0.55	1.00	1.40	1.45			N/A	N/A
AB-CD	1.88	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.88	0.03	0.27	0.88	1.29			N/A	N/A
AB-CD	4.16	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.90	0.03	0.29	1.23	3.81			N/A	N/A
AB-CD	4.46	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.58	0.06	0.59	1.33	1.42			N/A	N/A
AB-CD	2.08	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.41	0.04	0.36	1.17	1.34			N/A	N/A
AB-CD	1.24	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	294	100.000
B - A12 Off Slip SB		ONE HOUR	✓	148	100.000
C - B1078 South East		ONE HOUR	✓	158	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	120	174
	B - A12 Off Slip SB	139	0	9	0
	C - B1078 South East	105	0	0	53
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	5
	B - A12 Off Slip SB	4	0	33	0
	C - B1078 South East	2	0	0	11
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.03	9.60	0.0	0.5	A	8	12
B-A	0.34	12.30	0.5	2.4	B	128	192
A-B						0	0
A-C						110	165
A-D						159	239
AB-CD	0.38	9.02	0.7	~1	A	197	296
AB-C						80	121
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						48	73
C-A						96	145
C-B						0	0
CD-A						96	145
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	7	2	432	0.016	7	0.0	0.0	8.465	A
B-A	105	26	476	0.220	104	0.0	0.3	9.650	A
A-B	0	0			0				
A-C	90	23			90				
A-D	131	33			131				
AB-CD	155	39	625	0.247	153	0.0	0.4	7.607	A
AB-C	73	18			73				
D-ABC	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	79	20			79				
C-B	0	0			0				
CD-A	79	20			79				
CD-B	0	0	581	0.000	0	0.0	0.0	0.000	A

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	414	0.020	8	0.0	0.0	8.877	A
B-A	125	31	463	0.270	125	0.3	0.4	10.628	B
A-B	0	0			0				
A-C	108	27			108				
A-D	156	39			156				
AB-CD	191	48	634	0.302	191	0.4	0.5	8.129	A
AB-C	81	20			81				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	95	24			95				
C-B	0	0			0				
CD-A	95	24			95				
CD-B	0	0	570	0.000	0	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	385	0.026	10	0.0	0.0	9.589	A
B-A	153	38	446	0.344	153	0.4	0.5	12.251	B
A-B	0	0			0				
A-C	132	33			132				
A-D	191	48			191				
AB-CD	246	61	645	0.380	245	0.5	0.7	8.989	A
AB-C	88	22			88				
D-ABC	0	0	422	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	116	29			116				
C-B	0	0			0				
CD-A	116	29			116				
CD-B	0	0	557	0.000	0	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	385	0.026	10	0.0	0.0	9.599	A
B-A	153	38	446	0.344	153	0.5	0.5	12.299	B
A-B	0	0			0				
A-C	132	33			132				
A-D	191	48			191				
AB-CD	246	61	646	0.381	246	0.7	0.7	9.020	A
AB-C	88	22			88				
D-ABC	0	0	421	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	116	29			116				
C-B	0	0			0				
CD-A	116	29			116				
CD-B	0	0	557	0.000	0	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	413	0.020	8	0.0	0.0	8.890	A
B-A	125	31	463	0.270	126	0.5	0.4	10.685	B
A-B	0	0			0				
A-C	108	27			108				
A-D	156	39			156				
AB-CD	192	48	634	0.302	192	0.7	0.5	8.169	A
AB-C	81	20			81				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	95	24			95				
C-B	0	0			0				
CD-A	95	24			95				
CD-B	0	0	570	0.000	0	0.0	0.0	0.000	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	431	0.016	7	0.0	0.0	8.480	A
B-A	105	26	476	0.220	105	0.4	0.3	9.726	A
A-B	0	0			0				
A-C	90	23			90				
A-D	131	33			131				
AB-CD	155	39	626	0.248	156	0.5	0.4	7.669	A
AB-C	73	18			73				
D-ABC	0	0	447	0.000	0	0.0	0.0	0.000	A

C-D	40	10			40				
C-A	79	20			79				
C-B	0	0			0				
CD-A	79	20			79				
CD-B	0	0	581	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
AB-CD	0.37	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.36	0.00	0.00	0.36	0.36			N/A	N/A
AB-CD	0.49	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.51	0.03	0.26	0.51	0.51			N/A	N/A
AB-CD	0.71	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.52	0.03	0.30	1.33	2.40			N/A	N/A
AB-CD	0.72	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.38	0.00	0.00	0.38	0.38			N/A	N/A
AB-CD	0.51	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.29	0.00	0.00	0.29	0.29			N/A	N/A
AB-CD	0.38	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	338	100.000
B - A12 Off Slip SB		ONE HOUR	✓	135	100.000
C - B1078 South East		ONE HOUR	✓	153	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	164	174
	B - A12 Off Slip SB	129	0	6	0
	C - B1078 South East	123	0	0	31
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - A12 Off Slip SB	4	0	0	0
	C - B1078 South East	2	0	0	6
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.07	0.0	0.5	A	6	8
B-A	0.33	12.34	0.5	2.1	B	118	177
A-B						0	0
A-C						150	225
A-D						160	239
AB-CD	0.38	8.40	0.8	~1	A	209	314
AB-C						106	159
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						28	42
C-A						113	169
C-B						0	0
CD-A						113	169
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	575	0.008	4	0.0	0.0	6.314	A
B-A	97	24	467	0.207	96	0.0	0.3	9.669	A
A-B	0	0			0				
A-C	123	31			123				
A-D	131	33			131				
AB-CD	162	41	662	0.245	161	0.0	0.4	7.163	A
AB-C	96	24			96				
D-ABC	0	0	444	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	92	23			92				
C-B	0	0			0				
CD-A	92	23			92				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	551	0.010	5	0.0	0.0	6.593	A
B-A	116	29	453	0.255	115	0.3	0.3	10.658	B
A-B	0	0			0				
A-C	147	37			147				
A-D	156	39			156				
AB-CD	202	51	675	0.300	202	0.4	0.5	7.611	A
AB-C	106	27			106				
D-ABC	0	0	433	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	110	28			110				
C-B	0	0			0				
CD-A	110	28			110				
CD-B	0	0	562	0.000	0	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	516	0.013	7	0.0	0.0	7.068	A
B-A	142	35	433	0.327	141	0.3	0.5	12.298	B
A-B	0	0			0				
A-C	180	45			180				
A-D	192	48			192				
AB-CD	263	66	692	0.380	262	0.5	0.7	8.372	A
AB-C	115	29			115				
D-ABC	0	0	417	0.000	0	0.0	0.0	0.000	A
C-D	34	8			34				
C-A	135	34			135				
C-B	0	0			0				
CD-A	135	34			135				
CD-B	0	0	546	0.000	0	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	515	0.013	7	0.0	0.0	7.074	A
B-A	142	35	433	0.327	142	0.5	0.5	12.341	B
A-B	0	0			0				
A-C	180	45			180				
A-D	192	48			192				
AB-CD	263	66	692	0.380	263	0.7	0.8	8.405	A
AB-C	115	29			115				
D-ABC	0	0	417	0.000	0	0.0	0.0	0.000	A
C-D	34	8			34				
C-A	135	34			135				
C-B	0	0			0				
CD-A	135	34			135				
CD-B	0	0	546	0.000	0	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	551	0.010	5	0.0	0.0	6.602	A
B-A	116	29	453	0.255	116	0.5	0.3	10.712	B
A-B	0	0			0				
A-C	147	37			147				
A-D	156	39			156				
AB-CD	203	51	675	0.300	204	0.8	0.5	7.659	A
AB-C	106	27			106				
D-ABC	0	0	433	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	110	28			110				
C-B	0	0			0				
CD-A	110	28			110				
CD-B	0	0	562	0.000	0	0.0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	574	0.008	5	0.0	0.0	6.324	A
B-A	97	24	467	0.207	97	0.3	0.3	9.745	A
A-B	0	0			0				
A-C	123	31			123				
A-D	131	33			131				
AB-CD	163	41	663	0.245	163	0.5	0.4	7.219	A
AB-C	96	24			96				
D-ABC	0	0	444	0.000	0	0.0	0.0	0.000	A

C-D	23	6			23				
C-A	92	23			92				
C-B	0	0			0				
CD-A	92	23			92				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.26	0.00	0.00	0.26	0.26			N/A	N/A
AB-CD	0.38	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.34	0.00	0.00	0.34	0.34			N/A	N/A
AB-CD	0.51	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.48	0.03	0.26	0.48	0.49			N/A	N/A
AB-CD	0.75	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.48	0.03	0.30	1.34	2.14			N/A	N/A
AB-CD	0.75	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.35	0.00	0.00	0.35	0.35			N/A	N/A
AB-CD	0.53	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.26	0.00	0.00	0.26	0.26			N/A	N/A
AB-CD	0.39	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	2.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	123	100.000
B - A12 Off Slip SB		ONE HOUR	✓	55	100.000
C - B1078 South East		ONE HOUR	✓	61	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	33	90
	B - A12 Off Slip SB	54	0	1	0
	C - B1078 South East	34	0	0	28
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	3	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	5.82	0.0	0.5	A	0.92	1
B-A	0.12	8.04	0.1	0.5	A	49	74
A-B						0	0
A-C						30	45
A-D						83	124
AB-CD	0.18	7.37	0.2	~1	A	87	131
AB-C						26	39
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						25	38
C-A						31	46
C-B						0	0
CD-A						31	46
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	0.75	0.19	637	0.001	0.75	0.0	0.0	5.655	A
B-A	40	10	519	0.078	40	0.0	0.1	7.518	A
A-B	0	0			0				
A-C	24	6			24				
A-D	68	17			68				
AB-CD	71	18	591	0.120	70	0.0	0.1	6.912	A
AB-C	22	6			22				
D-ABC	0	0	477	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	25	6			25				
C-B	0	0			0				
CD-A	25	6			25				
CD-B	0	0	610	0.000	0	0.0	0.0	0.000	A

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	630	0.001	0.90	0.0	0.0	5.722	A
B-A	48	12	513	0.094	48	0.1	0.1	7.735	A
A-B	0	0			0				
A-C	29	7			29				
A-D	81	20			81				
AB-CD	85	21	592	0.144	85	0.1	0.2	7.101	A
AB-C	26	6			26				
D-ABC	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	8			30				
C-B	0	0			0				
CD-A	30	8			30				
CD-B	0	0	606	0.000	0	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	620	0.002	1	0.0	0.0	5.819	A
B-A	59	15	506	0.117	59	0.1	0.1	8.042	A
A-B	0	0			0				
A-C	36	9			36				
A-D	99	25			99				
AB-CD	106	26	594	0.178	106	0.2	0.2	7.370	A
AB-C	30	8			30				
D-ABC	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	37	9			37				
C-B	0	0			0				
CD-A	37	9			37				
CD-B	0	0	600	0.000	0	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	620	0.002	1	0.0	0.0	5.819	A
B-A	59	15	506	0.117	59	0.1	0.1	8.045	A
A-B	0	0			0				
A-C	36	9			36				
A-D	99	25			99				
AB-CD	106	26	594	0.178	106	0.2	0.2	7.374	A
AB-C	30	8			30				
D-ABC	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	37	9			37				
C-B	0	0			0				
CD-A	37	9			37				
CD-B	0	0	600	0.000	0	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	630	0.001	0.90	0.0	0.0	5.723	A
B-A	48	12	513	0.094	48	0.1	0.1	7.741	A
A-B	0	0			0				
A-C	29	7			29				
A-D	81	20			81				
AB-CD	85	21	592	0.144	86	0.2	0.2	7.111	A
AB-C	26	6			26				
D-ABC	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	8			30				
C-B	0	0			0				
CD-A	30	8			30				
CD-B	0	0	606	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	637	0.001	0.75	0.0	0.0	5.656	A
B-A	40	10	519	0.078	40	0.1	0.1	7.532	A
A-B	0	0			0				
A-C	24	6			24				
A-D	68	17			68				
AB-CD	71	18	591	0.120	71	0.2	0.1	6.933	A
AB-C	22	6			22				
D-ABC	0	0	477	0.000	0	0.0	0.0	0.000	A

C-D	21	5			21				
C-A	25	6			25				
C-B	0	0			0				
CD-A	25	6			25				
CD-B	0	0	610	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-CD	0.14	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.23	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.23	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-CD	0.14	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	5.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	322	100.000
B - A12 Off Slip SB		ONE HOUR	✓	154	100.000
C - B1078 South East		ONE HOUR	✓	145	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	72	251
	B - A12 Off Slip SB	147	0	7	0
	C - B1078 South East	89	0	0	56
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	3
	B - A12 Off Slip SB	3	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.02	7.22	0.0	0.5	A	6	10
B-A	0.36	12.62	0.6	2.6	B	135	202
A-B						0	0
A-C						66	98
A-D						230	345
AB-CD	0.52	11.95	1.2	?	B	262	393
AB-C						40	61
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						52	77
C-A						81	122
C-B						0	0
CD-A						81	122
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	571	0.009	5	0.0	0.0	6.361	A
B-A	110	28	478	0.231	109	0.0	0.3	9.723	A
A-B	0	0			0				
A-C	54	13			54				
A-D	189	47			189				
AB-CD	209	52	615	0.340	207	0.0	0.5	8.783	A
AB-C	39	10			39				
D-ABC	0	0	442	0.000	0	0.0	0.0	0.000	A
C-D	42	11			42				
C-A	67	17			67				
C-B	0	0			0				
CD-A	67	17			67				
CD-B	0	0	576	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	546	0.012	6	0.0	0.0	6.669	A
B-A	132	33	465	0.284	132	0.3	0.4	10.780	B
A-B	0	0			0				
A-C	64	16			64				
A-D	225	56			225				
AB-CD	255	64	618	0.412	254	0.5	0.7	9.870	A
AB-C	41	10			41				
D-ABC	0	0	430	0.000	0	0.0	0.0	0.000	A
C-D	51	13			51				
C-A	80	20			80				
C-B	0	0			0				
CD-A	80	20			80				
CD-B	0	0	565	0.000	0	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	507	0.015	8	0.0	0.0	7.208	A
B-A	162	40	447	0.362	161	0.4	0.6	12.561	B
A-B	0	0			0				
A-C	79	20			79				
A-D	276	69			276				
AB-CD	321	80	623	0.516	320	0.7	1.1	11.828	B
AB-C	42	10			42				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	62	15			62				
C-A	98	24			98				
C-B	0	0			0				
CD-A	98	24			98				
CD-B	0	0	549	0.000	0	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	507	0.015	8	0.0	0.0	7.215	A
B-A	162	40	447	0.362	162	0.6	0.6	12.617	B
A-B	0	0			0				
A-C	79	20			79				
A-D	276	69			276				
AB-CD	321	80	623	0.516	321	1.1	1.1	11.949	B
AB-C	41	10			41				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	62	15			62				
C-A	98	24			98				
C-B	0	0			0				
CD-A	98	24			98				
CD-B	0	0	549	0.000	0	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	545	0.012	6	0.0	0.0	6.677	A
B-A	132	33	465	0.284	133	0.6	0.4	10.845	B
A-B	0	0			0				
A-C	64	16			64				
A-D	225	56			225				
AB-CD	255	64	619	0.412	257	1.1	0.8	10.007	B
AB-C	41	10			41				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	51	13			51				
C-A	80	20			80				
C-B	0	0			0				
CD-A	80	20			80				
CD-B	0	0	565	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	570	0.009	5	0.0	0.0	6.373	A
B-A	110	28	478	0.231	111	0.4	0.3	9.806	A
A-B	0	0			0				
A-C	54	13			54				
A-D	189	47			189				
AB-CD	209	52	615	0.340	210	0.8	0.6	8.918	A
AB-C	39	10			39				
D-ABC	0	0	441	0.000	0	0.0	0.0	0.000	A

C-D	42	11			42				
C-A	67	17			67				
C-B	0	0			0				
CD-A	67	17			67				
CD-B	0	0	576	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
AB-CD	0.54	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.39	0.00	0.00	0.39	0.39			N/A	N/A
AB-CD	0.74	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.55	0.03	0.26	0.55	0.55			N/A	N/A
AB-CD	1.13	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.56	0.03	0.30	1.32	2.62			N/A	N/A
AB-CD	1.15	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.40	0.00	0.00	0.40	0.40			N/A	N/A
AB-CD	0.78	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.30	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.56	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	10.25	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	508	100.000
B - A12 Off Slip SB		ONE HOUR	✓	200	100.000
C - B1078 South East		ONE HOUR	✓	216	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	166	343
	B - A12 Off Slip SB	175	0	25	0
	C - B1078 South East	153	0	0	62
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	3	0	4	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.07	9.92	0.1	0.5	A	23	34
B-A	0.50	18.87	1.0	4.1	C	161	241
A-B						0	0
A-C						152	228
A-D						315	472
AB-CD	0.81	27.33	4.6	?	D	434	650
AB-C						56	84
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						57	86
C-A						141	211
C-B						0	0
CD-A						141	211
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	19	5	500	0.038	19	0.0	0.0	7.484	A
B-A	132	33	435	0.304	130	0.0	0.4	11.755	B
A-B	0	0			0				
A-C	125	31			125				
A-D	258	65			258				
AB-CD	331	83	649	0.510	327	0.0	1.2	11.055	B
AB-C	70	18			70				
D-ABC	0	0	409	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	115	29			115				
C-B	0	0			0				
CD-A	115	29			115				
CD-B	0	0	542	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	459	0.049	22	0.0	0.1	8.238	A
B-A	158	39	413	0.381	157	0.4	0.6	13.996	B
A-B	0	0			0				
A-C	149	37			149				
A-D	308	77			308				
AB-CD	417	104	663	0.629	414	1.2	1.9	14.440	B
AB-C	62	16			62				
D-ABC	0	0	389	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	138	34			138				
C-B	0	0			0				
CD-A	138	34			138				
CD-B	0	0	525	0.000	0	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	392	0.070	27	0.1	0.1	9.870	A
B-A	193	48	384	0.503	192	0.6	1.0	18.601	C
A-B	0	0			0				
A-C	182	46			182				
A-D	377	94			377				
AB-CD	548	137	682	0.804	539	1.9	4.3	24.498	C
AB-C	39	10			39				
D-ABC	0	0	361	0.000	0	0.0	0.0	0.000	A
C-D	69	17			69				
C-A	169	42			169				
C-B	0	0			0				
CD-A	169	42			169				
CD-B	0	0	500	0.000	0	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	390	0.071	28	0.1	0.1	9.920	A
B-A	193	48	384	0.503	193	1.0	1.0	18.869	C
A-B	0	0			0				
A-C	182	46			182				
A-D	377	94			377				
AB-CD	551	138	684	0.806	550	4.3	4.6	27.334	D
AB-C	36	9			36				
D-ABC	0	0	359	0.000	0	0.0	0.0	0.000	A
C-D	69	17			69				
C-A	169	42			169				
C-B	0	0			0				
CD-A	169	42			169				
CD-B	0	0	500	0.000	0	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	458	0.049	23	0.1	0.1	8.277	A
B-A	158	39	413	0.381	159	1.0	0.6	14.236	B
A-B	0	0			0				
A-C	149	37			149				
A-D	308	77			308				
AB-CD	421	105	666	0.632	430	4.6	2.1	16.034	C
AB-C	59	15			59				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	138	34			138				
C-B	0	0			0				
CD-A	138	34			138				
CD-B	0	0	525	0.000	0	0.0	0.0	0.000	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	19	5	498	0.038	19	0.1	0.0	7.514	A
B-A	132	33	435	0.304	133	0.6	0.4	11.947	B
A-B	0	0			0				
A-C	125	31			125				
A-D	258	65			258				
AB-CD	333	83	651	0.512	337	2.1	1.3	11.633	B
AB-C	68	17			68				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A

C-D	47	12			47				
C-A	115	29			115				
C-B	0	0			0				
CD-A	115	29			115				
CD-B	0	0	542	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.43	0.00	0.00	0.43	0.43			N/A	N/A
AB-CD	1.18	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.60	0.55	1.00	1.40	1.45			N/A	N/A
AB-CD	1.91	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.97	0.03	0.27	0.97	1.60			N/A	N/A
AB-CD	4.28	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.99	0.03	0.29	1.22	4.11			N/A	N/A
AB-CD	4.60	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.63	0.06	0.63	1.37	1.46			N/A	N/A
AB-CD	2.12	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.44	0.04	0.38	1.23	1.38			N/A	N/A
AB-CD	1.25	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	293	100.000
B - A12 Off Slip SB		ONE HOUR	✓	152	100.000
C - B1078 South East		ONE HOUR	✓	159	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	123	170
	B - A12 Off Slip SB	143	0	9	0
	C - B1078 South East	106	0	0	53
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	6
	B - A12 Off Slip SB	5	0	33	0
	C - B1078 South East	2	0	0	11
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.03	9.69	0.0	0.5	A	8	12
B-A	0.36	12.60	0.5	2.6	B	131	197
A-B						0	0
A-C						113	170
A-D						156	233
AB-CD	0.38	8.96	0.7	~1	A	194	291
AB-C						83	124
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						48	73
C-A						97	146
C-B						0	0
CD-A						97	146
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	7	2	430	0.016	7	0.0	0.0	8.495	A
B-A	108	27	473	0.228	107	0.0	0.3	9.768	A
A-B	0	0			0				
A-C	93	23			93				
A-D	128	32			128				
AB-CD	152	38	623	0.244	150	0.0	0.4	7.596	A
AB-C	75	19			75				
D-ABC	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	80	20			80				
C-B	0	0			0				
CD-A	80	20			80				
CD-B	0	0	581	0.000	0	0.0	0.0	0.000	A

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	411	0.020	8	0.0	0.0	8.925	A
B-A	129	32	460	0.280	128	0.3	0.4	10.828	B
A-B	0	0			0				
A-C	111	28			111				
A-D	152	38			152				
AB-CD	188	47	632	0.297	188	0.4	0.5	8.102	A
AB-C	83	21			83				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	95	24			95				
C-B	0	0			0				
CD-A	95	24			95				
CD-B	0	0	570	0.000	0	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	382	0.026	10	0.0	0.0	9.677	A
B-A	158	39	443	0.356	157	0.4	0.5	12.548	B
A-B	0	0			0				
A-C	136	34			136				
A-D	187	47			187				
AB-CD	242	60	644	0.375	241	0.5	0.7	8.929	A
AB-C	91	23			91				
D-ABC	0	0	422	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	117	29			117				
C-B	0	0			0				
CD-A	117	29			117				
CD-B	0	0	557	0.000	0	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	381	0.026	10	0.0	0.0	9.687	A
B-A	158	39	443	0.356	158	0.5	0.5	12.603	B
A-B	0	0			0				
A-C	136	34			136				
A-D	187	47			187				
AB-CD	242	60	644	0.375	242	0.7	0.7	8.961	A
AB-C	90	23			90				
D-ABC	0	0	422	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	117	29			117				
C-B	0	0			0				
CD-A	117	29			117				
CD-B	0	0	557	0.000	0	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	411	0.020	8	0.0	0.0	8.938	A
B-A	129	32	460	0.280	129	0.5	0.4	10.894	B
A-B	0	0			0				
A-C	111	28			111				
A-D	152	38			152				
AB-CD	188	47	632	0.298	189	0.7	0.5	8.140	A
AB-C	83	21			83				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	95	24			95				
C-B	0	0			0				
CD-A	95	24			95				
CD-B	0	0	570	0.000	0	0.0	0.0	0.000	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	430	0.016	7	0.0	0.0	8.513	A
B-A	108	27	473	0.228	108	0.4	0.3	9.881	A
A-B	0	0			0				
A-C	93	23			93				
A-D	128	32			128				
AB-CD	152	38	624	0.244	153	0.5	0.4	7.653	A
AB-C	75	19			75				
D-ABC	0	0	447	0.000	0	0.0	0.0	0.000	A

C-D	40	10			40				
C-A	80	20			80				
C-B	0	0			0				
CD-A	80	20			80				
CD-B	0	0	581	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.29	0.00	0.00	0.29	0.29			N/A	N/A
AB-CD	0.36	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.38	0.00	0.00	0.38	0.38			N/A	N/A
AB-CD	0.49	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.54	0.03	0.26	0.54	0.54			N/A	N/A
AB-CD	0.70	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.55	0.03	0.30	1.32	2.56			N/A	N/A
AB-CD	0.71	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.39	0.00	0.00	0.39	0.39			N/A	N/A
AB-CD	0.50	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.30	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.37	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	358	100.000
B - A12 Off Slip SB		ONE HOUR	✓	212	100.000
C - B1078 South East		ONE HOUR	✓	157	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	169	189
	B - A12 Off Slip SB	205	0	7	0
	C - B1078 South East	128	0	0	30
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	3
	B - A12 Off Slip SB	3	0	0	0
	C - B1078 South East	1	0	0	7
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.02	8.56	0.0	0.5	A	6	10
B-A	0.52	17.27	1.1	4.0	C	188	282
A-B						0	0
A-C						155	232
A-D						173	260
AB-CD	0.42	8.91	0.9	~1	A	230	345
AB-C						105	157
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						27	41
C-A						117	176
C-B						0	0
CD-A						117	176
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	539	0.010	5	0.0	0.0	6.750	A
B-A	154	39	470	0.328	152	0.0	0.5	11.270	B
A-B	0	0			0				
A-C	127	32			127				
A-D	142	36			142				
AB-CD	178	44	663	0.268	176	0.0	0.4	7.372	A
AB-C	97	24			97				
D-ABC	0	0	441	0.000	0	0.0	0.0	0.000	A
C-D	22	6			22				
C-A	96	24			96				
C-B	0	0			0				
CD-A	96	24			96				
CD-B	0	0	570	0.000	0	0.0	0.0	0.000	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	498	0.013	6	0.0	0.0	7.315	A
B-A	184	46	454	0.405	183	0.5	0.7	13.232	B
A-B	0	0			0				
A-C	152	38			152				
A-D	170	42			170				
AB-CD	222	56	676	0.328	221	0.4	0.6	7.921	A
AB-C	106	26			106				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	115	29			115				
C-B	0	0			0				
CD-A	115	29			115				
CD-B	0	0	558	0.000	0	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	430	0.018	8	0.0	0.0	8.520	A
B-A	225	56	433	0.520	224	0.7	1.0	17.038	C
A-B	0	0			0				
A-C	186	46			186				
A-D	208	52			208				
AB-CD	289	72	694	0.416	288	0.6	0.9	8.866	A
AB-C	112	28			112				
D-ABC	0	0	412	0.000	0	0.0	0.0	0.000	A
C-D	32	8			32				
C-A	141	35			141				
C-B	0	0			0				
CD-A	141	35			141				
CD-B	0	0	541	0.000	0	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	428	0.018	8	0.0	0.0	8.558	A
B-A	225	56	433	0.520	225	1.0	1.1	17.267	C
A-B	0	0			0				
A-C	186	46			186				
A-D	208	52			208				
AB-CD	289	72	695	0.417	289	0.9	0.9	8.910	A
AB-C	112	28			112				
D-ABC	0	0	412	0.000	0	0.0	0.0	0.000	A
C-D	32	8			32				
C-A	141	35			141				
C-B	0	0			0				
CD-A	141	35			141				
CD-B	0	0	541	0.000	0	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	496	0.013	6	0.0	0.0	7.350	A
B-A	184	46	454	0.405	185	1.1	0.7	13.449	B
A-B	0	0			0				
A-C	152	38			152				
A-D	170	42			170				
AB-CD	222	56	677	0.329	224	0.9	0.6	7.976	A
AB-C	105	26			105				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	115	29			115				
C-B	0	0			0				
CD-A	115	29			115				
CD-B	0	0	558	0.000	0	0.0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	537	0.010	5	0.0	0.0	6.777	A
B-A	154	39	470	0.328	155	0.7	0.5	11.462	B
A-B	0	0			0				
A-C	127	32			127				
A-D	142	36			142				
AB-CD	178	45	663	0.269	179	0.6	0.4	7.443	A
AB-C	96	24			96				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A

C-D	22	6			22				
C-A	96	24			96				
C-B	0	0			0				
CD-A	96	24			96				
CD-B	0	0	570	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.48	0.00	0.00	0.48	0.48			N/A	N/A
AB-CD	0.43	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.66	0.25	0.94	1.39	1.44			N/A	N/A
AB-CD	0.58	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	1.04	0.03	0.27	1.04	1.78			N/A	N/A
AB-CD	0.87	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	1.06	0.03	0.28	1.06	3.95			N/A	N/A
AB-CD	0.88	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.70	0.06	0.70	1.10	1.10			N/A	N/A
AB-CD	0.60	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.50	0.04	0.42	1.29	1.42			N/A	N/A
AB-CD	0.44	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	2.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	126	100.000
B - A12 Off Slip SB		ONE HOUR	✓	50	100.000
C - B1078 South East		ONE HOUR	✓	70	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	35	91
	B - A12 Off Slip SB	49	0	1	0
	C - B1078 South East	35	0	0	36
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	4	0	0	0
	C - B1078 South East	0	0	0	3
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	5.81	0.0	0.5	A	0.92	1
B-A	0.11	7.99	0.1	0.5	A	45	67
A-B						0	0
A-C						32	48
A-D						84	125
AB-CD	0.18	7.40	0.2	~1	A	89	133
AB-C						28	41
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						33	49
C-A						32	48
C-B						0	0
CD-A						32	48
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	0.75	0.19	638	0.001	0.75	0.0	0.0	5.649	A
B-A	37	9	516	0.071	36	0.0	0.1	7.494	A
A-B	0	0			0				
A-C	26	6			26				
A-D	69	17			69				
AB-CD	72	18	591	0.122	71	0.0	0.1	6.925	A
AB-C	23	6			23				
D-ABC	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	26	7			26				
C-B	0	0			0				
CD-A	26	7			26				
CD-B	0	0	610	0.000	0	0.0	0.0	0.000	A

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	631	0.001	0.90	0.0	0.0	5.715	A
B-A	44	11	511	0.085	44	0.1	0.1	7.700	A
A-B	0	0			0				
A-C	31	8			31				
A-D	82	20			82				
AB-CD	87	22	592	0.146	86	0.1	0.2	7.120	A
AB-C	27	7			27				
D-ABC	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	32	8			32				
C-A	31	8			31				
C-B	0	0			0				
CD-A	31	8			31				
CD-B	0	0	605	0.000	0	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	621	0.002	1	0.0	0.0	5.808	A
B-A	53	13	504	0.106	53	0.1	0.1	7.989	A
A-B	0	0			0				
A-C	38	9			38				
A-D	100	25			100				
AB-CD	107	27	594	0.181	107	0.2	0.2	7.396	A
AB-C	32	8			32				
D-ABC	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	38	10			38				
C-B	0	0			0				
CD-A	38	10			38				
CD-B	0	0	599	0.000	0	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	621	0.002	1	0.0	0.0	5.809	A
B-A	53	13	504	0.106	53	0.1	0.1	7.992	A
A-B	0	0			0				
A-C	38	9			38				
A-D	100	25			100				
AB-CD	107	27	594	0.181	107	0.2	0.2	7.404	A
AB-C	32	8			32				
D-ABC	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	38	10			38				
C-B	0	0			0				
CD-A	38	10			38				
CD-B	0	0	599	0.000	0	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	631	0.001	0.90	0.0	0.0	5.717	A
B-A	44	11	511	0.085	44	0.1	0.1	7.706	A
A-B	0	0			0				
A-C	31	8			31				
A-D	82	20			82				
AB-CD	87	22	592	0.146	87	0.2	0.2	7.129	A
AB-C	27	7			27				
D-ABC	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	32	8			32				
C-A	31	8			31				
C-B	0	0			0				
CD-A	31	8			31				
CD-B	0	0	605	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	638	0.001	0.75	0.0	0.0	5.652	A
B-A	37	9	516	0.071	37	0.1	0.1	7.505	A
A-B	0	0			0				
A-C	26	6			26				
A-D	69	17			69				
AB-CD	72	18	591	0.122	72	0.2	0.1	6.944	A
AB-C	23	6			23				
D-ABC	0	0	476	0.000	0	0.0	0.0	0.000	A

C-D	27	7			27				
C-A	26	7			26				
C-B	0	0			0				
CD-A	26	7			26				
CD-B	0	0	610	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-CD	0.14	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.03	0.26	0.47	0.49			N/A	N/A
AB-CD	0.23	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.23	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-CD	0.15	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	328	100.000
B - A12 Off Slip SB		ONE HOUR	✓	133	100.000
C - B1078 South East		ONE HOUR	✓	157	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	77	252
	B - A12 Off Slip SB	126	0	7	0
	C - B1078 South East	91	0	0	66
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	3
	B - A12 Off Slip SB	3	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.00	0.0	0.5	A	6	10
B-A	0.31	11.69	0.4	1.9	B	115	173
A-B						0	0
A-C						70	105
A-D						231	347
AB-CD	0.52	12.08	1.2	?	B	265	398
AB-C						43	64
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						61	91
C-A						83	125
C-B						0	0
CD-A						83	125
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	578	0.009	5	0.0	0.0	6.288	A
B-A	95	24	479	0.198	94	0.0	0.2	9.330	A
A-B	0	0			0				
A-C	58	14			58				
A-D	190	47			190				
AB-CD	211	53	616	0.343	209	0.0	0.6	8.812	A
AB-C	41	10			41				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A
C-D	50	12			50				
C-A	68	17			68				
C-B	0	0			0				
CD-A	68	17			68				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	556	0.011	6	0.0	0.0	6.552	A
B-A	113	28	465	0.243	113	0.2	0.3	10.210	B
A-B	0	0			0				
A-C	69	17			69				
A-D	226	57			226				
AB-CD	258	64	619	0.417	257	0.6	0.8	9.927	A
AB-C	44	11			44				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	81	20			81				
C-B	0	0			0				
CD-A	81	20			81				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	522	0.015	8	0.0	0.0	6.994	A
B-A	138	35	446	0.310	138	0.3	0.4	11.652	B
A-B	0	0			0				
A-C	84	21			84				
A-D	277	69			277				
AB-CD	326	81	624	0.522	324	0.8	1.2	11.955	B
AB-C	44	11			44				
D-ABC	0	0	411	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	100	25			100				
C-B	0	0			0				
CD-A	100	25			100				
CD-B	0	0	548	0.000	0	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	522	0.015	8	0.0	0.0	6.998	A
B-A	138	35	446	0.310	138	0.4	0.4	11.689	B
A-B	0	0			0				
A-C	84	21			84				
A-D	277	69			277				
AB-CD	326	81	624	0.522	326	1.2	1.2	12.084	B
AB-C	43	11			43				
D-ABC	0	0	411	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	100	25			100				
C-B	0	0			0				
CD-A	100	25			100				
CD-B	0	0	548	0.000	0	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	555	0.011	6	0.0	0.0	6.560	A
B-A	113	28	465	0.243	113	0.4	0.3	10.254	B
A-B	0	0			0				
A-C	69	17			69				
A-D	226	57			226				
AB-CD	258	65	620	0.417	260	1.2	0.8	10.071	B
AB-C	43	11			43				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	81	20			81				
C-B	0	0			0				
CD-A	81	20			81				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	577	0.009	5	0.0	0.0	6.295	A
B-A	95	24	479	0.198	95	0.3	0.2	9.391	A
A-B	0	0			0				
A-C	58	14			58				
A-D	190	47			190				
AB-CD	211	53	616	0.343	212	0.8	0.6	8.952	A
AB-C	41	10			41				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A

C-D	50	12			50				
C-A	68	17			68				
C-B	0	0			0				
CD-A	68	17			68				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.24	0.00	0.00	0.24	0.24			N/A	N/A
AB-CD	0.55	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
AB-CD	0.76	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.44	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	1.17	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.45	0.03	0.30	1.33	1.92			N/A	N/A
AB-CD	1.19	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.33	0.00	0.00	0.33	0.33			N/A	N/A
AB-CD	0.79	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.25	0.00	0.00	0.25	0.25			N/A	N/A
AB-CD	0.57	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	10.45	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	518	100.000
B - A12 Off Slip SB		ONE HOUR	✓	158	100.000
C - B1078 South East		ONE HOUR	✓	228	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	172	347
	B - A12 Off Slip SB	133	0	25	0
	C - B1078 South East	155	0	0	72
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	5	0	4	0
	C - B1078 South East	4	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.06	8.90	0.1	0.5	A	23	34
B-A	0.39	15.80	0.6	3.0	C	122	184
A-B						0	0
A-C						157	236
A-D						318	477
AB-CD	0.82	29.71	5.1	?	D	444	665
AB-C						55	82
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						66	100
C-A						143	214
C-B						0	0
CD-A						143	214
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	19	5	515	0.037	19	0.0	0.0	7.258	A
B-A	100	25	426	0.236	99	0.0	0.3	10.985	B
A-B	0	0			0				
A-C	129	32			129				
A-D	261	65			261				
AB-CD	338	84	651	0.519	333	0.0	1.2	11.214	B
AB-C	71	18			71				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-D	55	14			55				
C-A	117	29			117				
C-B	0	0			0				
CD-A	117	29			117				
CD-B	0	0	540	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	483	0.047	22	0.0	0.0	7.820	A
B-A	120	30	404	0.297	119	0.3	0.4	12.617	B
A-B	0	0			0				
A-C	154	39			154				
A-D	312	78			312				
AB-CD	426	107	665	0.641	423	1.2	2.0	14.843	B
AB-C	62	16			62				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-D	65	16			65				
C-A	140	35			140				
C-B	0	0			0				
CD-A	140	35			140				
CD-B	0	0	523	0.000	0	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	433	0.064	27	0.0	0.1	8.878	A
B-A	147	37	375	0.392	146	0.4	0.6	15.687	C
A-B	0	0			0				
A-C	189	47			189				
A-D	382	95			382				
AB-CD	562	140	684	0.821	551	2.0	4.7	26.111	D
AB-C	36	9			36				
D-ABC	0	0	358	0.000	0	0.0	0.0	0.000	A
C-D	80	20			80				
C-A	171	43			171				
C-B	0	0			0				
CD-A	171	43			171				
CD-B	0	0	498	0.000	0	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	432	0.064	28	0.1	0.1	8.895	A
B-A	147	37	375	0.392	147	0.6	0.6	15.801	C
A-B	0	0			0				
A-C	189	47			189				
A-D	382	95			382				
AB-CD	565	141	687	0.823	564	4.7	5.1	29.709	D
AB-C	33	8			33				
D-ABC	0	0	355	0.000	0	0.0	0.0	0.000	A
C-D	80	20			80				
C-A	171	43			171				
C-B	0	0			0				
CD-A	171	43			171				
CD-B	0	0	498	0.000	0	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	482	0.047	23	0.1	0.0	7.837	A
B-A	120	30	404	0.297	121	0.6	0.4	12.733	B
A-B	0	0			0				
A-C	154	39			154				
A-D	312	78			312				
AB-CD	430	108	668	0.644	442	5.1	2.3	16.771	C
AB-C	58	15			58				
D-ABC	0	0	384	0.000	0	0.0	0.0	0.000	A
C-D	65	16			65				
C-A	140	35			140				
C-B	0	0			0				
CD-A	140	35			140				
CD-B	0	0	523	0.000	0	0.0	0.0	0.000	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	19	5	514	0.037	19	0.0	0.0	7.275	A
B-A	100	25	426	0.236	101	0.4	0.3	11.099	B
A-B	0	0			0				
A-C	129	32			129				
A-D	261	65			261				
AB-CD	340	85	652	0.521	344	2.3	1.3	11.845	B
AB-C	69	17			69				
D-ABC	0	0	405	0.000	0	0.0	0.0	0.000	A

C-D	55	14			55				
C-A	117	29			117				
C-B	0	0			0				
CD-A	117	29			117				
CD-B	0	0	540	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
AB-CD	1.22	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.41	0.00	0.00	0.41	0.41			N/A	N/A
AB-CD	2.01	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.63	0.03	0.26	0.63	0.63			N/A	N/A
AB-CD	4.69	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.64	0.03	0.30	1.37	2.96			N/A	N/A
AB-CD	5.10	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.43	0.03	0.33	1.09	1.29			N/A	N/A
AB-CD	2.25	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.31	0.03	0.26	0.47	0.49			N/A	N/A
AB-CD	1.31	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	330	100.000
B - A12 Off Slip SB		ONE HOUR	✓	155	100.000
C - B1078 South East		ONE HOUR	✓	166	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	141	189
	B - A12 Off Slip SB	146	0	9	0
	C - B1078 South East	111	0	0	55
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	5
	B - A12 Off Slip SB	4	0	33	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.03	9.96	0.0	0.5	A	8	12
B-A	0.37	13.07	0.6	2.7	B	134	201
A-B						0	0
A-C						130	194
A-D						173	260
AB-CD	0.42	9.39	0.9	~1	A	222	333
AB-C						89	134
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						50	75
C-A						102	153
C-B						0	0
CD-A						102	153
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	7	2	424	0.016	7	0.0	0.0	8.617	A
B-A	110	28	470	0.234	109	0.0	0.3	9.950	A
A-B	0	0			0				
A-C	106	27			106				
A-D	142	35			142				
AB-CD	173	43	637	0.271	171	0.0	0.4	7.703	A
AB-C	82	21			82				
D-ABC	0	0	442	0.000	0	0.0	0.0	0.000	A
C-D	41	10			41				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	404	0.020	8	0.0	0.0	9.095	A
B-A	131	33	456	0.289	131	0.3	0.4	11.077	B
A-B	0	0			0				
A-C	127	32			127				
A-D	170	42			170				
AB-CD	215	54	647	0.331	214	0.4	0.6	8.310	A
AB-C	90	22			90				
D-ABC	0	0	431	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	100	25			100				
C-B	0	0			0				
CD-A	100	25			100				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	372	0.027	10	0.0	0.0	9.946	A
B-A	161	40	436	0.369	160	0.4	0.6	13.002	B
A-B	0	0			0				
A-C	155	39			155				
A-D	208	52			208				
AB-CD	277	69	662	0.419	276	0.6	0.9	9.346	A
AB-C	95	24			95				
D-ABC	0	0	415	0.000	0	0.0	0.0	0.000	A
C-D	60	15			60				
C-A	122	31			122				
C-B	0	0			0				
CD-A	122	31			122				
CD-B	0	0	547	0.000	0	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	371	0.027	10	0.0	0.0	9.959	A
B-A	161	40	436	0.369	161	0.6	0.6	13.066	B
A-B	0	0			0				
A-C	155	39			155				
A-D	208	52			208				
AB-CD	278	69	662	0.420	278	0.9	0.9	9.394	A
AB-C	95	24			95				
D-ABC	0	0	414	0.000	0	0.0	0.0	0.000	A
C-D	60	15			60				
C-A	122	31			122				
C-B	0	0			0				
CD-A	122	31			122				
CD-B	0	0	547	0.000	0	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	403	0.020	8	0.0	0.0	9.109	A
B-A	131	33	456	0.289	132	0.6	0.4	11.151	B
A-B	0	0			0				
A-C	127	32			127				
A-D	170	42			170				
AB-CD	215	54	648	0.332	216	0.9	0.6	8.367	A
AB-C	90	22			90				
D-ABC	0	0	430	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	100	25			100				
C-B	0	0			0				
CD-A	100	25			100				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	424	0.016	7	0.0	0.0	8.634	A
B-A	110	28	470	0.234	111	0.4	0.3	10.040	B
A-B	0	0			0				
A-C	106	27			106				
A-D	142	35			142				
AB-CD	173	43	637	0.271	174	0.6	0.4	7.779	A
AB-C	82	21			82				
D-ABC	0	0	442	0.000	0	0.0	0.0	0.000	A

C-D	41	10			41				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	574	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
AB-CD	0.43	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.40	0.00	0.00	0.40	0.40			N/A	N/A
AB-CD	0.58	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.57	0.03	0.26	0.57	0.57			N/A	N/A
AB-CD	0.85	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.58	0.03	0.29	1.31	2.70			N/A	N/A
AB-CD	0.86	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.41	0.03	0.29	0.69	1.10			N/A	N/A
AB-CD	0.60	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.31	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.44	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	348	100.000
B - A12 Off Slip SB		ONE HOUR	✓	142	100.000
C - B1078 South East		ONE HOUR	✓	177	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	170	178
	B - A12 Off Slip SB	136	0	6	0
	C - B1078 South East	128	0	0	50
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	1	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.21	0.0	0.5	A	6	8
B-A	0.35	12.93	0.5	2.5	B	124	187
A-B						0	0
A-C						156	233
A-D						163	245
AB-CD	0.39	8.60	0.8	~1	A	217	325
AB-C						108	162
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						45	68
C-A						117	176
C-B						0	0
CD-A						117	176
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	570	0.008	4	0.0	0.0	6.367	A
B-A	102	26	462	0.221	101	0.0	0.3	9.931	A
A-B	0	0			0				
A-C	128	32			128				
A-D	134	33			134				
AB-CD	167	42	662	0.253	166	0.0	0.4	7.237	A
AB-C	99	25			99				
D-ABC	0	0	441	0.000	0	0.0	0.0	0.000	A
C-D	37	9			37				
C-A	96	24			96				
C-B	0	0			0				
CD-A	96	24			96				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	545	0.010	5	0.0	0.0	6.672	A
B-A	122	30	448	0.272	122	0.3	0.4	11.021	B
A-B	0	0			0				
A-C	152	38			152				
A-D	160	40			160				
AB-CD	209	52	675	0.310	209	0.4	0.5	7.728	A
AB-C	109	27			109				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	45	11			45				
C-A	115	29			115				
C-B	0	0			0				
CD-A	115	29			115				
CD-B	0	0	560	0.000	0	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	506	0.013	7	0.0	0.0	7.203	A
B-A	149	37	428	0.349	149	0.4	0.5	12.870	B
A-B	0	0			0				
A-C	187	47			187				
A-D	196	49			196				
AB-CD	273	68	692	0.394	272	0.5	0.8	8.566	A
AB-C	117	29			117				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	55	14			55				
C-A	141	35			141				
C-B	0	0			0				
CD-A	141	35			141				
CD-B	0	0	544	0.000	0	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	506	0.013	7	0.0	0.0	7.210	A
B-A	149	37	428	0.349	149	0.5	0.5	12.926	B
A-B	0	0			0				
A-C	187	47			187				
A-D	196	49			196				
AB-CD	273	68	692	0.394	273	0.8	0.8	8.604	A
AB-C	116	29			116				
D-ABC	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	55	14			55				
C-A	141	35			141				
C-B	0	0			0				
CD-A	141	35			141				
CD-B	0	0	544	0.000	0	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	544	0.010	5	0.0	0.0	6.683	A
B-A	122	30	448	0.272	123	0.5	0.4	11.085	B
A-B	0	0			0				
A-C	152	38			152				
A-D	160	40			160				
AB-CD	210	52	675	0.310	211	0.8	0.6	7.778	A
AB-C	108	27			108				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	45	11			45				
C-A	115	29			115				
C-B	0	0			0				
CD-A	115	29			115				
CD-B	0	0	560	0.000	0	0.0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	569	0.008	5	0.0	0.0	6.378	A
B-A	102	26	462	0.221	102	0.4	0.3	10.012	B
A-B	0	0			0				
A-C	128	32			128				
A-D	134	33			134				
AB-CD	168	42	663	0.253	168	0.6	0.4	7.299	A
AB-C	98	25			98				
D-ABC	0	0	441	0.000	0	0.0	0.0	0.000	A

C-D	37	9			37				
C-A	96	24			96				
C-B	0	0			0				
CD-A	96	24			96				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
AB-CD	0.40	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.37	0.00	0.00	0.37	0.37			N/A	N/A
AB-CD	0.54	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.53	0.03	0.26	0.53	0.53			N/A	N/A
AB-CD	0.79	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.53	0.03	0.30	1.34	2.47			N/A	N/A
AB-CD	0.80	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.38	0.00	0.00	0.38	0.38			N/A	N/A
AB-CD	0.56	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.29	0.00	0.00	0.29	0.29			N/A	N/A
AB-CD	0.41	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	128	100.000
B - A12 Off Slip SB		ONE HOUR	✓	59	100.000
C - B1078 South East		ONE HOUR	✓	68	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	34	94
	B - A12 Off Slip SB	58	0	1	0
	C - B1078 South East	35	0	0	34
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	12	0	0	0
	C - B1078 South East	0	0	0	3
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	5.87	0.0	0.5	A	0.92	1
B-A	0.14	8.92	0.2	0.5	A	53	79
A-B						0	0
A-C						31	46
A-D						86	130
AB-CD	0.19	7.44	0.2	~1	A	91	137
AB-C						27	40
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						31	46
C-A						32	48
C-B						0	0
CD-A						32	48
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	0.75	0.19	634	0.001	0.75	0.0	0.0	5.683	A
B-A	43	11	478	0.091	43	0.0	0.1	8.260	A
A-B	0	0			0				
A-C	25	6			25				
A-D	71	18			71				
AB-CD	74	19	591	0.125	74	0.0	0.1	6.946	A
AB-C	23	6			23				
D-ABC	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	26	7			26				
C-B	0	0			0				
CD-A	26	7			26				
CD-B	0	0	609	0.000	0	0.0	0.0	0.000	A

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	626	0.001	0.90	0.0	0.0	5.758	A
B-A	52	13	473	0.109	52	0.1	0.1	8.532	A
A-B	0	0			0				
A-C	30	8			30				
A-D	85	21			85				
AB-CD	89	22	593	0.151	89	0.1	0.2	7.149	A
AB-C	26	7			26				
D-ABC	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	31	8			31				
C-B	0	0			0				
CD-A	31	8			31				
CD-B	0	0	605	0.000	0	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	615	0.002	1	0.0	0.0	5.866	A
B-A	63	16	467	0.136	63	0.1	0.2	8.919	A
A-B	0	0			0				
A-C	37	9			37				
A-D	104	26			104				
AB-CD	111	28	594	0.186	111	0.2	0.2	7.438	A
AB-C	31	8			31				
D-ABC	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	37	9			37				
C-A	38	10			38				
C-B	0	0			0				
CD-A	38	10			38				
CD-B	0	0	599	0.000	0	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	615	0.002	1	0.0	0.0	5.867	A
B-A	63	16	467	0.136	63	0.2	0.2	8.925	A
A-B	0	0			0				
A-C	37	9			37				
A-D	104	26			104				
AB-CD	111	28	594	0.186	111	0.2	0.2	7.442	A
AB-C	31	8			31				
D-ABC	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	37	9			37				
C-A	38	10			38				
C-B	0	0			0				
CD-A	38	10			38				
CD-B	0	0	599	0.000	0	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	626	0.001	0.90	0.0	0.0	5.761	A
B-A	52	13	473	0.109	52	0.2	0.1	8.541	A
A-B	0	0			0				
A-C	30	8			30				
A-D	85	21			85				
AB-CD	89	22	593	0.151	90	0.2	0.2	7.159	A
AB-C	26	7			26				
D-ABC	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	31	8			31				
C-B	0	0			0				
CD-A	31	8			31				
CD-B	0	0	605	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	634	0.001	0.75	0.0	0.0	5.687	A
B-A	43	11	478	0.091	43	0.1	0.1	8.278	A
A-B	0	0			0				
A-C	25	6			25				
A-D	71	18			71				
AB-CD	74	19	591	0.125	74	0.2	0.2	6.968	A
AB-C	23	6			23				
D-ABC	0	0	476	0.000	0	0.0	0.0	0.000	A

C-D	25	6			25				
C-A	26	7			26				
C-B	0	0			0				
CD-A	26	7			26				
CD-B	0	0	609	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
AB-CD	0.15	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.16	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.24	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.16	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.24	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
AB-CD	0.19	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
AB-CD	0.15	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	5.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	347	100.000
B - A12 Off Slip SB		ONE HOUR	✓	141	100.000
C - B1078 South East		ONE HOUR	✓	157	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	77	271
	B - A12 Off Slip SB	134	0	7	0
	C - B1078 South East	91	0	0	66
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	2
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.02	7.21	0.0	0.5	A	6	10
B-A	0.34	12.75	0.5	2.4	B	123	184
A-B						0	0
A-C						70	105
A-D						249	373
AB-CD	0.56	13.12	1.4	?	B	285	428
AB-C						40	60
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						61	91
C-A						83	125
C-B						0	0
CD-A						83	125
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	570	0.009	5	0.0	0.0	6.374	A
B-A	101	25	462	0.218	100	0.0	0.3	9.892	A
A-B	0	0			0				
A-C	58	14			58				
A-D	204	51			204				
AB-CD	227	57	617	0.368	225	0.0	0.6	9.134	A
AB-C	40	10			40				
D-ABC	0	0	438	0.000	0	0.0	0.0	0.000	A
C-D	50	12			50				
C-A	68	17			68				
C-B	0	0			0				
CD-A	68	17			68				
CD-B	0	0	571	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	545	0.012	6	0.0	0.0	6.677	A
B-A	120	30	449	0.268	120	0.3	0.4	10.937	B
A-B	0	0			0				
A-C	69	17			69				
A-D	243	61			243				
AB-CD	277	69	620	0.447	276	0.6	0.9	10.451	B
AB-C	41	10			41				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	81	20			81				
C-B	0	0			0				
CD-A	81	20			81				
CD-B	0	0	559	0.000	0	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	508	0.015	8	0.0	0.0	7.199	A
B-A	147	37	430	0.343	147	0.4	0.5	12.695	B
A-B	0	0			0				
A-C	84	21			84				
A-D	298	75			298				
AB-CD	350	88	625	0.560	348	0.9	1.4	12.937	B
AB-C	40	10			40				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	100	25			100				
C-B	0	0			0				
CD-A	100	25			100				
CD-B	0	0	543	0.000	0	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	507	0.015	8	0.0	0.0	7.206	A
B-A	147	37	430	0.343	147	0.5	0.5	12.748	B
A-B	0	0			0				
A-C	84	21			84				
A-D	298	75			298				
AB-CD	350	88	625	0.560	350	1.4	1.4	13.120	B
AB-C	40	10			40				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	100	25			100				
C-B	0	0			0				
CD-A	100	25			100				
CD-B	0	0	543	0.000	0	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	545	0.012	6	0.0	0.0	6.687	A
B-A	120	30	449	0.268	121	0.5	0.4	11.001	B
A-B	0	0			0				
A-C	69	17			69				
A-D	243	61			243				
AB-CD	278	69	621	0.447	280	1.4	0.9	10.638	B
AB-C	41	10			41				
D-ABC	0	0	424	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	81	20			81				
C-B	0	0			0				
CD-A	81	20			81				
CD-B	0	0	559	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	569	0.009	5	0.0	0.0	6.385	A
B-A	101	25	462	0.218	101	0.4	0.3	9.972	A
A-B	0	0			0				
A-C	58	14			58				
A-D	204	51			204				
AB-CD	227	57	617	0.369	228	0.9	0.6	9.305	A
AB-C	39	10			39				
D-ABC	0	0	437	0.000	0	0.0	0.0	0.000	A

C-D	50	12			50				
C-A	68	17			68				
C-B	0	0			0				
CD-A	68	17			68				
CD-B	0	0	571	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.27	0.00	0.00	0.27	0.27			N/A	N/A
AB-CD	0.62	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.36	0.00	0.00	0.36	0.36			N/A	N/A
AB-CD	0.86	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.51	0.03	0.26	0.51	0.51			N/A	N/A
AB-CD	1.35	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.52	0.03	0.30	1.34	2.38			N/A	N/A
AB-CD	1.38	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.37	0.00	0.00	0.37	0.37			N/A	N/A
AB-CD	0.90	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
AB-CD	0.64	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	13.84	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	540	100.000
B - A12 Off Slip SB		ONE HOUR	✓	178	100.000
C - B1078 South East		ONE HOUR	✓	223	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	173	368
	B - A12 Off Slip SB	153	0	25	0
	C - B1078 South East	158	0	0	64
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	6	0	4	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.07	9.61	0.1	0.5	A	23	34
B-A	0.46	18.23	0.8	3.7	C	141	211
A-B						0	0
A-C						158	238
A-D						338	506
AB-CD	0.87	38.84	6.8	?	E	471	707
AB-C						48	71
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						59	89
C-A						145	218
C-B						0	0
CD-A						145	218
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	19	5	502	0.038	19	0.0	0.0	7.450	A
B-A	115	29	419	0.276	114	0.0	0.4	11.746	B
A-B	0	0			0				
A-C	130	32			130				
A-D	277	69			277				
AB-CD	358	90	653	0.549	353	0.0	1.4	11.839	B
AB-C	67	17			67				
D-ABC	0	0	403	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	119	30			119				
C-B	0	0			0				
CD-A	119	30			119				
CD-B	0	0	537	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	464	0.048	22	0.0	0.1	8.143	A
B-A	138	34	397	0.347	137	0.4	0.5	13.835	B
A-B	0	0			0				
A-C	155	39			155				
A-D	331	83			331				
AB-CD	452	113	668	0.677	448	1.4	2.3	16.322	C
AB-C	56	14			56				
D-ABC	0	0	382	0.000	0	0.0	0.0	0.000	A
C-D	58	14			58				
C-A	142	36			142				
C-B	0	0			0				
CD-A	142	36			142				
CD-B	0	0	518	0.000	0	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	403	0.068	27	0.1	0.1	9.573	A
B-A	169	42	366	0.461	168	0.5	0.8	18.132	C
A-B	0	0			0				
A-C	190	47			190				
A-D	405	101			405				
AB-CD	596	149	688	0.867	581	2.3	6.1	31.840	D
AB-C	26	7			26				
D-ABC	0	0	352	0.000	0	0.0	0.0	0.000	A
C-D	71	18			71				
C-A	174	44			174				
C-B	0	0			0				
CD-A	174	44			174				
CD-B	0	0	492	0.000	0	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	28	7	402	0.068	28	0.1	0.1	9.609	A
B-A	169	42	366	0.461	169	0.8	0.8	18.227	C
A-B	0	0			0				
A-C	190	47			190				
A-D	405	101			405				
AB-CD	601	150	691	0.870	598	6.1	6.8	38.838	E
AB-C	21	5			21				
D-ABC	0	0	349	0.000	0	0.0	0.0	0.000	A
C-D	71	18			71				
C-A	174	44			174				
C-B	0	0			0				
CD-A	174	44			174				
CD-B	0	0	492	0.000	0	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	22	6	463	0.049	23	0.1	0.1	8.176	A
B-A	138	34	397	0.347	139	0.8	0.5	14.026	B
A-B	0	0			0				
A-C	155	39			155				
A-D	331	83			331				
AB-CD	458	115	673	0.681	475	6.8	2.7	19.805	C
AB-C	50	13			50				
D-ABC	0	0	378	0.000	0	0.0	0.0	0.000	A
C-D	58	14			58				
C-A	142	36			142				
C-B	0	0			0				
CD-A	142	36			142				
CD-B	0	0	518	0.000	0	0.0	0.0	0.000	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	19	5	500	0.038	19	0.1	0.0	7.474	A
B-A	115	29	419	0.276	116	0.5	0.4	11.909	B
A-B	0	0			0				
A-C	130	32			130				
A-D	277	69			277				
AB-CD	361	90	655	0.551	366	2.7	1.5	12.693	B
AB-C	65	16			65				
D-ABC	0	0	402	0.000	0	0.0	0.0	0.000	A

C-D	49	12			49				
C-A	119	30			119				
C-B	0	0			0				
CD-A	119	30			119				
CD-B	0	0	537	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.37	0.00	0.00	0.37	0.37			N/A	N/A
AB-CD	1.37	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.52	0.52	1.00	1.40	1.45			N/A	N/A
AB-CD	2.34	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.83	0.03	0.27	0.83	1.06			N/A	N/A
AB-CD	6.06	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.84	0.03	0.29	1.29	3.70			N/A	N/A
AB-CD	6.84	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.54	0.05	0.53	1.31	1.41			N/A	N/A
AB-CD	2.69	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.39	0.03	0.33	1.10	1.30			N/A	N/A
AB-CD	1.47	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	5.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	388	100.000
B - A12 Off Slip SB		ONE HOUR	✓	174	100.000
C - B1078 South East		ONE HOUR	✓	166	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	135	253
	B - A12 Off Slip SB	165	0	9	0
	C - B1078 South East	112	0	0	54
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	4
	B - A12 Off Slip SB	6	0	33	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.03	10.94	0.0	0.5	B	8	12
B-A	0.44	15.52	0.8	3.3	C	152	227
A-B						0	0
A-C						124	186
A-D						232	348
AB-CD	0.55	12.20	1.4	?	B	294	440
AB-C						70	106
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						49	74
C-A						103	154
C-B						0	0
CD-A						103	154
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	7	2	408	0.017	7	0.0	0.0	8.962	A
B-A	124	31	451	0.276	123	0.0	0.4	10.929	B
A-B	0	0			0				
A-C	102	25			102				
A-D	190	48			190				
AB-CD	229	57	640	0.358	226	0.0	0.6	8.666	A
AB-C	70	17			70				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	564	0.000	0	0.0	0.0	0.000	A

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	382	0.021	8	0.0	0.0	9.626	A
B-A	149	37	435	0.341	148	0.4	0.5	12.506	B
A-B	0	0			0				
A-C	122	30			122				
A-D	227	57			227				
AB-CD	284	71	650	0.437	283	0.6	0.9	9.818	A
AB-C	72	18			72				
D-ABC	0	0	420	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	101	25			101				
C-B	0	0			0				
CD-A	101	25			101				
CD-B	0	0	551	0.000	0	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	340	0.029	10	0.0	0.0	10.911	B
B-A	182	45	414	0.440	181	0.5	0.8	15.390	C
A-B	0	0			0				
A-C	149	37			149				
A-D	278	70			278				
AB-CD	367	92	663	0.553	364	0.9	1.4	12.038	B
AB-C	70	18			70				
D-ABC	0	0	401	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	123	31			123				
C-B	0	0			0				
CD-A	123	31			123				
CD-B	0	0	533	0.000	0	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	10	2	339	0.029	10	0.0	0.0	10.941	B
B-A	182	45	414	0.440	182	0.8	0.8	15.517	C
A-B	0	0			0				
A-C	149	37			149				
A-D	278	70			278				
AB-CD	367	92	663	0.553	367	1.4	1.4	12.202	B
AB-C	70	17			70				
D-ABC	0	0	400	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	123	31			123				
C-B	0	0			0				
CD-A	123	31			123				
CD-B	0	0	533	0.000	0	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	381	0.021	8	0.0	0.0	9.655	A
B-A	149	37	435	0.341	150	0.8	0.5	12.641	B
A-B	0	0			0				
A-C	122	30			122				
A-D	227	57			227				
AB-CD	285	71	650	0.438	287	1.4	0.9	9.987	A
AB-C	72	18			72				
D-ABC	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	101	25			101				
C-B	0	0			0				
CD-A	101	25			101				
CD-B	0	0	551	0.000	0	0.0	0.0	0.000	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	407	0.017	7	0.0	0.0	8.989	A
B-A	124	31	451	0.276	125	0.5	0.4	11.065	B
A-B	0	0			0				
A-C	102	25			102				
A-D	190	48			190				
AB-CD	230	57	641	0.358	231	0.9	0.6	8.821	A
AB-C	69	17			69				
D-ABC	0	0	433	0.000	0	0.0	0.0	0.000	A

C-D	40	10			40				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	564	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.37	0.00	0.00	0.37	0.37			N/A	N/A
AB-CD	0.62	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.51	0.51	1.00	1.40	1.45			N/A	N/A
AB-CD	0.88	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.76	0.03	0.26	0.76	0.76			N/A	N/A
AB-CD	1.41	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.77	0.03	0.29	1.17	3.32			N/A	N/A
AB-CD	1.43	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.53	0.05	0.52	1.31	1.40			N/A	N/A
AB-CD	0.92	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.39	0.03	0.32	1.05	1.27			N/A	N/A
AB-CD	0.65	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	387	100.000
B - A12 Off Slip SB		ONE HOUR	✓	146	100.000
C - B1078 South East		ONE HOUR	✓	165	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	171	216
	B - A12 Off Slip SB	140	0	6	0
	C - B1078 South East	134	0	0	32
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	1	0	0	6
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.46	0.0	0.5	A	6	8
B-A	0.37	13.79	0.6	2.7	B	128	192
A-B						0	0
A-C						157	235
A-D						198	297
AB-CD	0.47	9.85	1.1	?	A	263	394
AB-C						97	146
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						29	43
C-A						123	184
C-B						0	0
CD-A						123	184
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	561	0.008	4	0.0	0.0	6.473	A
B-A	105	26	452	0.232	104	0.0	0.3	10.293	B
A-B	0	0			0				
A-C	128	32			128				
A-D	163	41			163				
AB-CD	203	51	667	0.305	201	0.0	0.5	7.711	A
AB-C	92	23			92				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-D	24	6			24				
C-A	101	25			101				
C-B	0	0			0				
CD-A	101	25			101				
CD-B	0	0	565	0.000	0	0.0	0.0	0.000	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	533	0.010	5	0.0	0.0	6.823	A
B-A	125	31	437	0.287	125	0.3	0.4	11.540	B
A-B	0	0			0				
A-C	153	38			153				
A-D	194	49			194				
AB-CD	254	63	679	0.374	253	0.5	0.7	8.445	A
AB-C	99	25			99				
D-ABC	0	0	423	0.000	0	0.0	0.0	0.000	A
C-D	28	7			28				
C-A	120	30			120				
C-B	0	0			0				
CD-A	120	30			120				
CD-B	0	0	552	0.000	0	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	490	0.013	7	0.0	0.0	7.448	A
B-A	154	38	415	0.371	153	0.4	0.6	13.717	B
A-B	0	0			0				
A-C	188	47			188				
A-D	238	59			238				
AB-CD	331	83	697	0.474	329	0.7	1.1	9.776	A
AB-C	102	25			102				
D-ABC	0	0	405	0.000	0	0.0	0.0	0.000	A
C-D	35	9			35				
C-A	147	37			147				
C-B	0	0			0				
CD-A	147	37			147				
CD-B	0	0	534	0.000	0	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	489	0.014	7	0.0	0.0	7.457	A
B-A	154	38	415	0.371	154	0.6	0.6	13.786	B
A-B	0	0			0				
A-C	188	47			188				
A-D	238	59			238				
AB-CD	331	83	698	0.474	331	1.1	1.1	9.853	A
AB-C	101	25			101				
D-ABC	0	0	404	0.000	0	0.0	0.0	0.000	A
C-D	35	9			35				
C-A	147	37			147				
C-B	0	0			0				
CD-A	147	37			147				
CD-B	0	0	534	0.000	0	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	532	0.010	5	0.0	0.0	6.835	A
B-A	125	31	437	0.287	126	0.6	0.4	11.621	B
A-B	0	0			0				
A-C	153	38			153				
A-D	194	49			194				
AB-CD	254	64	680	0.374	256	1.1	0.7	8.535	A
AB-C	99	25			99				
D-ABC	0	0	422	0.000	0	0.0	0.0	0.000	A
C-D	28	7			28				
C-A	120	30			120				
C-B	0	0			0				
CD-A	120	30			120				
CD-B	0	0	552	0.000	0	0.0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	560	0.008	5	0.0	0.0	6.484	A
B-A	105	26	452	0.232	106	0.4	0.3	10.387	B
A-B	0	0			0				
A-C	128	32			128				
A-D	163	41			163				
AB-CD	204	51	667	0.305	205	0.7	0.5	7.806	A
AB-C	92	23			92				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A

C-D	24	6			24				
C-A	101	25			101				
C-B	0	0			0				
CD-A	101	25			101				
CD-B	0	0	565	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
AB-CD	0.51	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.40	0.00	0.00	0.40	0.40			N/A	N/A
AB-CD	0.70	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.58	0.03	0.26	0.58	0.58			N/A	N/A
AB-CD	1.08	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.58	0.03	0.30	1.33	2.72			N/A	N/A
AB-CD	1.10	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.41	0.03	0.29	0.74	1.12			N/A	N/A
AB-CD	0.73	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.31	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.53	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	2.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	132	100.000
B - A12 Off Slip SB		ONE HOUR	✓	54	100.000
C - B1078 South East		ONE HOUR	✓	65	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	35	97
	B - A12 Off Slip SB	53	0	1	0
	C - B1078 South East	37	0	0	29
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	5.84	0.0	0.5	A	0.92	1
B-A	0.12	8.25	0.1	0.5	A	48	72
A-B						0	0
A-C						32	48
A-D						89	134
AB-CD	0.19	7.46	0.3	~1	A	94	142
AB-C						27	41
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						26	39
C-A						34	50
C-B						0	0
CD-A						34	50
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	0.75	0.19	636	0.001	0.75	0.0	0.0	5.669	A
B-A	40	10	507	0.078	39	0.0	0.1	7.690	A
A-B	0	0			0				
A-C	26	6			26				
A-D	73	18			73				
AB-CD	77	19	593	0.129	76	0.0	0.2	6.955	A
AB-C	23	6			23				
D-ABC	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	28	7			28				
C-B	0	0			0				
CD-A	28	7			28				
CD-B	0	0	609	0.000	0	0.0	0.0	0.000	A

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	628	0.001	0.90	0.0	0.0	5.740	A
B-A	47	12	502	0.094	47	0.1	0.1	7.920	A
A-B	0	0			0				
A-C	31	8			31				
A-D	87	22			87				
AB-CD	92	23	595	0.155	92	0.2	0.2	7.162	A
AB-C	27	7			27				
D-ABC	0	0	471	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				
C-B	0	0			0				
CD-A	33	8			33				
CD-B	0	0	604	0.000	0	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	617	0.002	1	0.0	0.0	5.842	A
B-A	58	14	494	0.117	58	0.1	0.1	8.246	A
A-B	0	0			0				
A-C	38	9			38				
A-D	107	27			107				
AB-CD	114	29	597	0.192	114	0.2	0.2	7.460	A
AB-C	32	8			32				
D-ABC	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	40	10			40				
C-B	0	0			0				
CD-A	40	10			40				
CD-B	0	0	598	0.000	0	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	617	0.002	1	0.0	0.0	5.842	A
B-A	58	14	494	0.117	58	0.1	0.1	8.249	A
A-B	0	0			0				
A-C	38	9			38				
A-D	107	27			107				
AB-CD	114	29	597	0.192	114	0.2	0.3	7.465	A
AB-C	32	8			32				
D-ABC	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	40	10			40				
C-B	0	0			0				
CD-A	40	10			40				
CD-B	0	0	598	0.000	0	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	628	0.001	0.90	0.0	0.0	5.743	A
B-A	47	12	502	0.094	47	0.1	0.1	7.926	A
A-B	0	0			0				
A-C	31	8			31				
A-D	87	22			87				
AB-CD	92	23	595	0.155	93	0.3	0.2	7.173	A
AB-C	27	7			27				
D-ABC	0	0	471	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				
C-B	0	0			0				
CD-A	33	8			33				
CD-B	0	0	604	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	635	0.001	0.75	0.0	0.0	5.671	A
B-A	40	10	507	0.078	40	0.1	0.1	7.705	A
A-B	0	0			0				
A-C	26	6			26				
A-D	73	18			73				
AB-CD	77	19	593	0.129	77	0.2	0.2	6.976	A
AB-C	23	6			23				
D-ABC	0	0	475	0.000	0	0.0	0.0	0.000	A

C-D	21	5			21				
C-A	28	7			28				
C-B	0	0			0				
CD-A	28	7			28				
CD-B	0	0	609	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-CD	0.15	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
AB-CD	0.19	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.25	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.25	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
AB-CD	0.20	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-CD	0.16	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	5.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	342	100.000
B - A12 Off Slip SB		ONE HOUR	✓	133	100.000
C - B1078 South East		ONE HOUR	✓	159	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	78	265
	B - A12 Off Slip SB	126	0	7	0
	C - B1078 South East	94	0	0	65
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	3
	B - A12 Off Slip SB	3	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.06	0.0	0.5	A	6	10
B-A	0.31	11.85	0.5	2.0	B	115	173
A-B						0	0
A-C						71	107
A-D						243	365
AB-CD	0.55	12.79	1.3	?	B	279	419
AB-C						41	62
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						60	90
C-A						86	129
C-B						0	0
CD-A						86	129
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	575	0.009	5	0.0	0.0	6.317	A
B-A	95	24	476	0.199	94	0.0	0.2	9.398	A
A-B	0	0			0				
A-C	58	15			58				
A-D	199	50			199				
AB-CD	222	56	617	0.361	220	0.0	0.6	9.030	A
AB-C	41	10			41				
D-ABC	0	0	438	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	70	18			70				
C-B	0	0			0				
CD-A	70	18			70				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	552	0.011	6	0.0	0.0	6.591	A
B-A	113	28	462	0.245	113	0.2	0.3	10.307	B
A-B	0	0			0				
A-C	70	17			70				
A-D	238	60			238				
AB-CD	272	68	620	0.438	271	0.6	0.8	10.284	B
AB-C	42	11			42				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	560	0.000	0	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	518	0.015	8	0.0	0.0	7.051	A
B-A	138	35	442	0.313	138	0.3	0.4	11.808	B
A-B	0	0			0				
A-C	85	21			85				
A-D	292	73			292				
AB-CD	343	86	625	0.549	341	0.8	1.3	12.625	B
AB-C	42	10			42				
D-ABC	0	0	408	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	103	26			103				
C-B	0	0			0				
CD-A	103	26			103				
CD-B	0	0	544	0.000	0	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	518	0.015	8	0.0	0.0	7.056	A
B-A	138	35	442	0.313	138	0.4	0.5	11.845	B
A-B	0	0			0				
A-C	85	21			85				
A-D	292	73			292				
AB-CD	343	86	625	0.549	343	1.3	1.3	12.790	B
AB-C	41	10			41				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	103	26			103				
C-B	0	0			0				
CD-A	103	26			103				
CD-B	0	0	544	0.000	0	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	552	0.011	6	0.0	0.0	6.600	A
B-A	113	28	462	0.245	114	0.5	0.3	10.355	B
A-B	0	0			0				
A-C	70	17			70				
A-D	238	60			238				
AB-CD	272	68	621	0.438	274	1.3	0.9	10.459	B
AB-C	42	11			42				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	560	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	574	0.009	5	0.0	0.0	6.324	A
B-A	95	24	476	0.199	95	0.3	0.3	9.462	A
A-B	0	0			0				
A-C	58	15			58				
A-D	199	50			199				
AB-CD	223	56	617	0.361	224	0.9	0.6	9.192	A
AB-C	40	10			40				
D-ABC	0	0	437	0.000	0	0.0	0.0	0.000	A

C-D	49	12			49				
C-A	70	18			70				
C-B	0	0			0				
CD-A	70	18			70				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.25	0.00	0.00	0.25	0.25			N/A	N/A
AB-CD	0.60	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
AB-CD	0.83	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.45	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	1.30	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.45	0.03	0.30	1.33	1.95			N/A	N/A
AB-CD	1.32	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.33	0.00	0.00	0.33	0.33			N/A	N/A
AB-CD	0.87	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.25	0.00	0.00	0.25	0.25			N/A	N/A
AB-CD	0.62	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	17.85	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	567	100.000
B - A12 Off Slip SB		ONE HOUR	✓	148	100.000
C - B1078 South East		ONE HOUR	✓	263	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	193	375
	B - A12 Off Slip SB	122	0	26	0
	C - B1078 South East	178	0	0	84
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	5	0	4	0
	C - B1078 South East	4	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.07	9.04	0.1	0.5	A	24	36
B-A	0.38	16.19	0.6	2.8	C	112	168
A-B						0	0
A-C						177	265
A-D						344	516
AB-CD	0.92	53.13	9.8	?	F	500	750
AB-C						45	67
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						78	116
C-A						164	245
C-B						0	0
CD-A						164	245
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	20	5	510	0.038	19	0.0	0.0	7.334	A
B-A	92	23	413	0.223	91	0.0	0.3	11.141	B
A-B	0	0			0				
A-C	145	36			145				
A-D	282	71			282				
AB-CD	376	94	659	0.571	370	0.0	1.5	12.288	B
AB-C	71	18			71				
D-ABC	0	0	397	0.000	0	0.0	0.0	0.000	A
C-D	64	16			64				
C-A	134	34			134				
C-B	0	0			0				
CD-A	134	34			134				
CD-B	0	0	532	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	23	6	478	0.049	23	0.0	0.1	7.918	A
B-A	110	28	390	0.282	110	0.3	0.4	12.839	B
A-B	0	0			0				
A-C	173	43			173				
A-D	337	84			337				
AB-CD	478	119	675	0.708	473	1.5	2.7	17.701	C
AB-C	56	14			56				
D-ABC	0	0	374	0.000	0	0.0	0.0	0.000	A
C-D	76	19			76				
C-A	160	40			160				
C-B	0	0			0				
CD-A	160	40			160				
CD-B	0	0	513	0.000	0	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	29	7	428	0.067	29	0.1	0.1	9.017	A
B-A	135	34	357	0.377	134	0.4	0.6	16.073	C
A-B	0	0			0				
A-C	212	53			212				
A-D	413	103			413				
AB-CD	636	159	697	0.912	614	2.7	8.1	39.223	E
AB-C	18	4			18				
D-ABC	0	0	341	0.000	0	0.0	0.0	0.000	A
C-D	93	23			93				
C-A	196	49			196				
C-B	0	0			0				
CD-A	196	49			196				
CD-B	0	0	486	0.000	0	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	29	7	427	0.067	29	0.1	0.1	9.037	A
B-A	135	34	357	0.377	135	0.6	0.6	16.189	C
A-B	0	0			0				
A-C	212	53			212				
A-D	413	103			413				
AB-CD	644	161	702	0.917	637	8.1	9.8	53.135	F
AB-C	9	2			9				
D-ABC	0	0	336	0.000	0	0.0	0.0	0.000	A
C-D	93	23			93				
C-A	196	49			196				
C-B	0	0			0				
CD-A	196	49			196				
CD-B	0	0	486	0.000	0	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	23	6	477	0.049	23	0.1	0.1	7.936	A
B-A	110	28	390	0.282	111	0.6	0.4	12.950	B
A-B	0	0			0				
A-C	173	43			173				
A-D	337	84			337				
AB-CD	487	122	683	0.714	513	9.8	3.2	24.544	C
AB-C	46	12			46				
D-ABC	0	0	367	0.000	0	0.0	0.0	0.000	A
C-D	76	19			76				
C-A	160	40			160				
C-B	0	0			0				
CD-A	160	40			160				
CD-B	0	0	513	0.000	0	0.0	0.0	0.000	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	20	5	509	0.038	20	0.1	0.0	7.354	A
B-A	92	23	413	0.223	93	0.4	0.3	11.251	B
A-B	0	0			0				
A-C	145	36			145				
A-D	282	71			282				
AB-CD	379	95	662	0.573	386	3.2	1.6	13.406	B
AB-C	67	17			67				
D-ABC	0	0	394	0.000	0	0.0	0.0	0.000	A

C-D	64	16			64				
C-A	134	34			134				
C-B	0	0			0				
CD-A	134	34			134				
CD-B	0	0	532	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
AB-CD	1.51	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.39	0.00	0.00	0.39	0.39			N/A	N/A
AB-CD	2.71	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.59	0.03	0.26	0.59	0.59			N/A	N/A
AB-CD	8.12	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.60	0.03	0.30	1.41	2.82			N/A	N/A
AB-CD	9.80	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.40	0.03	0.29	0.79	1.15			N/A	N/A
AB-CD	3.24	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.29	0.03	0.25	0.46	0.48			N/A	N/A
AB-CD	1.64	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	4.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	370	100.000
B - A12 Off Slip SB		ONE HOUR	✓	164	100.000
C - B1078 South East		ONE HOUR	✓	176	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	160	210
	B - A12 Off Slip SB	154	0	10	0
	C - B1078 South East	121	0	0	55
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	4
	B - A12 Off Slip SB	4	0	30	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.03	10.16	0.0	0.5	B	9	14
B-A	0.40	14.07	0.7	3.0	B	142	212
A-B						0	0
A-C						147	220
A-D						192	288
AB-CD	0.47	10.11	1.1	?	B	254	381
AB-C						94	141
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						50	75
C-A						111	167
C-B						0	0
CD-A						111	167
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	8	2	427	0.018	7	0.0	0.0	8.581	A
B-A	116	29	462	0.251	115	0.0	0.3	10.317	B
A-B	0	0			0				
A-C	121	30			121				
A-D	158	39			158				
AB-CD	197	49	648	0.303	195	0.0	0.5	7.909	A
AB-C	89	22			89				
D-ABC	0	0	437	0.000	0	0.0	0.0	0.000	A
C-D	41	10			41				
C-A	91	23			91				
C-B	0	0			0				
CD-A	91	23			91				
CD-B	0	0	567	0.000	0	0.0	0.0	0.000	A

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	9	2	403	0.022	9	0.0	0.0	9.130	A
B-A	139	35	447	0.310	138	0.3	0.4	11.641	B
A-B	0	0			0				
A-C	144	36			144				
A-D	188	47			188				
AB-CD	246	61	660	0.372	245	0.5	0.7	8.668	A
AB-C	96	24			96				
D-ABC	0	0	424	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	109	27			109				
C-B	0	0			0				
CD-A	109	27			109				
CD-B	0	0	555	0.000	0	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	11	3	366	0.030	11	0.0	0.0	10.146	B
B-A	170	42	426	0.399	169	0.4	0.6	13.985	B
A-B	0	0			0				
A-C	176	44			176				
A-D	231	58			231				
AB-CD	320	80	677	0.472	318	0.7	1.1	10.036	B
AB-C	98	25			98				
D-ABC	0	0	406	0.000	0	0.0	0.0	0.000	A
C-D	60	15			60				
C-A	133	33			133				
C-B	0	0			0				
CD-A	133	33			133				
CD-B	0	0	538	0.000	0	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	11	3	365	0.030	11	0.0	0.0	10.163	B
B-A	170	42	426	0.399	170	0.6	0.7	14.070	B
A-B	0	0			0				
A-C	176	44			176				
A-D	231	58			231				
AB-CD	320	80	678	0.473	320	1.1	1.1	10.113	B
AB-C	98	24			98				
D-ABC	0	0	406	0.000	0	0.0	0.0	0.000	A
C-D	60	15			60				
C-A	133	33			133				
C-B	0	0			0				
CD-A	133	33			133				
CD-B	0	0	538	0.000	0	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	9	2	403	0.022	9	0.0	0.0	9.150	A
B-A	139	35	447	0.310	139	0.7	0.5	11.735	B
A-B	0	0			0				
A-C	144	36			144				
A-D	188	47			188				
AB-CD	246	62	661	0.372	248	1.1	0.7	8.755	A
AB-C	95	24			95				
D-ABC	0	0	423	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	109	27			109				
C-B	0	0			0				
CD-A	109	27			109				
CD-B	0	0	555	0.000	0	0.0	0.0	0.000	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	426	0.018	8	0.0	0.0	8.602	A
B-A	116	29	462	0.251	117	0.5	0.3	10.425	B
A-B	0	0			0				
A-C	121	30			121				
A-D	158	39			158				
AB-CD	197	49	649	0.304	198	0.7	0.5	8.007	A
AB-C	89	22			89				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A

C-D	41	10			41				
C-A	91	23			91				
C-B	0	0			0				
CD-A	91	23			91				
CD-B	0	0	567	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.33	0.00	0.00	0.33	0.33			N/A	N/A
AB-CD	0.50	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.44	0.00	0.00	0.44	0.44			N/A	N/A
AB-CD	0.70	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.65	0.03	0.26	0.65	0.65			N/A	N/A
AB-CD	1.07	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.66	0.03	0.29	1.27	2.96			N/A	N/A
AB-CD	1.08	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.46	0.04	0.37	1.20	1.35			N/A	N/A
AB-CD	0.72	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.34	0.03	0.27	0.48	0.71			N/A	N/A
AB-CD	0.52	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	401	100.000
B - A12 Off Slip SB		ONE HOUR	✓	117	100.000
C - B1078 South East		ONE HOUR	✓	196	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	200	201
	B - A12 Off Slip SB	111	0	6	0
	C - B1078 South East	140	0	0	57
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	2
	B - A12 Off Slip SB	6	0	0	0
	C - B1078 South East	1	0	0	3
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.16	0.0	0.5	A	6	8
B-A	0.30	12.55	0.4	1.8	B	101	152
A-B						0	0
A-C						183	275
A-D						184	277
AB-CD	0.46	9.34	1.1	?	A	257	385
AB-C						117	175
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						52	78
C-A						128	192
C-B						0	0
CD-A						128	192
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	568	0.008	4	0.0	0.0	6.383	A
B-A	83	21	447	0.186	82	0.0	0.2	9.837	A
A-B	0	0			0				
A-C	150	38			150				
A-D	151	38			151				
AB-CD	196	49	676	0.290	194	0.0	0.5	7.452	A
AB-C	110	27			110				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	43	11			43				
C-A	105	26			105				
C-B	0	0			0				
CD-A	105	26			105				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	545	0.010	5	0.0	0.0	6.673	A
B-A	99	25	431	0.231	99	0.2	0.3	10.836	B
A-B	0	0			0				
A-C	179	45			179				
A-D	181	45			181				
AB-CD	247	62	691	0.358	246	0.5	0.7	8.099	A
AB-C	118	30			118				
D-ABC	0	0	420	0.000	0	0.0	0.0	0.000	A
C-D	51	13			51				
C-A	126	31			126				
C-B	0	0			0				
CD-A	126	31			126				
CD-B	0	0	549	0.000	0	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	509	0.013	7	0.0	0.0	7.158	A
B-A	122	30	408	0.298	121	0.3	0.4	12.515	B
A-B	0	0			0				
A-C	220	55			220				
A-D	221	55			221				
AB-CD	325	81	712	0.457	324	0.7	1.0	9.274	A
AB-C	122	31			122				
D-ABC	0	0	402	0.000	0	0.0	0.0	0.000	A
C-D	62	16			62				
C-A	154	38			154				
C-B	0	0			0				
CD-A	154	38			154				
CD-B	0	0	531	0.000	0	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	509	0.013	7	0.0	0.0	7.163	A
B-A	122	30	408	0.298	122	0.4	0.4	12.554	B
A-B	0	0			0				
A-C	220	55			220				
A-D	221	55			221				
AB-CD	326	81	713	0.457	326	1.0	1.1	9.340	A
AB-C	122	30			122				
D-ABC	0	0	401	0.000	0	0.0	0.0	0.000	A
C-D	62	16			62				
C-A	154	38			154				
C-B	0	0			0				
CD-A	154	38			154				
CD-B	0	0	531	0.000	0	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	544	0.010	5	0.0	0.0	6.681	A
B-A	99	25	431	0.231	100	0.4	0.3	10.884	B
A-B	0	0			0				
A-C	179	45			179				
A-D	181	45			181				
AB-CD	248	62	692	0.358	249	1.1	0.7	8.175	A
AB-C	118	29			118				
D-ABC	0	0	420	0.000	0	0.0	0.0	0.000	A
C-D	51	13			51				
C-A	126	31			126				
C-B	0	0			0				
CD-A	126	31			126				
CD-B	0	0	549	0.000	0	0.0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	568	0.008	5	0.0	0.0	6.392	A
B-A	83	21	447	0.186	84	0.3	0.2	9.899	A
A-B	0	0			0				
A-C	150	38			150				
A-D	151	38			151				
AB-CD	197	49	677	0.291	198	0.7	0.5	7.535	A
AB-C	109	27			109				
D-ABC	0	0	433	0.000	0	0.0	0.0	0.000	A

C-D	43	11			43				
C-A	105	26			105				
C-B	0	0			0				
CD-A	105	26			105				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
AB-CD	0.49	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
AB-CD	0.68	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.42	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	1.05	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.42	0.03	0.31	1.31	1.77			N/A	N/A
AB-CD	1.06	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
AB-CD	0.71	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
AB-CD	0.51	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	2.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	132	100.000
B - A12 Off Slip SB		ONE HOUR	✓	54	100.000
C - B1078 South East		ONE HOUR	✓	65	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	35	97
	B - A12 Off Slip SB	53	0	1	0
	C - B1078 South East	37	0	0	29
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	5.84	0.0	0.5	A	0.92	1
B-A	0.12	8.25	0.1	0.5	A	48	72
A-B						0	0
A-C						32	48
A-D						89	134
AB-CD	0.19	7.46	0.3	~1	A	94	142
AB-C						27	41
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						26	39
C-A						34	50
C-B						0	0
CD-A						34	50
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	0.75	0.19	636	0.001	0.75	0.0	0.0	5.669	A
B-A	40	10	507	0.078	39	0.0	0.1	7.690	A
A-B	0	0			0				
A-C	26	6			26				
A-D	73	18			73				
AB-CD	77	19	593	0.129	76	0.0	0.2	6.955	A
AB-C	23	6			23				
D-ABC	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	28	7			28				
C-B	0	0			0				
CD-A	28	7			28				
CD-B	0	0	609	0.000	0	0.0	0.0	0.000	A

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	628	0.001	0.90	0.0	0.0	5.740	A
B-A	47	12	502	0.094	47	0.1	0.1	7.920	A
A-B	0	0			0				
A-C	31	8			31				
A-D	87	22			87				
AB-CD	92	23	595	0.155	92	0.2	0.2	7.162	A
AB-C	27	7			27				
D-ABC	0	0	471	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				
C-B	0	0			0				
CD-A	33	8			33				
CD-B	0	0	604	0.000	0	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	617	0.002	1	0.0	0.0	5.842	A
B-A	58	14	494	0.117	58	0.1	0.1	8.246	A
A-B	0	0			0				
A-C	38	9			38				
A-D	107	27			107				
AB-CD	114	29	597	0.192	114	0.2	0.2	7.460	A
AB-C	32	8			32				
D-ABC	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	40	10			40				
C-B	0	0			0				
CD-A	40	10			40				
CD-B	0	0	598	0.000	0	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1	0.28	617	0.002	1	0.0	0.0	5.842	A
B-A	58	14	494	0.117	58	0.1	0.1	8.249	A
A-B	0	0			0				
A-C	38	9			38				
A-D	107	27			107				
AB-CD	114	29	597	0.192	114	0.2	0.3	7.465	A
AB-C	32	8			32				
D-ABC	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	40	10			40				
C-B	0	0			0				
CD-A	40	10			40				
CD-B	0	0	598	0.000	0	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.90	0.22	628	0.001	0.90	0.0	0.0	5.743	A
B-A	47	12	502	0.094	47	0.1	0.1	7.926	A
A-B	0	0			0				
A-C	31	8			31				
A-D	87	22			87				
AB-CD	92	23	595	0.155	93	0.3	0.2	7.173	A
AB-C	27	7			27				
D-ABC	0	0	471	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				
C-B	0	0			0				
CD-A	33	8			33				
CD-B	0	0	604	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.75	0.19	635	0.001	0.75	0.0	0.0	5.671	A
B-A	40	10	507	0.078	40	0.1	0.1	7.705	A
A-B	0	0			0				
A-C	26	6			26				
A-D	73	18			73				
AB-CD	77	19	593	0.129	77	0.2	0.2	6.976	A
AB-C	23	6			23				
D-ABC	0	0	475	0.000	0	0.0	0.0	0.000	A

C-D	21	5			21				
C-A	28	7			28				
C-B	0	0			0				
CD-A	28	7			28				
CD-B	0	0	609	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
AB-CD	0.15	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
AB-CD	0.19	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	0.25	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	0.25	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
AB-CD	0.20	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
AB-CD	0.16	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	5.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	344	100.000
B - A12 Off Slip SB		ONE HOUR	✓	131	100.000
C - B1078 South East		ONE HOUR	✓	159	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	80	265
	B - A12 Off Slip SB	124	0	7	0
	C - B1078 South East	94	0	0	65
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	3
	B - A12 Off Slip SB	3	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.04	0.0	0.5	A	6	10
B-A	0.31	11.79	0.4	1.9	B	114	170
A-B						0	0
A-C						73	109
A-D						243	365
AB-CD	0.55	12.78	1.3	?	B	280	420
AB-C						42	63
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						60	90
C-A						86	129
C-B						0	0
CD-A						86	129
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	575	0.009	5	0.0	0.0	6.314	A
B-A	93	23	475	0.196	92	0.0	0.2	9.375	A
A-B	0	0			0				
A-C	60	15			60				
A-D	199	50			199				
AB-CD	223	56	618	0.361	220	0.0	0.6	9.020	A
AB-C	42	10			42				
D-ABC	0	0	438	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	70	18			70				
C-B	0	0			0				
CD-A	70	18			70				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	553	0.011	6	0.0	0.0	6.585	A
B-A	111	28	461	0.241	111	0.2	0.3	10.272	B
A-B	0	0			0				
A-C	72	18			72				
A-D	238	60			238				
AB-CD	272	68	621	0.438	272	0.6	0.8	10.272	B
AB-C	43	11			43				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	560	0.000	0	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	519	0.015	8	0.0	0.0	7.039	A
B-A	136	34	442	0.309	136	0.3	0.4	11.750	B
A-B	0	0			0				
A-C	88	22			88				
A-D	292	73			292				
AB-CD	344	86	627	0.550	343	0.8	1.3	12.615	B
AB-C	42	11			42				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	103	26			103				
C-B	0	0			0				
CD-A	103	26			103				
CD-B	0	0	544	0.000	0	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	519	0.015	8	0.0	0.0	7.043	A
B-A	136	34	442	0.309	136	0.4	0.4	11.787	B
A-B	0	0			0				
A-C	88	22			88				
A-D	292	73			292				
AB-CD	345	86	627	0.550	345	1.3	1.3	12.783	B
AB-C	42	11			42				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	103	26			103				
C-B	0	0			0				
CD-A	103	26			103				
CD-B	0	0	544	0.000	0	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6	2	552	0.011	6	0.0	0.0	6.594	A
B-A	111	28	461	0.241	112	0.4	0.3	10.318	B
A-B	0	0			0				
A-C	72	18			72				
A-D	238	60			238				
AB-CD	273	68	622	0.439	275	1.3	0.9	10.446	B
AB-C	43	11			43				
D-ABC	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	84	21			84				
C-B	0	0			0				
CD-A	84	21			84				
CD-B	0	0	560	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	575	0.009	5	0.0	0.0	6.323	A
B-A	93	23	475	0.196	93	0.3	0.2	9.438	A
A-B	0	0			0				
A-C	60	15			60				
A-D	199	50			199				
AB-CD	223	56	618	0.361	224	0.9	0.6	9.182	A
AB-C	41	10			41				
D-ABC	0	0	437	0.000	0	0.0	0.0	0.000	A

C-D	49	12			49				
C-A	70	18			70				
C-B	0	0			0				
CD-A	70	18			70				
CD-B	0	0	572	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.24	0.00	0.00	0.24	0.24			N/A	N/A
AB-CD	0.60	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.31	0.00	0.00	0.31	0.31			N/A	N/A
AB-CD	0.83	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.44	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	1.30	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.44	0.03	0.30	1.33	1.90			N/A	N/A
AB-CD	1.32	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
AB-CD	0.87	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.25	0.00	0.00	0.25	0.25			N/A	N/A
AB-CD	0.62	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	18.52	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	570	100.000
B - A12 Off Slip SB		ONE HOUR	✓	145	100.000
C - B1078 South East		ONE HOUR	✓	267	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	195	376
	B - A12 Off Slip SB	119	0	26	0
	C - B1078 South East	178	0	0	88
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	6	0	4	0
	C - B1078 South East	4	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.07	9.00	0.1	0.5	A	24	36
B-A	0.37	16.04	0.6	2.7	C	110	164
A-B						0	0
A-C						179	268
A-D						345	517
AB-CD	0.92	55.28	10.2	?	F	503	755
AB-C						44	66
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						81	122
C-A						164	245
C-B						0	0
CD-A						164	245
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	20	5	511	0.038	19	0.0	0.0	7.327	A
B-A	90	22	412	0.218	89	0.0	0.3	11.101	B
A-B	0	0			0				
A-C	146	37			146				
A-D	283	71			283				
AB-CD	378	95	660	0.573	372	0.0	1.5	12.345	B
AB-C	71	18			71				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-D	67	17			67				
C-A	134	34			134				
C-B	0	0			0				
CD-A	134	34			134				
CD-B	0	0	532	0.000	0	0.0	0.0	0.000	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	23	6	479	0.049	23	0.0	0.1	7.903	A
B-A	107	27	388	0.276	107	0.3	0.4	12.769	B
A-B	0	0			0				
A-C	175	44			175				
A-D	338	84			338				
AB-CD	481	120	675	0.711	476	1.5	2.8	17.884	C
AB-C	56	14			56				
D-ABC	0	0	373	0.000	0	0.0	0.0	0.000	A
C-D	80	20			80				
C-A	160	40			160				
C-B	0	0			0				
CD-A	160	40			160				
CD-B	0	0	512	0.000	0	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	29	7	429	0.067	29	0.1	0.1	8.977	A
B-A	131	33	356	0.369	131	0.4	0.6	15.931	C
A-B	0	0			0				
A-C	214	54			214				
A-D	414	103			414				
AB-CD	640	160	698	0.918	618	2.8	8.4	40.242	E
AB-C	16	4			16				
D-ABC	0	0	340	0.000	0	0.0	0.0	0.000	A
C-D	97	24			97				
C-A	196	49			196				
C-B	0	0			0				
CD-A	196	49			196				
CD-B	0	0	485	0.000	0	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	29	7	429	0.067	29	0.1	0.1	8.996	A
B-A	131	33	356	0.369	131	0.6	0.6	16.036	C
A-B	0	0			0				
A-C	214	54			214				
A-D	414	103			414				
AB-CD	649	162	703	0.923	642	8.4	10.3	55.280	F
AB-C	8	2			8				
D-ABC	0	0	335	0.000	0	0.0	0.0	0.000	A
C-D	97	24			97				
C-A	196	49			196				
C-B	0	0			0				
CD-A	196	49			196				
CD-B	0	0	485	0.000	0	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	23	6	478	0.049	23	0.1	0.1	7.921	A
B-A	107	27	388	0.276	108	0.6	0.4	12.873	B
A-B	0	0			0				
A-C	175	44			175				
A-D	338	84			338				
AB-CD	491	123	684	0.718	518	10.3	3.3	25.356	D
AB-C	45	11			45				
D-ABC	0	0	366	0.000	0	0.0	0.0	0.000	A
C-D	80	20			80				
C-A	160	40			160				
C-B	0	0			0				
CD-A	160	40			160				
CD-B	0	0	512	0.000	0	0.0	0.0	0.000	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	20	5	510	0.038	20	0.1	0.0	7.345	A
B-A	90	22	412	0.218	90	0.4	0.3	11.207	B
A-B	0	0			0				
A-C	146	37			146				
A-D	283	71			283				
AB-CD	381	95	662	0.576	388	3.3	1.7	13.504	B
AB-C	68	17			68				
D-ABC	0	0	394	0.000	0	0.0	0.0	0.000	A

C-D	67	17			67				
C-A	134	34			134				
C-B	0	0			0				
CD-A	134	34			134				
CD-B	0	0	532	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.27	0.00	0.00	0.27	0.27			N/A	N/A
AB-CD	1.53	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.37	0.00	0.00	0.37	0.37			N/A	N/A
AB-CD	2.75	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.57	0.03	0.26	0.57	0.57			N/A	N/A
AB-CD	8.41	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.58	0.03	0.30	1.41	2.72			N/A	N/A
AB-CD	10.26	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.39	0.03	0.28	0.50	0.98			N/A	N/A
AB-CD	3.32	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.28	0.03	0.25	0.45	0.48			N/A	N/A
AB-CD	1.66	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	4.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	369	100.000
B - A12 Off Slip SB		ONE HOUR	✓	165	100.000
C - B1078 South East		ONE HOUR	✓	178	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	160	209
	B - A12 Off Slip SB	155	0	10	0
	C - B1078 South East	122	0	0	56
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	4
	B - A12 Off Slip SB	4	0	30	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.03	10.18	0.0	0.5	B	9	14
B-A	0.40	14.12	0.7	3.0	B	142	214
A-B						0	0
A-C						147	220
A-D						191	287
AB-CD	0.47	10.08	1.1	?	B	253	380
AB-C						94	142
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						51	77
C-A						112	168
C-B						0	0
CD-A						112	168
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	8	2	427	0.018	7	0.0	0.0	8.585	A
B-A	117	29	463	0.253	116	0.0	0.3	10.334	B
A-B	0	0			0				
A-C	121	30			121				
A-D	157	39			157				
AB-CD	196	49	648	0.302	194	0.0	0.5	7.903	A
AB-C	89	22			89				
D-ABC	0	0	437	0.000	0	0.0	0.0	0.000	A
C-D	42	10			42				
C-A	92	23			92				
C-B	0	0			0				
CD-A	92	23			92				
CD-B	0	0	568	0.000	0	0.0	0.0	0.000	A

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	9	2	403	0.022	9	0.0	0.0	9.138	A
B-A	140	35	447	0.312	139	0.3	0.4	11.668	B
A-B	0	0			0				
A-C	144	36			144				
A-D	187	47			187				
AB-CD	245	61	660	0.371	244	0.5	0.7	8.654	A
AB-C	96	24			96				
D-ABC	0	0	424	0.000	0	0.0	0.0	0.000	A
C-D	50	13			50				
C-A	110	27			110				
C-B	0	0			0				
CD-A	110	27			110				
CD-B	0	0	555	0.000	0	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	11	3	365	0.030	11	0.0	0.0	10.163	B
B-A	171	43	426	0.401	170	0.4	0.7	14.032	B
A-B	0	0			0				
A-C	176	44			176				
A-D	230	57			230				
AB-CD	318	80	677	0.471	317	0.7	1.1	10.010	B
AB-C	99	25			99				
D-ABC	0	0	406	0.000	0	0.0	0.0	0.000	A
C-D	61	15			61				
C-A	134	34			134				
C-B	0	0			0				
CD-A	134	34			134				
CD-B	0	0	538	0.000	0	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	11	3	365	0.030	11	0.0	0.0	10.180	B
B-A	171	43	426	0.401	171	0.7	0.7	14.120	B
A-B	0	0			0				
A-C	176	44			176				
A-D	230	57			230				
AB-CD	319	80	677	0.471	319	1.1	1.1	10.085	B
AB-C	98	25			98				
D-ABC	0	0	405	0.000	0	0.0	0.0	0.000	A
C-D	61	15			61				
C-A	134	34			134				
C-B	0	0			0				
CD-A	134	34			134				
CD-B	0	0	538	0.000	0	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	9	2	402	0.022	9	0.0	0.0	9.156	A
B-A	140	35	447	0.312	140	0.7	0.5	11.766	B
A-B	0	0			0				
A-C	144	36			144				
A-D	187	47			187				
AB-CD	245	61	661	0.371	247	1.1	0.7	8.740	A
AB-C	95	24			95				
D-ABC	0	0	423	0.000	0	0.0	0.0	0.000	A
C-D	50	13			50				
C-A	110	27			110				
C-B	0	0			0				
CD-A	110	27			110				
CD-B	0	0	555	0.000	0	0.0	0.0	0.000	A

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	8	2	426	0.018	8	0.0	0.0	8.605	A
B-A	117	29	463	0.253	117	0.5	0.3	10.441	B
A-B	0	0			0				
A-C	121	30			121				
A-D	157	39			157				
AB-CD	196	49	648	0.303	197	0.7	0.5	7.999	A
AB-C	89	22			89				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A

C-D	42	10			42				
C-A	92	23			92				
C-B	0	0			0				
CD-A	92	23			92				
CD-B	0	0	568	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.33	0.00	0.00	0.33	0.33			N/A	N/A
AB-CD	0.50	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.45	0.00	0.00	0.45	0.45			N/A	N/A
AB-CD	0.69	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.65	0.03	0.26	0.65	0.65			N/A	N/A
AB-CD	1.06	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.66	0.03	0.29	1.26	2.97			N/A	N/A
AB-CD	1.08	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.46	0.04	0.38	1.21	1.36			N/A	N/A
AB-CD	0.72	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.34	0.03	0.27	0.48	0.80			N/A	N/A
AB-CD	0.52	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	399	100.000
B - A12 Off Slip SB		ONE HOUR	✓	120	100.000
C - B1078 South East		ONE HOUR	✓	195	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	200	199
	B - A12 Off Slip SB	114	0	6	0
	C - B1078 South East	142	0	0	54
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	2
	B - A12 Off Slip SB	6	0	0	0
	C - B1078 South East	1	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.01	7.19	0.0	0.5	A	6	8
B-A	0.31	12.67	0.4	1.9	B	104	156
A-B						0	0
A-C						183	275
A-D						183	274
AB-CD	0.45	9.26	1.0	?	A	254	381
AB-C						117	176
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-D						49	74
C-A						130	195
C-B						0	0
CD-A						130	195
CD-B	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-CD	5	1	568	0.008	4	0.0	0.0	6.390	A
B-A	86	21	448	0.191	85	0.0	0.2	9.876	A
A-B	0	0			0				
A-C	150	38			150				
A-D	150	37			150				
AB-CD	194	49	676	0.287	192	0.0	0.5	7.421	A
AB-C	110	28			110				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	107	27			107				
C-B	0	0			0				
CD-A	107	27			107				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	544	0.010	5	0.0	0.0	6.685	A
B-A	102	26	432	0.236	102	0.2	0.3	10.897	B
A-B	0	0			0				
A-C	179	45			179				
A-D	179	45			179				
AB-CD	245	61	691	0.354	244	0.5	0.7	8.052	A
AB-C	119	30			119				
D-ABC	0	0	421	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	127	32			127				
C-B	0	0			0				
CD-A	127	32			127				
CD-B	0	0	550	0.000	0	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	508	0.013	7	0.0	0.0	7.182	A
B-A	125	31	409	0.306	125	0.3	0.4	12.624	B
A-B	0	0			0				
A-C	220	55			220				
A-D	219	55			219				
AB-CD	322	81	713	0.452	321	0.7	1.0	9.196	A
AB-C	123	31			123				
D-ABC	0	0	402	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	156	39			156				
C-B	0	0			0				
CD-A	156	39			156				
CD-B	0	0	531	0.000	0	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	7	2	507	0.013	7	0.0	0.0	7.187	A
B-A	125	31	409	0.306	125	0.4	0.4	12.666	B
A-B	0	0			0				
A-C	220	55			220				
A-D	219	55			219				
AB-CD	323	81	713	0.452	323	1.0	1.0	9.259	A
AB-C	123	31			123				
D-ABC	0	0	402	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	156	39			156				
C-B	0	0			0				
CD-A	156	39			156				
CD-B	0	0	531	0.000	0	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	543	0.010	5	0.0	0.0	6.694	A
B-A	102	26	432	0.236	103	0.4	0.3	10.949	B
A-B	0	0			0				
A-C	179	45			179				
A-D	179	45			179				
AB-CD	245	61	692	0.354	247	1.0	0.7	8.126	A
AB-C	118	30			118				
D-ABC	0	0	420	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	127	32			127				
C-B	0	0			0				
CD-A	127	32			127				
CD-B	0	0	550	0.000	0	0.0	0.0	0.000	A

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5	1	567	0.008	5	0.0	0.0	6.400	A
B-A	86	21	448	0.191	86	0.3	0.2	9.941	A
A-B	0	0			0				
A-C	150	38			150				
A-D	150	37			150				
AB-CD	195	49	677	0.288	196	0.7	0.5	7.506	A
AB-C	110	27			110				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A

C-D	40	10			40				
C-A	107	27			107				
C-B	0	0			0				
CD-A	107	27			107				
CD-B	0	0	563	0.000	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
AB-CD	0.48	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.31	0.00	0.00	0.31	0.31			N/A	N/A
AB-CD	0.67	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.43	0.03	0.26	0.46	0.49			N/A	N/A
AB-CD	1.03	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.44	0.03	0.31	1.33	1.86			N/A	N/A
AB-CD	1.04	?	?	?	?			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.31	0.00	0.00	0.31	0.31			N/A	N/A
AB-CD	0.70	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.24	0.00	0.00	0.24	0.24			N/A	N/A
AB-CD	0.50	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200922 34b+c_Model stagger_peaky_HPC_profile.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\TN04 Peaky Models\J34bc
Report generation date: 18/12/2020 14:29:03

»2028 Peak Construction, 6-7 AM peaky
»2028 Peak Construction, 7-8 AM peaky
»2028 Peak Construction, 8-9 AM peaky
»2028 Peak Construction, 3-4 PM peaky
»2028 Peak Construction, 5-6 PM peaky

Summary of junction performance

	6-7 AM peaky					7-8 AM peaky					8-9 AM peaky					3-4 PM peaky					5-6 PM peaky				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2028 Peak Construction																								
Stream B-CD	0.0	~1	5.85	0.00	A	0.0	~1	7.24	0.02	A	0.1	~1	9.61	0.07	A	0.0	~1	11.14	0.03	B	0.0	~1	7.50	0.01	A
Stream B-A	0.2	~1	9.02	0.14	A	0.5	~1	12.83	0.35	B	0.8	~1	18.19	0.46	C	0.8	~1	15.94	0.45	C	0.6	~1	13.91	0.37	B
Stream AB-CD	0.2	~1	7.44	0.19	A	1.4	?	13.28	0.57	B	6.7	?	38.04	0.87	E	1.5	?	12.83	0.58	B	1.1	?	10.08	0.49	B
Stream D-ABC	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
Stream CD-B	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

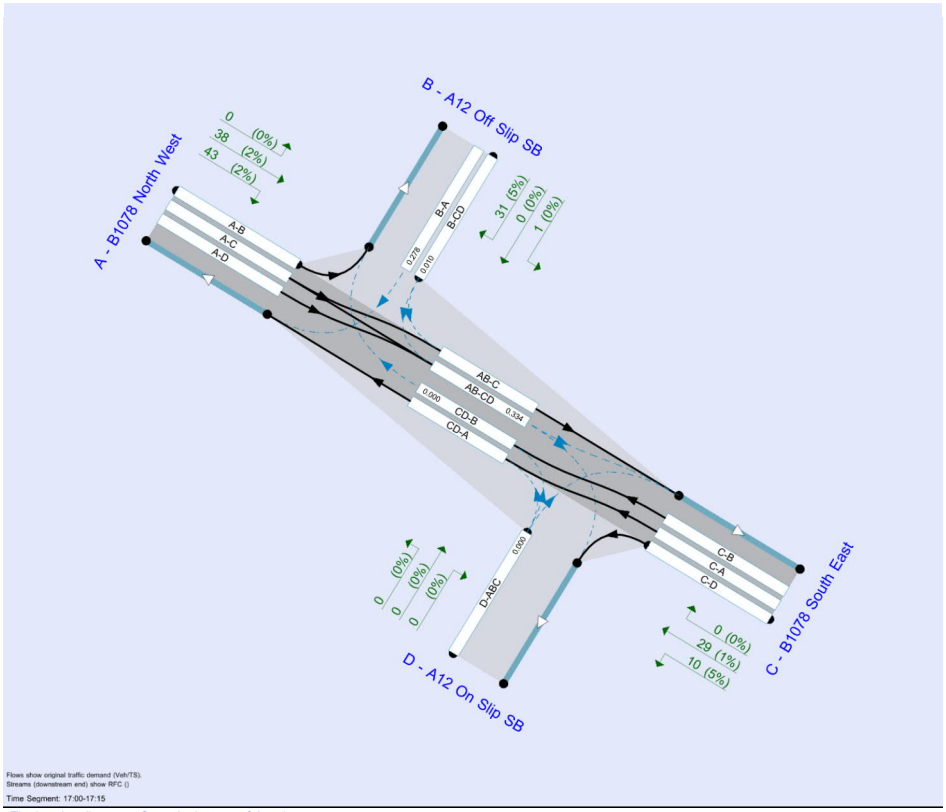
File summary

File Description

Title	A12 Southbound on slip / B1078 / Station Road
Location	52° 9'34.11"N, 1°22'50.74"E
Site number	34c
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INSR01910
Description	Give way width of the minor arm is 10m, due to the junctions 9 restriction.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perTimeSegment	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15		15	
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15		15	
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15		15	
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15		15	
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	
D21	2028 Peak Construction	6-7 AM peaky	DIRECT	06:00	07:00	60	15	✓
D22	2028 Peak Construction	7-8 AM peaky	DIRECT	07:00	08:00	60	15	✓
D23	2028 Peak Construction	8-9 AM peaky	DIRECT	08:00	09:00	60	15	✓
D24	2028 Peak Construction	3-4 PM peaky	DIRECT	15:00	16:00	60	15	✓
D25	2028 Peak Construction	5-6 PM peaky	DIRECT	17:00	18:00	60	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15		15	
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15		15	
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15		15	
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15		15	

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2028 Peak Construction, 6-7 AM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm D	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	3.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1078 North West		Major
B	A12 Off Slip SB		Minor
C	B1078 South East		Major
D	A12 On Slip SB		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - B1078 North West	8.25			71.0	✓	0.00
C - B1078 South East	7.80			100.4		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - A12 Off Slip SB	One lane plus flare		10.00	7.00	4.20	3.50	3.10	✓	1.00	38	28
D - A12 On Slip SB	One lane	2.20								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/TS)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
J34c	AB-D	153.770	-	-	-	-	-	0.215	0.215	0.215	-	-
J34c	B-A	140.539	0.094	0.239	0.239	-	-	0.150	0.341	-	0.150	0.341
J34c	B-CD	168.420	0.095	0.241	0.241	-	-	-	-	-	-	-
J34c	CD-B	158.026	0.226	0.226	0.226	-	-	-	-	-	-	-
J34c	D-AB	143.491	-	-	-	-	-	0.201	0.201	0.079	-	-
J34c	D-C	109.895	-	0.115	0.261	0.115	0.261	0.183	0.183	0.072	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM peaky	DIRECT	06:00	07:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 North West		DIRECT	✓	100.000
B - A12 Off Slip SB		DIRECT	✓	100.000
C - B1078 South East		DIRECT	✓	100.000
D - A12 On Slip SB		DIRECT	✓	100.000

Origin-Destination Data

Demand (Veh/TS)

	To			
	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
06:00 - 06:15				

Proportions

	To			
	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB

From	A - B1078 North West	0.00	0.00	7.69	20.66
	B - A12 Off Slip SB	11.48	0.00	0.22	0.00
	C - B1078 South East	7.76	0.00	0.00	7.86
	D - A12 On Slip SB	0.00	0.00	0.00	0.00

From	A - B1078 North West	0.00	0.00	0.27	0.73
	B - A12 Off Slip SB	0.98	0.00	0.02	0.00
	C - B1078 South East	0.50	0.00	0.00	0.50
	D - A12 On Slip SB	0.25	0.25	0.25	0.25

06:15 - 06:30

Demand (Veh/TS)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0.00	0.00	9.28	25.72
	B - A12 Off Slip SB	15.31	0.00	0.28	0.00
	C - B1078 South East	9.51	0.00	0.00	9.34
	D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0.00	0.00	0.27	0.73
	B - A12 Off Slip SB	0.98	0.00	0.02	0.00
	C - B1078 South East	0.50	0.00	0.00	0.50
	D - A12 On Slip SB	0.25	0.25	0.25	0.25

06:30 - 06:45

Demand (Veh/TS)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0.00	0.00	9.29	25.71
	B - A12 Off Slip SB	15.27	0.00	0.28	0.00
	C - B1078 South East	9.51	0.00	0.00	9.35
	D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0.00	0.00	0.27	0.73
	B - A12 Off Slip SB	0.98	0.00	0.02	0.00
	C - B1078 South East	0.50	0.00	0.00	0.50
	D - A12 On Slip SB	0.25	0.25	0.25	0.25

06:45 - 07:00

Demand (Veh/TS)

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0.00	0.00	7.24	22.01
	B - A12 Off Slip SB	15.53	0.00	0.22	0.00
	C - B1078 South East	7.76	0.00	0.00	6.96
	D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0.00	0.00	0.25	0.75
	B - A12 Off Slip SB	0.99	0.00	0.01	0.00
	C - B1078 South East	0.53	0.00	0.00	0.47
	D - A12 On Slip SB	0.25	0.25	0.25	0.25

Vehicle Mix

06:00 - 06:15

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	6	0	0	0
	C - B1078 South East	0	0	0	3
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.058	1.053
	B - A12 Off Slip SB	1.060	1.000	1.000	1.000
	C - B1078 South East	1.000	1.000	1.000	1.029
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

06:15 - 06:30

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	10	0	0	0
	C - B1078 South East	0	0	0	3
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.059	1.052
	B - A12 Off Slip SB	1.101	1.000	1.000	1.000
	C - B1078 South East	1.000	1.000	1.000	1.029
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

06:30 - 06:45

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	10	0	0	0
	C - B1078 South East	0	0	0	3
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.059	1.052
	B - A12 Off Slip SB	1.100	1.000	1.000	1.000
	C - B1078 South East	1.000	1.000	1.000	1.029
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

06:45 - 07:00

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - A12 Off Slip SB	19	0	0	0
	C - B1078 South East	0	0	0	3
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.061	1.050
	B - A12 Off Slip SB	1.190	1.000	1.000	1.000
	C - B1078 South East	1.000	1.000	1.000	1.032
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
06:00-06:15	A - B1078 North West	28.36	29.90
	B - A12 Off Slip SB	11.70	12.40
	C - B1078 South East	15.62	15.84
	D - A12 On Slip SB	0.00	0.00
06:15-06:30	A - B1078 North West	35.01	36.90
	B - A12 Off Slip SB	15.59	17.14
	C - B1078 South East	18.85	19.13
	D - A12 On Slip SB	0.00	0.00
06:30-06:45	A - B1078 North West	35.00	36.89
	B - A12 Off Slip SB	15.55	17.07
	C - B1078 South East	18.86	19.14
	D - A12 On Slip SB	0.00	0.00
06:45-07:00	A - B1078 North West	29.26	30.80
	B - A12 Off Slip SB	15.75	18.69
	C - B1078 South East	14.72	14.94

	D - A12 On Slip SB	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-CD	0.00	5.85	0.0	~1	A	0.25	1.00
B-A	0.14	9.02	0.2	~1	A	14.40	57.60
A-B						0.00	0.00
A-C						8.38	33.51
A-D						23.53	94.10
AB-CD	0.19	7.44	0.2	~1	A	25.00	100.02
AB-C						7.15	28.60
D-ABC	0.00	0.00	0.0	~1	A	0.00	0.00
C-D						8.38	33.51
C-A						8.63	34.54
C-B						0.00	0.00
CD-A						8.63	34.54
CD-B	0.00	0.00	0.0	~1	A	0.00	0.00

Main Results for each time segment

06:00 - 06:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.22	0.22	157.40	0.001	0.22	0.0	0.0	5.725	A
B-A	11.48	11.48	124.70	0.092	11.38	0.0	0.1	7.936	A
A-B	0.00	0.00			0.00				
A-C	7.69	7.69			7.69				
A-D	20.66	20.66			20.66				
AB-CD	21.83	21.83	148.03	0.147	21.65	0.0	0.2	7.114	A
AB-C	6.75	6.75			6.75				
D-ABC	0.00	0.00	117.97	0.000	0.00	0.0	0.0	0.000	A
C-D	7.86	7.86			7.86				
C-A	7.76	7.76			7.76				
C-B	0.00	0.00			0.00				
CD-A	7.76	7.76			7.76				
CD-B	0.00	0.00	151.28	0.000	0.00	0.0	0.0	0.000	A

06:15 - 06:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.28	0.28	154.01	0.002	0.27	0.0	0.0	5.853	A
B-A	15.31	15.31	118.38	0.129	15.27	0.1	0.1	8.569	A
A-B	0.00	0.00			0.00				
A-C	9.28	9.28			9.28				
A-D	25.72	25.72			25.72				
AB-CD	27.50	27.50	148.58	0.185	27.45	0.2	0.2	7.432	A
AB-C	7.78	7.78			7.78				
D-ABC	0.00	0.00	116.40	0.000	0.00	0.0	0.0	0.000	A
C-D	9.34	9.34			9.34				
C-A	9.51	9.51			9.51				
C-B	0.00	0.00			0.00				
CD-A	9.51	9.51			9.51				
CD-B	0.00	0.00	149.70	0.000	0.00	0.0	0.0	0.000	A

06:30 - 06:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.28	0.28	154.02	0.002	0.28	0.0	0.0	5.853	A
B-A	15.27	15.27	118.48	0.129	15.27	0.1	0.1	8.725	A
A-B	0.00	0.00			0.00				
A-C	9.29	9.29			9.29				
A-D	25.71	25.71			25.71				
AB-CD	27.49	27.49	148.58	0.185	27.49	0.2	0.2	7.435	A
AB-C	7.78	7.78			7.78				
D-ABC	0.00	0.00	116.39	0.000	0.00	0.0	0.0	0.000	A
C-D	9.35	9.35			9.35				
C-A	9.51	9.51			9.51				
C-B	0.00	0.00			0.00				
CD-A	9.51	9.51			9.51				
CD-B	0.00	0.00	149.70	0.000	0.00	0.0	0.0	0.000	A

06:45 - 07:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	0.22	0.22	154.90	0.001	0.23	0.0	0.0	5.818	A
B-A	15.53	15.53	111.07	0.140	15.52	0.1	0.2	9.020	A
A-B	0.00	0.00			0.00				
A-C	7.24	7.24			7.24				
A-D	22.01	22.01			22.01				
AB-CD	23.19	23.19	148.34	0.156	23.23	0.2	0.2	7.206	A
AB-C	6.29	6.29			6.29				
D-ABC	0.00	0.00	117.79	0.000	0.00	0.0	0.0	0.000	A
C-D	6.96	6.96			6.96				
C-A	7.76	7.76			7.76				
C-B	0.00	0.00			0.00				

CD-A	7.76	7.76			7.76				
CD-B	0.00	0.00	151.07	0.000	0.00	0.0	0.0	0.000	A

Queue Variation Results for each time segment

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	~1	~1	~1	~1			N/A	N/A
B-A	0.10	~1	~1	~1	~1			N/A	N/A
AB-CD	0.18	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	~1	~1	~1	~1			N/A	N/A
B-A	0.14	~1	~1	~1	~1			N/A	N/A
AB-CD	0.24	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	~1	~1	~1	~1			N/A	N/A
B-A	0.15	~1	~1	~1	~1			N/A	N/A
AB-CD	0.24	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.00	~1	~1	~1	~1			N/A	N/A
B-A	0.15	~1	~1	~1	~1			N/A	N/A
AB-CD	0.20	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 7-8 AM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm D	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	5.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM peaky	DIRECT	07:00	08:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 North West		DIRECT	✓	100.000
B - A12 Off Slip SB		DIRECT	✓	100.000
C - B1078 South East		DIRECT	✓	100.000
D - A12 On Slip SB		DIRECT	✓	100.000

Origin-Destination Data

07:00 - 07:15

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	17.20	61.15
B - A12 Off Slip SB	30.17	0.00	1.57	0.00
C - B1078 South East	20.37	0.00	0.00	14.87
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.22	0.78
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.58	0.00	0.00	0.42
D - A12 On Slip SB	0.25	0.25	0.25	0.25

07:15 - 07:30

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	21.07	73.64
B - A12 Off Slip SB	36.43	0.00	1.93	0.00
C - B1078 South East	24.95	0.00	0.00	18.22
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.22	0.78
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.58	0.00	0.00	0.42
D - A12 On Slip SB	0.25	0.25	0.25	0.25

07:30 - 07:45

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	21.07	75.37
B - A12 Off Slip SB	37.15	0.00	1.93	0.00
C - B1078 South East	24.95	0.00	0.00	18.22
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.22	0.78
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.58	0.00	0.00	0.42
D - A12 On Slip SB	0.25	0.25	0.25	0.25

07:45 - 08:00

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	17.20	60.67
B - A12 Off Slip SB	29.97	0.00	1.57	0.00
C - B1078 South East	20.37	0.00	0.00	14.87
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.22	0.78
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.58	0.00	0.00	0.42
D - A12 On Slip SB	0.25	0.25	0.25	0.25

Vehicle Mix

07:00 - 07:15

Heavy Vehicle Percentages

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0	0	5	2

Average PCU Per Veh

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	1.000	1.000	1.052	1.025

From	B - A12 Off Slip SB	6	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

From	B - A12 Off Slip SB	1.055	1.000	1.000	1.000
	C - B1078 South East	1.033	1.000	1.000	1.015
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

07:15 - 07:30

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	3
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.052	1.025
	B - A12 Off Slip SB	1.049	1.000	1.000	1.000
	C - B1078 South East	1.033	1.000	1.000	1.015
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

07:30 - 07:45

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	2
	B - A12 Off Slip SB	6	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.052	1.024
	B - A12 Off Slip SB	1.058	1.000	1.000	1.000
	C - B1078 South East	1.033	1.000	1.000	1.015
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

07:45 - 08:00

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	2
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.052	1.025
	B - A12 Off Slip SB	1.052	1.000	1.000	1.000
	C - B1078 South East	1.033	1.000	1.000	1.015
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
07:00-07:15	A - B1078 North West	78.35	80.75
	B - A12 Off Slip SB	31.74	33.42
	C - B1078 South East	35.25	36.14
	D - A12 On Slip SB	0.00	0.00
07:15-07:30	A - B1078 North West	94.71	97.65
	B - A12 Off Slip SB	38.35	40.14
	C - B1078 South East	43.17	44.27
	D - A12 On Slip SB	0.00	0.00
07:30-07:45	A - B1078 North West	96.44	99.38
	B - A12 Off Slip SB	39.08	41.23
	C - B1078 South East	43.17	44.27
	D - A12 On Slip SB	0.00	0.00
07:45-08:00	A - B1078 North West	77.87	80.27
	B - A12 Off Slip SB	31.54	33.11
	C - B1078 South East	35.25	36.14
	D - A12 On Slip SB	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-CD	0.02	7.24	0.0	~1	A	1.75	7.00
B-A	0.35	12.83	0.5	~1	B	33.43	133.72
A-B						0.00	0.00
A-C						19.13	76.54
A-D						67.71	270.82
AB-CD	0.57	13.28	1.4	?	B	78.46	313.82
AB-C						10.13	40.53
D-ABC	0.00	0.00	0.0	~1	A	0.00	0.00
C-D						16.55	66.18
C-A						22.66	90.64
C-B						0.00	0.00
CD-A						22.66	90.64
CD-B	0.00	0.00	0.0	~1	A	0.00	0.00

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.57	1.57	136.33	0.012	1.56	0.0	0.0	6.677	A
B-A	30.17	30.17	111.91	0.270	29.81	0.0	0.4	10.915	B
A-B	0.00	0.00			0.00				
A-C	17.20	17.20			17.20				
A-D	61.15	61.15			61.15				
AB-CD	69.57	69.57	155.03	0.449	68.70	0.0	0.9	10.346	B
AB-C	10.34	10.34			10.34				
D-ABC	0.00	0.00	106.26	0.000	0.00	0.0	0.0	0.000	A
C-D	14.87	14.87			14.87				

C-A	20.37	20.37			20.37				
C-B	0.00	0.00			0.00				
CD-A	20.37	20.37			20.37				
CD-B	0.00	0.00	139.80	0.000	0.00	0.0	0.0	0.000	A

07:15 - 07:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.93	1.93	127.56	0.015	1.92	0.0	0.0	7.162	A
B-A	36.43	36.43	108.06	0.337	36.29	0.4	0.5	12.564	B
A-B	0.00	0.00			0.00				
A-C	21.07	21.07			21.07				
A-D	73.64	73.64			73.64				
AB-CD	86.49	86.49	156.25	0.554	86.03	0.9	1.3	12.759	B
AB-C	10.15	10.15			10.15				
D-ABC	0.00	0.00	101.91	0.000	0.00	0.0	0.0	0.000	A
C-D	18.22	18.22			18.22				
C-A	24.95	24.95			24.95				
C-B	0.00	0.00			0.00				
CD-A	24.95	24.95			24.95				
CD-B	0.00	0.00	135.98	0.000	0.00	0.0	0.0	0.000	A

07:30 - 07:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.93	1.93	126.21	0.015	1.93	0.0	0.0	7.240	A
B-A	37.15	37.15	106.79	0.348	37.13	0.5	0.5	12.834	B
A-B	0.00	0.00			0.00				
A-C	21.07	21.07			21.07				
A-D	75.37	75.37			75.37				
AB-CD	88.57	88.57	156.38	0.566	88.49	1.3	1.4	13.282	B
AB-C	9.79	9.79			9.79				
D-ABC	0.00	0.00	101.47	0.000	0.00	0.0	0.0	0.000	A
C-D	18.22	18.22			18.22				
C-A	24.95	24.95			24.95				
C-B	0.00	0.00			0.00				
CD-A	24.95	24.95			24.95				
CD-B	0.00	0.00	135.59	0.000	0.00	0.0	0.0	0.000	A

07:45 - 08:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.57	1.57	136.31	0.012	1.58	0.0	0.0	6.681	A
B-A	29.97	29.97	112.33	0.267	30.12	0.5	0.4	11.011	B
A-B	0.00	0.00			0.00				
A-C	17.20	17.20			17.20				
A-D	60.67	60.67			60.67				
AB-CD	69.20	69.20	155.14	0.446	69.70	1.4	0.9	10.615	B
AB-C	10.25	10.25			10.25				
D-ABC	0.00	0.00	106.09	0.000	0.00	0.0	0.0	0.000	A
C-D	14.87	14.87			14.87				
C-A	20.37	20.37			20.37				
C-B	0.00	0.00			0.00				
CD-A	20.37	20.37			20.37				
CD-B	0.00	0.00	139.91	0.000	0.00	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	~1	~1	~1	~1			N/A	N/A
B-A	0.36	~1	~1	~1	~1			N/A	N/A
AB-CD	0.86	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	~1	~1	~1	~1			N/A	N/A
B-A	0.50	~1	~1	~1	~1			N/A	N/A
AB-CD	1.32	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	~1	~1	~1	~1			N/A	N/A
B-A	0.52	~1	~1	~1	~1			N/A	N/A
AB-CD	1.40	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	~1	~1	~1	~1			N/A	N/A
B-A	0.37	~1	~1	~1	~1			N/A	N/A
AB-CD	0.90	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 8-9 AM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm D	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	13.88	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM peaky	DIRECT	08:00	09:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 North West		DIRECT	✓	100.000
B - A12 Off Slip SB		DIRECT	✓	100.000
C - B1078 South East		DIRECT	✓	100.000
D - A12 On Slip SB		DIRECT	✓	100.000

Origin-Destination Data

08:00 - 08:15

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	39.02	87.70
B - A12 Off Slip SB	39.27	0.00	5.62	0.00
C - B1078 South East	36.30	0.00	0.00	12.57
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.31	0.69
B - A12 Off Slip SB	0.87	0.00	0.13	0.00
C - B1078 South East	0.74	0.00	0.00	0.26
D - A12 On Slip SB	0.25	0.25	0.25	0.25

08:15 - 08:30

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	47.42	99.49
B - A12 Off Slip SB	40.54	0.00	6.88	0.00
C - B1078 South East	43.33	0.00	0.00	18.41
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.32	0.68
B - A12 Off Slip SB	0.85	0.00	0.15	0.00
C - B1078 South East	0.70	0.00	0.00	0.30
D - A12 On Slip SB	0.25	0.25	0.25	0.25

08:30 - 08:45

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	47.50	101.33
B - A12 Off Slip SB	42.29	0.00	6.88	0.00
C - B1078 South East	43.59	0.00	0.00	17.71
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.32	0.68
B - A12 Off Slip SB	0.86	0.00	0.14	0.00
C - B1078 South East	0.71	0.00	0.00	0.29
D - A12 On Slip SB	0.25	0.25	0.25	0.25

08:45 - 09:00

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	38.62	79.30
B - A12 Off Slip SB	31.27	0.00	5.62	0.00
C - B1078 South East	35.10	0.00	0.00	15.77
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.33	0.67
B - A12 Off Slip SB	0.85	0.00	0.15	0.00
C - B1078 South East	0.69	0.00	0.00	0.31
D - A12 On Slip SB	0.25	0.25	0.25	0.25

Vehicle Mix

08:00 - 08:15

Heavy Vehicle Percentages

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0	0	2	5

Average PCU Per Veh

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	1.000	1.000	1.023	1.045

From	B - A12 Off Slip SB	6	0	4	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

From	B - A12 Off Slip SB	1.061	1.000	1.040	1.000
	C - B1078 South East	1.037	1.000	1.000	1.018
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

08:15 - 08:30

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	5	0	4	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.023	1.049
	B - A12 Off Slip SB	1.054	1.000	1.040	1.000
	C - B1078 South East	1.038	1.000	1.000	1.015
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

08:30 - 08:45

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	6	0	4	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.023	1.048
	B - A12 Off Slip SB	1.056	1.000	1.040	1.000
	C - B1078 South East	1.038	1.000	1.000	1.016
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

08:45 - 09:00

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - A12 Off Slip SB	5	0	4	0
	C - B1078 South East	4	0	0	1
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.023	1.050
	B - A12 Off Slip SB	1.052	1.000	1.040	1.000
	C - B1078 South East	1.038	1.000	1.000	1.015
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
08:00-08:15	A - B1078 North West	126.73	131.58
	B - A12 Off Slip SB	44.88	47.52
	C - B1078 South East	48.87	50.45
	D - A12 On Slip SB	0.00	0.00
08:15-08:30	A - B1078 North West	146.91	152.85
	B - A12 Off Slip SB	47.43	49.90
	C - B1078 South East	61.74	63.67
	D - A12 On Slip SB	0.00	0.00
08:30-08:45	A - B1078 North West	148.83	154.77
	B - A12 Off Slip SB	49.17	51.83
	C - B1078 South East	61.30	63.23
	D - A12 On Slip SB	0.00	0.00
08:45-09:00	A - B1078 North West	117.93	122.78
	B - A12 Off Slip SB	36.88	38.72
	C - B1078 South East	50.87	52.45
	D - A12 On Slip SB	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-CD	0.07	9.61	0.1	~1	A	6.25	25.00
B-A	0.46	18.19	0.8	~1	C	38.34	153.37
A-B						0.00	0.00
A-C						43.14	172.57
A-D						91.96	367.82
AB-CD	0.87	38.04	6.7	?	E	131.59	526.35
AB-C						9.75	39.00
D-ABC	0.00	0.00	0.0	~1	A	0.00	0.00
C-D						16.12	64.46
C-A						39.58	158.31
C-B						0.00	0.00
CD-A						39.58	158.31
CD-B	0.00	0.00	0.0	~1	A	0.00	0.00

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5.62	5.62	110.91	0.051	5.57	0.0	0.1	8.538	A
B-A	39.27	39.27	97.42	0.403	38.61	0.0	0.7	15.143	C
A-B	0.00	0.00			0.00				
A-C	39.02	39.02			39.02				
A-D	87.70	87.70			87.70				
AB-CD	119.54	119.54	167.44	0.714	116.82	0.0	2.7	17.208	C
AB-C	12.76	12.76			12.76				
D-ABC	0.00	0.00	94.69	0.000	0.00	0.0	0.0	0.000	A
C-D	12.57	12.57			12.57				

C-A	36.30	36.30			36.30				
C-B	0.00	0.00			0.00				
CD-A	36.30	36.30			36.30				
CD-B	0.00	0.00	128.32	0.000	0.00	0.0	0.0	0.000	A

08:15 - 08:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6.88	6.88	103.06	0.067	6.86	0.1	0.1	9.356	A
B-A	40.54	40.54	92.15	0.440	40.43	0.7	0.8	17.457	C
A-B	0.00	0.00			0.00				
A-C	47.42	47.42			47.42				
A-D	99.49	99.49			99.49				
AB-CD	146.63	146.63	171.77	0.854	143.73	2.7	5.6	30.542	D
AB-C	7.14	7.14			7.14				
D-ABC	0.00	0.00	88.30	0.000	0.00	0.0	0.0	0.000	A
C-D	18.41	18.41			18.41				
C-A	43.33	43.33			43.33				
C-B	0.00	0.00			0.00				
CD-A	43.33	43.33			43.33				
CD-B	0.00	0.00	123.52	0.000	0.00	0.0	0.0	0.000	A

08:30 - 08:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	6.88	6.88	100.48	0.068	6.88	0.1	0.1	9.614	A
B-A	42.29	42.29	91.51	0.462	42.23	0.8	0.8	18.195	C
A-B	0.00	0.00			0.00				
A-C	47.50	47.50			47.50				
A-D	101.33	101.33			101.33				
AB-CD	150.32	150.32	172.67	0.871	149.23	5.6	6.7	38.039	E
AB-C	5.39	5.39			5.39				
D-ABC	0.00	0.00	87.30	0.000	0.00	0.0	0.0	0.000	A
C-D	17.71	17.71			17.71				
C-A	43.59	43.59			43.59				
C-B	0.00	0.00			0.00				
CD-A	43.59	43.59			43.59				
CD-B	0.00	0.00	123.09	0.000	0.00	0.0	0.0	0.000	A

08:45 - 09:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	5.62	5.62	119.09	0.047	5.64	0.1	0.0	7.935	A
B-A	31.27	31.27	100.51	0.311	31.64	0.8	0.5	13.181	B
A-B	0.00	0.00			0.00				
A-C	38.62	38.62			38.62				
A-D	79.30	79.30			79.30				
AB-CD	109.86	109.86	167.63	0.655	114.19	6.7	2.4	18.224	C
AB-C	13.71	13.71			13.71				
D-ABC	0.00	0.00	95.29	0.000	0.00	0.0	0.0	0.000	A
C-D	15.77	15.77			15.77				
C-A	35.10	35.10			35.10				
C-B	0.00	0.00			0.00				
CD-A	35.10	35.10			35.10				
CD-B	0.00	0.00	130.31	0.000	0.00	0.0	0.0	0.000	A

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	~1	~1	~1	~1			N/A	N/A
B-A	0.66	~1	~1	~1	~1			N/A	N/A
AB-CD	2.72	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	~1	~1	~1	~1			N/A	N/A
B-A	0.77	~1	~1	~1	~1			N/A	N/A
AB-CD	5.61	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.07	~1	~1	~1	~1			N/A	N/A
B-A	0.83	~1	~1	~1	~1			N/A	N/A
AB-CD	6.71	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.05	~1	~1	~1	~1			N/A	N/A
B-A	0.46	~1	~1	~1	~1			N/A	N/A
AB-CD	2.37	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 3-4 PM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm D	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	5.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM peaky	DIRECT	15:00	16:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 North West		DIRECT	✓	100.000
B - A12 Off Slip SB		DIRECT	✓	100.000
C - B1078 South East		DIRECT	✓	100.000
D - A12 On Slip SB		DIRECT	✓	100.000

Origin-Destination Data

15:00 - 15:15

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	30.33	57.27
B - A12 Off Slip SB	37.29	0.00	2.02	0.00
C - B1078 South East	25.21	0.00	0.00	12.07
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.35	0.65
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.68	0.00	0.00	0.32
D - A12 On Slip SB	0.25	0.25	0.25	0.25

15:15 - 15:30

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	37.48	66.61
B - A12 Off Slip SB	44.62	0.00	2.48	0.00
C - B1078 South East	30.83	0.00	0.00	14.84
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.36	0.64
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.68	0.00	0.00	0.32
D - A12 On Slip SB	0.25	0.25	0.25	0.25

15:30 - 15:45

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	36.91	72.61
B - A12 Off Slip SB	46.40	0.00	2.48	0.00
C - B1078 South East	30.92	0.00	0.00	14.75
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.34	0.66
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.68	0.00	0.00	0.32
D - A12 On Slip SB	0.25	0.25	0.25	0.25

15:45 - 16:00

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	30.44	56.07
B - A12 Off Slip SB	36.93	0.00	2.02	0.00
C - B1078 South East	25.20	0.00	0.00	12.09
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.35	0.65
B - A12 Off Slip SB	0.95	0.00	0.05	0.00
C - B1078 South East	0.68	0.00	0.00	0.32
D - A12 On Slip SB	0.25	0.25	0.25	0.25

Vehicle Mix

15:00 - 15:15

Heavy Vehicle Percentages

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0	0	1	4

Average PCU Per Veh

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	1.000	1.000	1.014	1.035

From	B - A12 Off Slip SB	6	0	33	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

From	B - A12 Off Slip SB	1.060	1.000	1.333	1.000
	C - B1078 South East	1.018	1.000	1.000	1.104
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

15:15 - 15:30

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	4
	B - A12 Off Slip SB	6	0	33	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.014	1.037
	B - A12 Off Slip SB	1.056	1.000	1.333	1.000
	C - B1078 South East	1.018	1.000	1.000	1.104
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

15:30 - 15:45

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	3
	B - A12 Off Slip SB	6	0	33	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.014	1.034
	B - A12 Off Slip SB	1.062	1.000	1.333	1.000
	C - B1078 South East	1.018	1.000	1.000	1.104
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

15:45 - 16:00

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	4
	B - A12 Off Slip SB	6	0	33	0
	C - B1078 South East	2	0	0	10
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.014	1.036
	B - A12 Off Slip SB	1.058	1.000	1.333	1.000
	C - B1078 South East	1.018	1.000	1.000	1.104
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
15:00-15:15	A - B1078 North West	87.60	90.04
	B - A12 Off Slip SB	39.31	42.22
	C - B1078 South East	37.29	38.99
	D - A12 On Slip SB	0.00	0.00
15:15-15:30	A - B1078 North West	104.08	107.08
	B - A12 Off Slip SB	47.10	50.44
	C - B1078 South East	45.67	47.76
	D - A12 On Slip SB	0.00	0.00
15:30-15:45	A - B1078 North West	109.53	112.52
	B - A12 Off Slip SB	48.88	52.59
	C - B1078 South East	45.67	47.76
	D - A12 On Slip SB	0.00	0.00
15:45-16:00	A - B1078 North West	86.51	88.95
	B - A12 Off Slip SB	38.95	41.79
	C - B1078 South East	37.29	38.99
	D - A12 On Slip SB	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-CD	0.03	11.14	0.0	~1	B	2.25	9.00
B-A	0.45	15.94	0.8	~1	C	41.31	165.24
A-B						0.00	0.00
A-C						33.79	135.16
A-D						63.14	252.56
AB-CD	0.58	12.83	1.5	?	B	81.38	325.52
AB-C						17.80	71.18
D-ABC	0.00	0.00	0.0	~1	A	0.00	0.00
C-D						13.44	53.75
C-A						28.04	112.16
C-B						0.00	0.00
CD-A						28.04	112.16
CD-B	0.00	0.00	0.0	~1	A	0.00	0.00

Main Results for each time segment

15:00 - 15:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	2.02	2.02	95.54	0.021	2.00	0.0	0.0	9.619	A
B-A	37.29	37.29	108.66	0.343	36.78	0.0	0.5	12.436	B
A-B	0.00	0.00			0.00				
A-C	30.33	30.33			30.33				
A-D	57.27	57.27			57.27				
AB-CD	71.51	71.51	162.35	0.440	70.62	0.0	0.9	9.742	A
AB-C	18.09	18.09			18.09				
D-ABC	0.00	0.00	104.95	0.000	0.00	0.0	0.0	0.000	A
C-D	12.07	12.07			12.07				

C-A	25.21	25.21			25.21				
C-B	0.00	0.00			0.00				
CD-A	25.21	25.21			25.21				
CD-B	0.00	0.00	137.70	0.000	0.00	0.0	0.0	0.000	A

15:15 - 15:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	2.48	2.48	86.32	0.029	2.47	0.0	0.0	10.733	B
B-A	44.62	44.62	104.33	0.428	44.40	0.5	0.7	14.998	B
A-B	0.00	0.00			0.00				
A-C	37.47	37.47			37.47				
A-D	66.61	66.61			66.61				
AB-CD	88.01	88.01	165.74	0.531	87.61	0.9	1.3	11.497	B
AB-C	18.54	18.54			18.54				
D-ABC	0.00	0.00	100.72	0.000	0.00	0.0	0.0	0.000	A
C-D	14.84	14.84			14.84				
C-A	30.83	30.83			30.83				
C-B	0.00	0.00			0.00				
CD-A	30.83	30.83			30.83				
CD-B	0.00	0.00	133.86	0.000	0.00	0.0	0.0	0.000	A

15:30 - 15:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	2.48	2.48	83.24	0.030	2.48	0.0	0.0	11.143	B
B-A	46.40	46.40	102.52	0.453	46.33	0.7	0.8	15.936	C
A-B	0.00	0.00			0.00				
A-C	36.91	36.91			36.91				
A-D	72.61	72.61			72.61				
AB-CD	95.60	95.60	165.81	0.577	95.35	1.3	1.5	12.825	B
AB-C	16.41	16.41			16.41				
D-ABC	0.00	0.00	99.44	0.000	0.00	0.0	0.0	0.000	A
C-D	14.75	14.75			14.75				
C-A	30.92	30.92			30.92				
C-B	0.00	0.00			0.00				
CD-A	30.92	30.92			30.92				
CD-B	0.00	0.00	132.63	0.000	0.00	0.0	0.0	0.000	A

15:45 - 16:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	2.02	2.02	95.52	0.021	2.03	0.0	0.0	9.629	A
B-A	36.93	36.93	109.05	0.339	37.21	0.8	0.5	12.614	B
A-B	0.00	0.00			0.00				
A-C	30.44	30.44			30.44				
A-D	56.07	56.07			56.07				
AB-CD	70.39	70.39	162.58	0.433	71.04	1.5	0.9	9.910	A
AB-C	18.15	18.15			18.15				
D-ABC	0.00	0.00	104.90	0.000	0.00	0.0	0.0	0.000	A
C-D	12.09	12.09			12.09				
C-A	25.20	25.20			25.20				
C-B	0.00	0.00			0.00				
CD-A	25.20	25.20			25.20				
CD-B	0.00	0.00	137.95	0.000	0.00	0.0	0.0	0.000	A

Queue Variation Results for each time segment

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	~1	~1	~1	~1			N/A	N/A
B-A	0.51	~1	~1	~1	~1			N/A	N/A
AB-CD	0.89	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	~1	~1	~1	~1			N/A	N/A
B-A	0.73	~1	~1	~1	~1			N/A	N/A
AB-CD	1.29	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.03	~1	~1	~1	~1			N/A	N/A
B-A	0.80	~1	~1	~1	~1			N/A	N/A
AB-CD	1.55	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.02	~1	~1	~1	~1			N/A	N/A
B-A	0.52	~1	~1	~1	~1			N/A	N/A
AB-CD	0.90	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

2028 Peak Construction, 5-6 PM peaky

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Flow Arm A	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm B	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm C	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Flow Arm D	Analysis Options	Queue Variations cannot be calculated for the selected traffic profile type.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Left-Right Stagger	Two-way	4.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM peaky	DIRECT	17:00	18:00	60	15	✓

Vehicle mix varies over time	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)	O-D data varies over time
✓	✓	✓	HV Percentages	2.00	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Scaling Factor (%)
A - B1078 North West		DIRECT	✓	100.000
B - A12 Off Slip SB		DIRECT	✓	100.000
C - B1078 South East		DIRECT	✓	100.000
D - A12 On Slip SB		DIRECT	✓	100.000

Origin-Destination Data

17:00 - 17:15

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	38.20	43.34
B - A12 Off Slip SB	30.83	0.00	1.35	0.00
C - B1078 South East	29.23	0.00	0.00	9.55
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.47	0.53
B - A12 Off Slip SB	0.96	0.00	0.04	0.00
C - B1078 South East	0.75	0.00	0.00	0.25
D - A12 On Slip SB	0.25	0.25	0.25	0.25

17:15 - 17:30

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	46.87	56.13
B - A12 Off Slip SB	38.08	0.00	1.65	0.00
C - B1078 South East	36.28	0.00	0.00	10.25
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.46	0.54
B - A12 Off Slip SB	0.96	0.00	0.04	0.00
C - B1078 South East	0.78	0.00	0.00	0.22
D - A12 On Slip SB	0.25	0.25	0.25	0.25

17:30 - 17:45

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	47.00	61.22
B - A12 Off Slip SB	38.61	0.00	1.65	0.00
C - B1078 South East	37.08	0.00	0.00	7.83
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.43	0.57
B - A12 Off Slip SB	0.96	0.00	0.04	0.00
C - B1078 South East	0.83	0.00	0.00	0.17
D - A12 On Slip SB	0.25	0.25	0.25	0.25

17:45 - 18:00

Demand (Veh/TS)

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	38.52	55.28
B - A12 Off Slip SB	32.08	0.00	1.35	0.00
C - B1078 South East	31.11	0.00	0.00	3.89
D - A12 On Slip SB	0.00	0.00	0.00	0.00

Proportions

From \ To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0.00	0.00	0.41	0.59
B - A12 Off Slip SB	0.96	0.00	0.04	0.00
C - B1078 South East	0.89	0.00	0.00	0.11
D - A12 On Slip SB	0.25	0.25	0.25	0.25

Vehicle Mix

17:00 - 17:15

Heavy Vehicle Percentages

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	0	0	2	2

Average PCU Per Veh

To	A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
A - B1078 North West	1.000	1.000	1.017	1.021

From	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	1	0	0	5
	D - A12 On Slip SB	0	0	0	0

From	B - A12 Off Slip SB	1.049	1.000	1.000	1.000
	C - B1078 South East	1.015	1.000	1.000	1.047
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

17:15 - 17:30

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	1	0	0	5
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.017	1.020
	B - A12 Off Slip SB	1.050	1.000	1.000	1.000
	C - B1078 South East	1.014	1.000	1.000	1.053
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

17:30 - 17:45

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - A12 Off Slip SB	5	0	0	0
	C - B1078 South East	1	0	0	7
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.017	1.018
	B - A12 Off Slip SB	1.053	1.000	1.000	1.000
	C - B1078 South East	1.014	1.000	1.000	1.069
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

17:45 - 18:00

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - A12 Off Slip SB	6	0	0	0
	C - B1078 South East	1	0	0	11
	D - A12 On Slip SB	0	0	0	0

Average PCU Per Veh

		To			
		A - B1078 North West	B - A12 Off Slip SB	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	1.000	1.000	1.017	1.016
	B - A12 Off Slip SB	1.057	1.000	1.000	1.000
	C - B1078 South East	1.014	1.000	1.000	1.114
	D - A12 On Slip SB	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/TS)	Demand in PCU (PCU/TS)
17:00-17:15	A - B1078 North West	81.54	83.11
	B - A12 Off Slip SB	32.17	33.68
	C - B1078 South East	38.77	39.64
	D - A12 On Slip SB	0.00	0.00
17:15-17:30	A - B1078 North West	103.00	104.92
	B - A12 Off Slip SB	39.73	41.65
	C - B1078 South East	46.52	47.59
	D - A12 On Slip SB	0.00	0.00
17:30-17:45	A - B1078 North West	108.22	110.15
	B - A12 Off Slip SB	40.26	42.32
	C - B1078 South East	44.91	45.98
	D - A12 On Slip SB	0.00	0.00
17:45-18:00	A - B1078 North West	93.80	95.37
	B - A12 Off Slip SB	33.43	35.25
	C - B1078 South East	35.00	35.87
	D - A12 On Slip SB	0.00	0.00

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/TS)	Total Junction Arrivals (Veh)
B-CD	0.01	7.50	0.0	~1	A	1.50	6.00
B-A	0.37	13.91	0.6	~1	B	34.90	139.60
A-B						0.00	0.00
A-C						42.65	170.59
A-D						53.99	215.98
AB-CD	0.49	10.08	1.1	?	B	73.05	292.20
AB-C						25.09	100.35
D-ABC	0.00	0.00	0.0	~1	A	0.00	0.00
C-D						7.88	31.51
C-A						33.42	133.69
C-B						0.00	0.00
CD-A						33.42	133.69
CD-B	0.00	0.00	0.0	~1	A	0.00	0.00

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.35	1.35	135.23	0.010	1.34	0.0	0.0	6.721	A
B-A	30.83	30.83	110.85	0.278	30.45	0.0	0.4	11.142	B
A-B	0.00	0.00			0.00				
A-C	38.20	38.20			38.20				
A-D	43.34	43.34			43.34				
AB-CD	56.56	56.56	169.11	0.334	55.97	0.0	0.6	7.927	A
AB-C	26.32	26.32			26.32				
D-ABC	0.00	0.00	106.79	0.000	0.00	0.0	0.0	0.000	A
C-D	9.55	9.55			9.55				

C-A	29.23	29.23			29.23				
C-B	0.00	0.00			0.00				
CD-A	29.23	29.23			29.23				
CD-B	0.00	0.00	139.27	0.000	0.00	0.0	0.0	0.000	A

17:15 - 17:30

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.65	1.65	123.79	0.013	1.65	0.0	0.0	7.367	A
B-A	38.08	38.08	104.70	0.364	37.90	0.4	0.6	13.415	B
A-B	0.00	0.00			0.00				
A-C	46.87	46.87			46.87				
A-D	56.13	56.13			56.13				
AB-CD	78.04	78.04	173.94	0.449	77.66	0.6	1.0	9.351	A
AB-C	26.60	26.60			26.60				
D-ABC	0.00	0.00	101.84	0.000	0.00	0.0	0.0	0.000	A
C-D	10.25	10.25			10.25				
C-A	36.28	36.28			36.28				
C-B	0.00	0.00			0.00				
CD-A	36.28	36.28			36.28				
CD-B	0.00	0.00	134.34	0.000	0.00	0.0	0.0	0.000	A

17:30 - 17:45

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.65	1.65	121.63	0.014	1.65	0.0	0.0	7.500	A
B-A	38.61	38.61	103.13	0.374	38.58	0.6	0.6	13.907	B
A-B	0.00	0.00			0.00				
A-C	47.00	47.00			47.00				
A-D	61.22	61.22			61.22				
AB-CD	85.19	85.19	174.63	0.488	85.03	1.0	1.1	10.079	B
AB-C	24.68	24.68			24.68				
D-ABC	0.00	0.00	100.75	0.000	0.00	0.0	0.0	0.000	A
C-D	7.83	7.83			7.83				
C-A	37.08	37.08			37.08				
C-B	0.00	0.00			0.00				
CD-A	37.08	37.08			37.08				
CD-B	0.00	0.00	133.16	0.000	0.00	0.0	0.0	0.000	A

17:45 - 18:00

Stream	Total Demand (Veh/TS)	Junction Arrivals (Veh)	Capacity (Veh/TS)	RFC	Throughput (Veh/TS)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-CD	1.35	1.35	130.66	0.010	1.35	0.0	0.0	6.959	A
B-A	32.08	32.08	107.00	0.300	32.24	0.6	0.4	12.035	B
A-B	0.00	0.00			0.00				
A-C	38.52	38.52			38.52				
A-D	55.28	55.28			55.28				
AB-CD	72.40	72.40	170.84	0.424	72.65	1.1	0.9	9.226	A
AB-C	22.75	22.75			22.75				
D-ABC	0.00	0.00	104.29	0.000	0.00	0.0	0.0	0.000	A
C-D	3.89	3.89			3.89				
C-A	31.11	31.11			31.11				
C-B	0.00	0.00			0.00				
CD-A	31.11	31.11			31.11				
CD-B	0.00	0.00	136.50	0.000	0.00	0.0	0.0	0.000	A

Queue Variation Results for each time segment

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	~1	~1	~1	~1			N/A	N/A
B-A	0.38	~1	~1	~1	~1			N/A	N/A
AB-CD	0.60	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	~1	~1	~1	~1			N/A	N/A
B-A	0.56	~1	~1	~1	~1			N/A	N/A
AB-CD	0.98	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	~1	~1	~1	~1			N/A	N/A
B-A	0.59	~1	~1	~1	~1			N/A	N/A
AB-CD	1.14	?	?	?	?			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-CD	0.01	~1	~1	~1	~1			N/A	N/A
B-A	0.43	~1	~1	~1	~1			N/A	N/A
AB-CD	0.90	~1	~1	~1	~1			N/A	N/A
D-ABC	0.00	~1	~1	~1	~1			N/A	N/A
CD-B	0.00	~1	~1	~1	~1			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200923 J35a_Model_CV.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J35a\Model
Report generation date: 18/12/2020 11:32:01

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	6.36	0.00	A	0.0	0.5	6.50	0.00	A	0.0	0.5	6.33	0.01	A	0.0	0.5	6.53	0.01	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	7.05	0.02	A	0.0	0.5	7.03	0.02	A	0.0	0.5	6.97	0.02	A	0.0	0.5	8.13	0.02	A
Stream C-AB	0.0	0.5	4.89	0.00	A	0.0	0.5	5.40	0.00	A	0.0	0.5	5.40	0.00	A	0.0	0.5	5.75	0.01	A	0.0	0.5	5.69	0.00	A
2023 Reference Case																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	6.43	0.00	A	0.0	0.5	6.53	0.00	A	0.0	0.5	6.45	0.01	A	0.0	0.5	6.51	0.01	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	7.30	0.02	A	0.0	0.5	7.28	0.02	A	0.0	0.5	7.27	0.02	A	0.0	0.5	8.56	0.02	A
Stream C-AB	0.0	0.5	4.90	0.00	A	0.0	0.5	5.52	0.00	A	0.0	0.5	5.47	0.00	A	0.0	0.5	5.87	0.01	A	0.0	0.5	5.83	0.00	A
2023 Early Years																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	6.88	0.01	A	0.0	0.5	6.88	0.00	A	0.0	0.5	6.53	0.01	A	0.0	0.5	6.62	0.01	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	8.12	0.03	A	0.0	0.5	7.80	0.03	A	0.0	0.5	7.47	0.02	A	0.0	0.5	8.84	0.02	A
Stream C-AB	0.0	0.5	4.99	0.01	A	0.0	0.5	5.92	0.00	A	0.0	0.5	5.75	0.00	A	0.0	0.5	5.94	0.01	A	0.0	0.5	5.90	0.01	A
2028 Reference Case																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	6.45	0.01	A	0.0	0.5	6.59	0.01	A	0.0	0.5	6.61	0.02	A	0.0	0.5	6.54	0.01	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	7.59	0.02	A	0.0	0.5	7.63	0.03	A	0.0	0.5	8.09	0.03	A	0.0	0.5	8.46	0.02	A
Stream C-AB	0.0	0.5	4.92	0.01	A	0.0	0.5	5.63	0.01	A	0.0	0.5	5.60	0.01	A	0.0	0.5	5.94	0.01	A	0.0	0.5	5.97	0.01	A
2028 Peak Construction																									
Stream B-C	0.0	0.5	5.65	0.01	A	0.0	0.5	6.59	0.01	A	0.0	0.5	6.89	0.01	A	0.0	0.5	6.85	0.02	A	0.0	0.5	6.72	0.01	A
Stream B-A	0.0	0.5	6.07	0.00	A	0.0	0.5	8.09	0.02	A	0.0	0.5	8.14	0.03	A	0.0	0.5	9.18	0.04	A	0.0	0.5	8.96	0.03	A
Stream C-AB	0.0	0.5	5.01	0.01	A	0.0	0.5	5.86	0.01	A	0.0	0.5	5.84	0.01	A	0.0	0.5	6.12	0.01	A	0.0	0.5	6.02	0.01	A
2034 Reference Case																									
Stream B-C	0.0	0.5	5.77	0.00	A	0.0	0.5	6.54	0.01	A	0.0	0.5	6.57	0.01	A	0.0	0.5	6.94	0.02	A	0.0	0.5	6.78	0.02	A
Stream B-A	0.0	0.5	5.97	0.01	A	0.0	0.5	7.92	0.02	A	0.0	0.5	8.05	0.03	A	0.0	0.5	9.16	0.05	A	0.0	0.5	8.70	0.03	A
Stream C-AB	0.0	0.5	4.95	0.01	A	0.0	0.5	5.76	0.01	A	0.0	0.5	5.70	0.01	A	0.0	0.5	6.15	0.01	A	0.0	0.5	6.17	0.01	A
2034 Operational Led																									
Stream B-C	0.0	0.5	5.77	0.00	A	0.0	0.5	6.54	0.01	A	0.0	0.5	6.60	0.01	A	0.0	0.5	6.93	0.02	A	0.0	0.5	6.80	0.02	A
Stream B-A	0.0	0.5	5.98	0.01	A	0.0	0.5	7.92	0.02	A	0.0	0.5	8.07	0.03	A	0.0	0.5	9.23	0.04	A	0.0	0.5	8.74	0.03	A
Stream C-AB	0.0	0.5	4.94	0.01	A	0.0	0.5	5.76	0.01	A	0.0	0.5	5.72	0.01	A	0.0	0.5	6.17	0.01	A	0.0	0.5	6.19	0.01	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

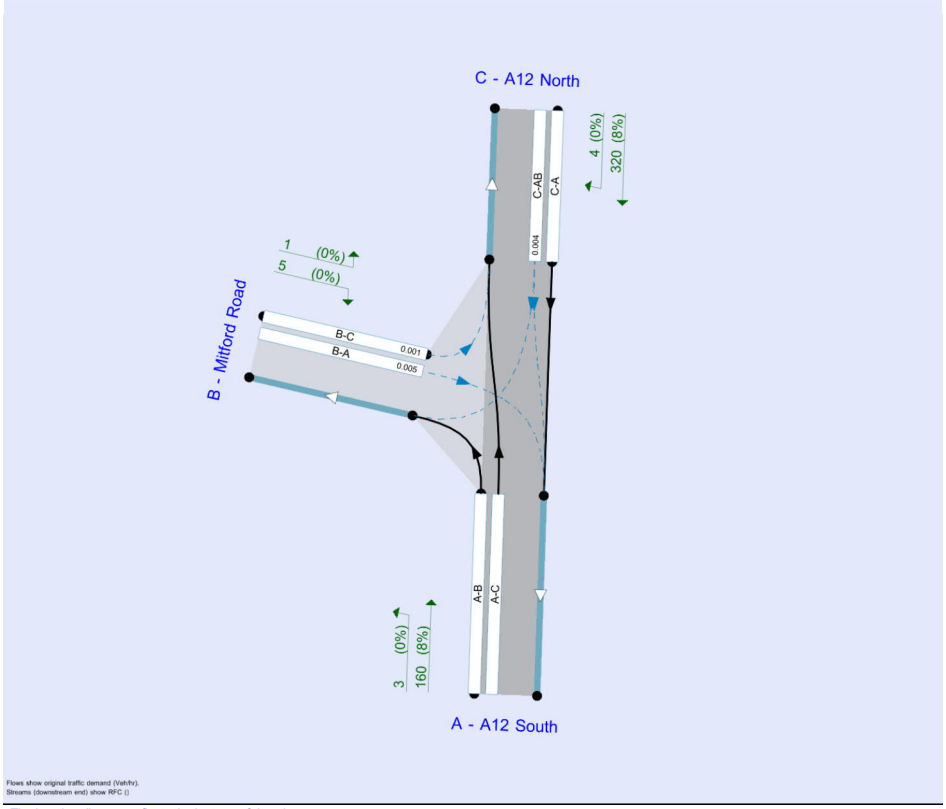
File summary

File Description

Title	A12 / Mitford Road
Location	52°11'55.58"N, 1°28'46.79"E
Site number	35a
Date	09/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
Description	Give way width of the minor arm is 5m, due to the junctions 9 restriction.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 South		Major
B	Mitford Road		Minor
C	A12 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 North	11.70	✓	10.00	✓	4.68	64.5	✓	9.72

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Mitford Road	One lane plus flare	10.00	5.50	3.30	2.60	2.60	✓	1.00	78	63

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J35a	B-A	711	0.080	0.201	0.127	0.287
J35a	B-C	722	0.083	0.210	-	-
J35a	C-B	776	0.226	0.226	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	137	100.000
B - Mitford Road		ONE HOUR	✓	3	100.000
C - A12 North		ONE HOUR	✓	288	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	137
	B - Mitford Road	2	0	1
	C - A12 North	285	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	9
	B - Mitford Road	0	0	0

	C - A12 North	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	4.89	0.0	0.5	A	3	4
C-A						262	392
A-B						0	0
A-C						126	189

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	698	0.000	0	0.0	0.0	0.000	A
B-A	0	0	658	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.56	751	0.003	2	0.0	0.0	4.809	A
C-A	215	54			215				
A-B	0	0			0				
A-C	103	26			103				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	694	0.000	0	0.0	0.0	0.000	A
B-A	0	0	648	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	746	0.004	3	0.0	0.0	4.844	A
C-A	256	64			256				
A-B	0	0			0				
A-C	123	31			123				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	687	0.000	0	0.0	0.0	0.000	A
B-A	0	0	634	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.83	739	0.004	3	0.0	0.0	4.893	A
C-A	314	78			314				
A-B	0	0			0				
A-C	151	38			151				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	687	0.000	0	0.0	0.0	0.000	A
B-A	0	0	634	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.83	739	0.004	3	0.0	0.0	4.893	A
C-A	314	78			314				
A-B	0	0			0				
A-C	151	38			151				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	694	0.000	0	0.0	0.0	0.000	A
B-A	0	0	648	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	746	0.004	3	0.0	0.0	4.844	A
C-A	256	64			256				
A-B	0	0			0				
A-C	123	31			123				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	698	0.000	0	0.0	0.0	0.000	A
B-A	0	0	658	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.56	751	0.003	2	0.0	0.0	4.811	A
C-A	215	54			215				
A-B	0	0			0				
A-C	103	26			103				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	395	100.000
B - Mitford Road		ONE HOUR	✓	11	100.000
C - A12 North		ONE HOUR	✓	537	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	3	392
	B - Mitford Road	9	0	2
	C - A12 North	536	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	11
	B - Mitford Road	0	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.36	0.0	0.5	A	2	3
B-A	0.02	7.05	0.0	0.5	A	8	12
C-AB	0.00	5.40	0.0	0.5	A	0.92	1
C-A						492	738
A-B						3	4
A-C						360	540

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	598	0.003	1	0.0	0.0	6.030	A
B-A	7	2	575	0.012	7	0.0	0.0	6.332	A
C-AB	0.75	0.19	702	0.001	0.75	0.0	0.0	5.135	A
C-A	404	101			404				
A-B	2	0.56			2				
A-C	295	74			295				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.45	586	0.003	2	0.0	0.0	6.164	A
B-A	8	2	552	0.015	8	0.0	0.0	6.613	A
C-AB	0.90	0.22	687	0.001	0.90	0.0	0.0	5.244	A
C-A	482	120			482				
A-B	3	0.67			3				
A-C	352	88			352				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	568	0.004	2	0.0	0.0	6.360	A
B-A	10	2	521	0.019	10	0.0	0.0	7.046	A
C-AB	1	0.28	667	0.002	1	0.0	0.0	5.403	A
C-A	590	148			590				
A-B	3	0.83			3				
A-C	432	108			432				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	568	0.004	2	0.0	0.0	6.360	A
B-A	10	2	521	0.019	10	0.0	0.0	7.046	A
C-AB	1	0.28	667	0.002	1	0.0	0.0	5.403	A
C-A	590	148			590				
A-B	3	0.83			3				
A-C	432	108			432				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	586	0.003	2	0.0	0.0	6.167	A
B-A	8	2	552	0.015	8	0.0	0.0	6.616	A
C-AB	0.90	0.22	687	0.001	0.90	0.0	0.0	5.246	A
C-A	482	120			482				
A-B	3	0.67			3				
A-C	352	88			352				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	598	0.003	2	0.0	0.0	6.030	A
B-A	7	2	575	0.012	7	0.0	0.0	6.335	A
C-AB	0.75	0.19	702	0.001	0.75	0.0	0.0	5.135	A
C-A	404	101			404				
A-B	2	0.56			2				
A-C	295	74			295				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	389	100.000
B - Mitford Road		ONE HOUR	✓	11	100.000
C - A12 North		ONE HOUR	✓	565	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	8	381
	B - Mitford Road	10	0	1
	C - A12 North	564	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	12
	B - Mitford Road	0	0	0
	C - A12 North	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.50	0.0	0.5	A	0.92	1
B-A	0.02	7.03	0.0	0.5	A	9	14
C-AB	0.00	5.40	0.0	0.5	A	0.92	1
C-A						518	776
A-B						7	11
A-C						350	524

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	584	0.001	0.75	0.0	0.0	6.170	A
B-A	8	2	579	0.013	7	0.0	0.0	6.298	A
C-AB	0.75	0.19	702	0.001	0.75	0.0	0.0	5.131	A
C-A	425	106			425				
A-B	6	2			6				
A-C	287	72			287				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0.90	0.22	572	0.002	0.90	0.0	0.0	6.304	A
B-A	9	2	556	0.016	9	0.0	0.0	6.585	A
C-AB	0.90	0.22	688	0.001	0.90	0.0	0.0	5.239	A
C-A	507	127			507				
A-B	7	2			7				
A-C	343	86			343				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	555	0.002	1	0.0	0.0	6.500	A
B-A	11	3	523	0.021	11	0.0	0.0	7.026	A
C-AB	1	0.28	668	0.002	1	0.0	0.0	5.397	A
C-A	621	155			621				
A-B	9	2			9				
A-C	419	105			419				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	555	0.002	1	0.0	0.0	6.500	A
B-A	11	3	523	0.021	11	0.0	0.0	7.026	A
C-AB	1	0.28	668	0.002	1	0.0	0.0	5.397	A
C-A	621	155			621				
A-B	9	2			9				
A-C	419	105			419				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.90	0.22	572	0.002	0.90	0.0	0.0	6.307	A
B-A	9	2	556	0.016	9	0.0	0.0	6.588	A
C-AB	0.90	0.22	688	0.001	0.90	0.0	0.0	5.242	A
C-A	507	127			507				
A-B	7	2			7				
A-C	343	86			343				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	584	0.001	0.75	0.0	0.0	6.170	A
B-A	8	2	579	0.013	8	0.0	0.0	6.299	A
C-AB	0.75	0.19	702	0.001	0.75	0.0	0.0	5.131	A
C-A	425	106			425				
A-B	6	2			6				
A-C	287	72			287				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	555	100.000
B - Mitford Road		ONE HOUR	✓	14	100.000
C - A12 North		ONE HOUR	✓	445	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	12	543
	B - Mitford Road	8	0	6
	C - A12 North	441	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	5
	B - Mitford Road	0	0	0
	C - A12 North	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.33	0.0	0.5	A	6	8
B-A	0.02	6.97	0.0	0.5	A	7	11
C-AB	0.01	5.75	0.0	0.5	A	4	6
C-A						405	607
A-B						11	17
A-C						498	747

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	618	0.007	4	0.0	0.0	5.871	A
B-A	6	2	588	0.010	6	0.0	0.0	6.186	A
C-AB	3	0.75	677	0.004	3	0.0	0.0	5.341	A
C-A	332	83			332				
A-B	9	2			9				
A-C	409	102			409				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	5	1	600	0.009	5	0.0	0.0	6.055	A
B-A	7	2	562	0.013	7	0.0	0.0	6.493	A
C-AB	4	0.90	658	0.005	4	0.0	0.0	5.504	A
C-A	396	99			396				
A-B	11	3			11				
A-C	488	122			488				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	575	0.011	7	0.0	0.0	6.330	A
B-A	9	2	525	0.017	9	0.0	0.0	6.972	A
C-AB	4	1	631	0.007	4	0.0	0.0	5.745	A
C-A	486	121			486				
A-B	13	3			13				
A-C	598	149			598				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	575	0.011	7	0.0	0.0	6.330	A
B-A	9	2	525	0.017	9	0.0	0.0	6.972	A
C-AB	4	1	631	0.007	4	0.0	0.0	5.745	A
C-A	486	121			486				
A-B	13	3			13				
A-C	598	149			598				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	600	0.009	5	0.0	0.0	6.056	A
B-A	7	2	562	0.013	7	0.0	0.0	6.496	A
C-AB	4	0.90	658	0.005	4	0.0	0.0	5.506	A
C-A	396	99			396				
A-B	11	3			11				
A-C	488	122			488				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	618	0.007	5	0.0	0.0	5.872	A
B-A	6	2	588	0.010	6	0.0	0.0	6.186	A
C-AB	3	0.75	677	0.004	3	0.0	0.0	5.341	A
C-A	332	83			332				
A-B	9	2			9				
A-C	409	102			409				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	553	100.000
B - Mitford Road		ONE HOUR	✓	10	100.000
C - A12 North		ONE HOUR	✓	362	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	8	545
	B - Mitford Road	7	0	3
	C - A12 North	361	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	3
	B - Mitford Road	14	0	0
	C - A12 North	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.53	0.0	0.5	A	3	4
B-A	0.02	8.13	0.0	0.5	A	6	10
C-AB	0.00	5.69	0.0	0.5	A	0.92	1
C-A						331	497
A-B						7	11
A-C						500	750

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	594	0.004	2	0.0	0.0	6.081	A
B-A	5	1	498	0.011	5	0.0	0.0	7.306	A
C-AB	0.75	0.19	679	0.001	0.75	0.0	0.0	5.307	A
C-A	272	68			272				
A-B	6	2			6				
A-C	410	103			410				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.67	577	0.005	3	0.0	0.0	6.264	A
B-A	6	2	478	0.013	6	0.0	0.0	7.631	A
C-AB	0.90	0.22	660	0.001	0.90	0.0	0.0	5.461	A
C-A	325	81			325				
A-B	7	2			7				
A-C	490	122			490				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.83	554	0.006	3	0.0	0.0	6.535	A
B-A	8	2	450	0.017	8	0.0	0.0	8.131	A
C-AB	1	0.28	634	0.002	1	0.0	0.0	5.688	A
C-A	397	99			397				
A-B	9	2			9				
A-C	600	150			600				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.83	554	0.006	3	0.0	0.0	6.535	A
B-A	8	2	450	0.017	8	0.0	0.0	8.131	A
C-AB	1	0.28	634	0.002	1	0.0	0.0	5.688	A
C-A	397	99			397				
A-B	9	2			9				
A-C	600	150			600				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	577	0.005	3	0.0	0.0	6.264	A
B-A	6	2	478	0.013	6	0.0	0.0	7.634	A
C-AB	0.90	0.22	660	0.001	0.90	0.0	0.0	5.461	A
C-A	325	81			325				
A-B	7	2			7				
A-C	490	122			490				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	594	0.004	2	0.0	0.0	6.085	A
B-A	5	1	498	0.011	5	0.0	0.0	7.309	A
C-AB	0.75	0.19	679	0.001	0.75	0.0	0.0	5.310	A
C-A	272	68			272				
A-B	6	2			6				
A-C	410	103			410				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	143	100.000
B - Mitford Road		ONE HOUR	✓	4	100.000
C - A12 North		ONE HOUR	✓	298	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0.51	143
	B - Mitford Road	3	0	1
	C - A12 North	295	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	9
	B - Mitford Road	0	0	0
	C - A12 North	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	4.90	0.0	0.5	A	3	4
C-A						271	406
A-B						0.47	0.71
A-C						131	196

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	697	0.000	0	0.0	0.0	0.000	A
B-A	0	0	656	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.56	750	0.003	2	0.0	0.0	4.816	A
C-A	222	56			222				
A-B	0.39	0.10			0.39				
A-C	107	27			107				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	692	0.000	0	0.0	0.0	0.000	A
B-A	0	0	646	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	745	0.004	3	0.0	0.0	4.852	A
C-A	265	66			265				
A-B	0.46	0.12			0.46				
A-C	128	32			128				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	686	0.000	0	0.0	0.0	0.000	A
B-A	0	0	631	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.83	737	0.004	3	0.0	0.0	4.903	A
C-A	325	81			325				
A-B	0.56	0.14			0.56				
A-C	157	39			157				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	686	0.000	0	0.0	0.0	0.000	A
B-A	0	0	631	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.83	737	0.004	3	0.0	0.0	4.903	A
C-A	325	81			325				
A-B	0.56	0.14			0.56				
A-C	157	39			157				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	692	0.000	0	0.0	0.0	0.000	A
B-A	0	0	646	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	745	0.004	3	0.0	0.0	4.854	A
C-A	265	66			265				
A-B	0.46	0.12			0.46				
A-C	128	32			128				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	697	0.000	0	0.0	0.0	0.000	A
B-A	0	0	656	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.56	750	0.003	2	0.0	0.0	4.816	A
C-A	222	56			222				
A-B	0.39	0.10			0.39				
A-C	107	27			107				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	446	100.000
B - Mitford Road		ONE HOUR	✓	12	100.000
C - A12 North		ONE HOUR	✓	564	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	3	443
	B - Mitford Road	9	0	3
	C - A12 North	562	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	10
	B - Mitford Road	0	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.43	0.0	0.5	A	2	3
B-A	0.02	7.30	0.0	0.5	A	8	12
C-AB	0.00	5.52	0.0	0.5	A	2	3
C-A						515	773
A-B						3	4
A-C						406	609

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	597	0.003	2	0.0	0.0	6.053	A
B-A	7	2	562	0.012	7	0.0	0.0	6.480	A
C-AB	2	0.38	693	0.002	2	0.0	0.0	5.209	A
C-A	423	106			423				
A-B	2	0.56			2				
A-C	333	83			333				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.56	582	0.004	2	0.0	0.0	6.207	A
B-A	8	2	537	0.015	8	0.0	0.0	6.801	A
C-AB	2	0.46	676	0.003	2	0.0	0.0	5.336	A
C-A	505	126			505				
A-B	3	0.67			3				
A-C	398	100			398				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	562	0.005	3	0.0	0.0	6.434	A
B-A	10	2	503	0.020	10	0.0	0.0	7.300	A
C-AB	2	0.56	654	0.003	2	0.0	0.0	5.524	A
C-A	618	155			618				
A-B	3	0.83			3				
A-C	488	122			488				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	562	0.005	3	0.0	0.0	6.434	A
B-A	10	2	503	0.020	10	0.0	0.0	7.300	A
C-AB	2	0.56	654	0.003	2	0.0	0.0	5.524	A
C-A	618	155			618				
A-B	3	0.83			3				
A-C	488	122			488				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	582	0.004	2	0.0	0.0	6.210	A
B-A	8	2	537	0.015	8	0.0	0.0	6.804	A
C-AB	2	0.46	676	0.003	2	0.0	0.0	5.336	A
C-A	505	126			505				
A-B	3	0.67			3				
A-C	398	100			398				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	596	0.003	2	0.0	0.0	6.056	A
B-A	7	2	562	0.012	7	0.0	0.0	6.480	A
C-AB	2	0.38	693	0.002	2	0.0	0.0	5.209	A
C-A	423	106			423				
A-B	2	0.56			2				
A-C	333	83			333				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	417	100.000
B - Mitford Road		ONE HOUR	✓	13	100.000
C - A12 North		ONE HOUR	✓	622	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	9	409
	B - Mitford Road	11	0	2
	C - A12 North	619	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	12
	B - Mitford Road	0	0	0
	C - A12 North	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.53	0.0	0.5	A	1	2
B-A	0.02	7.28	0.0	0.5	A	10	15
C-AB	0.00	5.47	0.0	0.5	A	2	3
C-A						568	853
A-B						8	12
A-C						375	563

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	584	0.002	1	0.0	0.0	6.170	A
B-A	8	2	567	0.015	8	0.0	0.0	6.442	A
C-AB	2	0.48	697	0.003	2	0.0	0.0	5.178	A
C-A	466	117			466				
A-B	6	2			6				
A-C	308	77			308				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	1	0.34	571	0.002	1	0.0	0.0	6.317	A
B-A	10	2	542	0.018	10	0.0	0.0	6.767	A
C-AB	2	0.57	682	0.003	2	0.0	0.0	5.298	A
C-A	557	139			557				
A-B	8	2			8				
A-C	367	92			367				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	553	0.003	2	0.0	0.0	6.531	A
B-A	12	3	507	0.024	12	0.0	0.0	7.276	A
C-AB	3	0.70	660	0.004	3	0.0	0.0	5.474	A
C-A	682	170			682				
A-B	9	2			9				
A-C	450	112			450				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	553	0.003	2	0.0	0.0	6.531	A
B-A	12	3	507	0.024	12	0.0	0.0	7.276	A
C-AB	3	0.70	660	0.004	3	0.0	0.0	5.474	A
C-A	682	170			682				
A-B	9	2			9				
A-C	450	112			450				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.34	571	0.002	1	0.0	0.0	6.317	A
B-A	10	2	542	0.018	10	0.0	0.0	6.768	A
C-AB	2	0.57	682	0.003	2	0.0	0.0	5.298	A
C-A	557	139			557				
A-B	8	2			8				
A-C	367	92			367				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	584	0.002	1	0.0	0.0	6.173	A
B-A	8	2	567	0.015	8	0.0	0.0	6.442	A
C-AB	2	0.48	697	0.003	2	0.0	0.0	5.180	A
C-A	466	117			466				
A-B	6	2			6				
A-C	308	77			308				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	599	100.000
B - Mitford Road		ONE HOUR	✓	17	100.000
C - A12 North		ONE HOUR	✓	494	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	14	585
	B - Mitford Road	10	0	8
	C - A12 North	489	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	6
	B - Mitford Road	0	0	0
	C - A12 North	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.45	0.0	0.5	A	7	10
B-A	0.02	7.27	0.0	0.5	A	9	13
C-AB	0.01	5.87	0.0	0.5	A	5	7
C-A						448	673
A-B						12	19
A-C						537	805

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	612	0.009	6	0.0	0.0	5.936	A
B-A	7	2	574	0.013	7	0.0	0.0	6.352	A
C-AB	4	0.95	669	0.006	4	0.0	0.0	5.412	A
C-A	368	92			368				
A-B	10	3			10				
A-C	440	110			440				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	593	0.011	7	0.0	0.0	6.143	A
B-A	9	2	545	0.016	9	0.0	0.0	6.708	A
C-AB	5	1	648	0.007	5	0.0	0.0	5.594	A
C-A	439	110			439				
A-B	12	3			12				
A-C	526	131			526				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	566	0.015	8	0.0	0.0	6.453	A
B-A	11	3	505	0.021	10	0.0	0.0	7.272	A
C-AB	6	1	619	0.009	6	0.0	0.0	5.866	A
C-A	538	135			538				
A-B	15	4			15				
A-C	644	161			644				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	566	0.015	8	0.0	0.0	6.454	A
B-A	11	3	505	0.021	11	0.0	0.0	7.271	A
C-AB	6	1	619	0.009	6	0.0	0.0	5.866	A
C-A	538	135			538				
A-B	15	4			15				
A-C	644	161			644				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	593	0.011	7	0.0	0.0	6.143	A
B-A	9	2	545	0.016	9	0.0	0.0	6.711	A
C-AB	5	1	648	0.007	5	0.0	0.0	5.594	A
C-A	439	110			439				
A-B	12	3			12				
A-C	526	131			526				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	612	0.009	6	0.0	0.0	5.936	A
B-A	7	2	574	0.013	7	0.0	0.0	6.355	A
C-AB	4	0.95	669	0.006	4	0.0	0.0	5.412	A
C-A	368	92			368				
A-B	10	3			10				
A-C	440	110			440				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	603	100.000
B - Mitford Road		ONE HOUR	✓	12	100.000
C - A12 North		ONE HOUR	✓	410	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	8	595
	B - Mitford Road	7	0	5
	C - A12 North	408	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	4
	B - Mitford Road	14	0	0
	C - A12 North	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.51	0.0	0.5	A	5	7
B-A	0.02	8.56	0.0	0.5	A	6	10
C-AB	0.00	5.83	0.0	0.5	A	2	3
C-A						374	561
A-B						7	11
A-C						546	819

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.95	604	0.006	4	0.0	0.0	5.999	A
B-A	5	1	480	0.011	5	0.0	0.0	7.575	A
C-AB	2	0.48	669	0.003	2	0.0	0.0	5.392	A
C-A	307	77			307				
A-B	6	2			6				
A-C	448	112			448				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	5	1	585	0.008	5	0.0	0.0	6.203	A
B-A	6	2	459	0.014	6	0.0	0.0	7.959	A
C-AB	2	0.57	649	0.004	2	0.0	0.0	5.568	A
C-A	366	92			366				
A-B	7	2			7				
A-C	535	134			535				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	559	0.010	6	0.0	0.0	6.508	A
B-A	8	2	428	0.018	8	0.0	0.0	8.560	A
C-AB	3	0.70	620	0.005	3	0.0	0.0	5.831	A
C-A	449	112			449				
A-B	9	2			9				
A-C	655	164			655				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	559	0.010	6	0.0	0.0	6.508	A
B-A	8	2	428	0.018	8	0.0	0.0	8.560	A
C-AB	3	0.70	620	0.005	3	0.0	0.0	5.831	A
C-A	449	112			449				
A-B	9	2			9				
A-C	655	164			655				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	585	0.008	5	0.0	0.0	6.206	A
B-A	6	2	459	0.014	6	0.0	0.0	7.960	A
C-AB	2	0.57	649	0.004	2	0.0	0.0	5.568	A
C-A	366	92			366				
A-B	7	2			7				
A-C	535	134			535				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.95	604	0.006	4	0.0	0.0	6.000	A
B-A	5	1	480	0.011	5	0.0	0.0	7.575	A
C-AB	2	0.48	669	0.003	2	0.0	0.0	5.392	A
C-A	307	77			307				
A-B	6	2			6				
A-C	448	112			448				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	177	100.000
B - Mitford Road		ONE HOUR	✓	4	100.000
C - A12 North		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0.51	177
	B - Mitford Road	3	0	1
	C - A12 North	308	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	14
	B - Mitford Road	0	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	4.99	0.0	0.5	A	4	6
C-A						283	424
A-B						0.47	0.71
A-C						162	243

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	690	0.000	0	0.0	0.0	0.000	A
B-A	0	0	648	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.75	742	0.004	3	0.0	0.0	4.871	A
C-A	232	58			232				
A-B	0.39	0.10			0.39				
A-C	133	33			133				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	684	0.000	0	0.0	0.0	0.000	A
B-A	0	0	636	0.000	0	0.0	0.0	0.000	A
C-AB	4	0.90	735	0.005	4	0.0	0.0	4.919	A
C-A	277	69			277				
A-B	0.46	0.12			0.46				
A-C	159	40			159				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	675	0.000	0	0.0	0.0	0.000	A
B-A	0	0	619	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	726	0.006	4	0.0	0.0	4.988	A
C-A	339	85			339				
A-B	0.56	0.14			0.56				
A-C	194	49			194				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	675	0.000	0	0.0	0.0	0.000	A
B-A	0	0	619	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	726	0.006	4	0.0	0.0	4.988	A
C-A	339	85			339				
A-B	0.56	0.14			0.56				
A-C	194	49			194				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	684	0.000	0	0.0	0.0	0.000	A
B-A	0	0	636	0.000	0	0.0	0.0	0.000	A
C-AB	4	0.90	735	0.005	4	0.0	0.0	4.920	A
C-A	277	69			277				
A-B	0.46	0.12			0.46				
A-C	159	40			159				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	690	0.000	0	0.0	0.0	0.000	A
B-A	0	0	648	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.75	742	0.004	3	0.0	0.0	4.871	A
C-A	232	58			232				
A-B	0.39	0.10			0.39				
A-C	133	33			133				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	585	100.000
B - Mitford Road		ONE HOUR	✓	15	100.000
C - A12 North		ONE HOUR	✓	622	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	4	581
	B - Mitford Road	11	0	4
	C - A12 North	620	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	14
	B - Mitford Road	0	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.88	0.0	0.5	A	3	5
B-A	0.03	8.12	0.0	0.5	A	10	15
C-AB	0.00	5.92	0.0	0.5	A	2	3
C-A						569	853
A-B						4	6
A-C						533	799

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	574	0.005	3	0.0	0.0	6.299	A
B-A	8	2	529	0.016	8	0.0	0.0	6.909	A
C-AB	2	0.38	663	0.002	2	0.0	0.0	5.444	A
C-A	467	117			467				
A-B	3	0.75			3				
A-C	437	109			437				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.79	554	0.006	3	0.0	0.0	6.530	A
B-A	10	2	498	0.020	10	0.0	0.0	7.369	A
C-AB	2	0.46	641	0.003	2	0.0	0.0	5.635	A
C-A	557	139			557				
A-B	4	0.90			4				
A-C	522	131			522				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.97	527	0.007	4	0.0	0.0	6.878	A
B-A	12	3	456	0.027	12	0.0	0.0	8.118	A
C-AB	2	0.56	610	0.004	2	0.0	0.0	5.922	A
C-A	682	171			682				
A-B	4	1			4				
A-C	639	160			639				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.97	527	0.007	4	0.0	0.0	6.878	A
B-A	12	3	456	0.027	12	0.0	0.0	8.118	A
C-AB	2	0.56	610	0.004	2	0.0	0.0	5.922	A
C-A	682	171			682				
A-B	4	1			4				
A-C	639	160			639				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.79	554	0.006	3	0.0	0.0	6.533	A
B-A	10	2	498	0.020	10	0.0	0.0	7.370	A
C-AB	2	0.46	641	0.003	2	0.0	0.0	5.635	A
C-A	557	139			557				
A-B	4	0.90			4				
A-C	522	131			522				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	574	0.005	3	0.0	0.0	6.303	A
B-A	8	2	529	0.016	8	0.0	0.0	6.909	A
C-AB	2	0.38	663	0.002	2	0.0	0.0	5.447	A
C-A	467	117			467				
A-B	3	0.75			3				
A-C	437	109			437				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	490	100.000
B - Mitford Road		ONE HOUR	✓	14	100.000
C - A12 North		ONE HOUR	✓	648	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	9	482
	B - Mitford Road	12	0	2
	C - A12 North	645	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	21
	B - Mitford Road	0	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.88	0.0	0.5	A	1	2
B-A	0.03	7.80	0.0	0.5	A	11	17
C-AB	0.00	5.75	0.0	0.5	A	2	3
C-A						592	888
A-B						8	12
A-C						442	663

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	565	0.002	1	0.0	0.0	6.384	A
B-A	9	2	546	0.017	9	0.0	0.0	6.709	A
C-AB	2	0.48	676	0.003	2	0.0	0.0	5.342	A
C-A	486	121			486				
A-B	6	2			6				
A-C	363	91			363				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	1	0.34	548	0.002	1	0.0	0.0	6.583	A
B-A	11	3	516	0.021	11	0.0	0.0	7.126	A
C-AB	2	0.57	656	0.003	2	0.0	0.0	5.504	A
C-A	580	145			580				
A-B	8	2			8				
A-C	433	108			433				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	525	0.003	2	0.0	0.0	6.879	A
B-A	13	3	475	0.028	13	0.0	0.0	7.796	A
C-AB	3	0.70	629	0.004	3	0.0	0.0	5.746	A
C-A	711	178			711				
A-B	9	2			9				
A-C	530	133			530				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	525	0.003	2	0.0	0.0	6.879	A
B-A	13	3	475	0.028	13	0.0	0.0	7.796	A
C-AB	3	0.70	629	0.004	3	0.0	0.0	5.746	A
C-A	711	178			711				
A-B	9	2			9				
A-C	530	133			530				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.34	548	0.002	1	0.0	0.0	6.583	A
B-A	11	3	516	0.021	11	0.0	0.0	7.127	A
C-AB	2	0.57	656	0.003	2	0.0	0.0	5.507	A
C-A	580	145			580				
A-B	8	2			8				
A-C	433	108			433				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	565	0.002	1	0.0	0.0	6.387	A
B-A	9	2	546	0.017	9	0.0	0.0	6.713	A
C-AB	2	0.48	676	0.003	2	0.0	0.0	5.342	A
C-A	486	121			486				
A-B	6	2			6				
A-C	363	91			363				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	608	100.000
B - Mitford Road		ONE HOUR	✓	17	100.000
C - A12 North		ONE HOUR	✓	510	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	14	594
	B - Mitford Road	10	0	8
	C - A12 North	505	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	9
	B - Mitford Road	0	0	0
	C - A12 North	13	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.53	0.0	0.5	A	7	10
B-A	0.02	7.47	0.0	0.5	A	9	13
C-AB	0.01	5.94	0.0	0.5	A	5	7
C-A						463	695
A-B						12	19
A-C						545	818

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	608	0.009	6	0.0	0.0	5.980	A
B-A	7	2	565	0.013	7	0.0	0.0	6.453	A
C-AB	4	0.95	664	0.006	4	0.0	0.0	5.453	A
C-A	380	95			380				
A-B	10	3			10				
A-C	447	112			447				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	587	0.012	7	0.0	0.0	6.200	A
B-A	9	2	535	0.016	9	0.0	0.0	6.842	A
C-AB	5	1	642	0.007	5	0.0	0.0	5.645	A
C-A	454	113			454				
A-B	12	3			12				
A-C	534	134			534				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	559	0.015	8	0.0	0.0	6.531	A
B-A	11	3	493	0.021	10	0.0	0.0	7.466	A
C-AB	6	1	612	0.009	6	0.0	0.0	5.936	A
C-A	556	139			556				
A-B	15	4			15				
A-C	654	164			654				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	559	0.015	8	0.0	0.0	6.532	A
B-A	11	3	493	0.021	11	0.0	0.0	7.466	A
C-AB	6	1	612	0.009	6	0.0	0.0	5.936	A
C-A	556	139			556				
A-B	15	4			15				
A-C	654	164			654				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	587	0.012	7	0.0	0.0	6.201	A
B-A	9	2	535	0.016	9	0.0	0.0	6.843	A
C-AB	5	1	642	0.007	5	0.0	0.0	5.646	A
C-A	454	113			454				
A-B	12	3			12				
A-C	534	134			534				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	607	0.009	6	0.0	0.0	5.983	A
B-A	7	2	565	0.013	7	0.0	0.0	6.453	A
C-AB	4	0.95	664	0.006	4	0.0	0.0	5.453	A
C-A	380	95			380				
A-B	10	3			10				
A-C	447	112			447				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	617	100.000
B - Mitford Road		ONE HOUR	✓	13	100.000
C - A12 North		ONE HOUR	✓	515	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	10	607
	B - Mitford Road	8	0	5
	C - A12 North	512	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	6
	B - Mitford Road	13	0	0
	C - A12 North	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.62	0.0	0.5	A	5	7
B-A	0.02	8.84	0.0	0.5	A	7	11
C-AB	0.01	5.90	0.0	0.5	A	3	5
C-A						470	704
A-B						9	14
A-C						557	835

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.95	596	0.006	4	0.0	0.0	6.080	A
B-A	6	2	476	0.013	6	0.0	0.0	7.666	A
C-AB	3	0.67	665	0.004	3	0.0	0.0	5.431	A
C-A	385	96			385				
A-B	8	2			8				
A-C	457	114			457				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	5	1	576	0.008	5	0.0	0.0	6.296	A
B-A	7	2	450	0.016	7	0.0	0.0	8.120	A
C-AB	3	0.80	644	0.005	3	0.0	0.0	5.617	A
C-A	460	115			460				
A-B	9	2			9				
A-C	545	136			545				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	549	0.010	6	0.0	0.0	6.621	A
B-A	9	2	416	0.021	9	0.0	0.0	8.843	A
C-AB	4	0.97	614	0.006	4	0.0	0.0	5.898	A
C-A	563	141			563				
A-B	11	3			11				
A-C	668	167			668				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	549	0.010	6	0.0	0.0	6.622	A
B-A	9	2	416	0.021	9	0.0	0.0	8.843	A
C-AB	4	0.97	614	0.006	4	0.0	0.0	5.898	A
C-A	563	141			563				
A-B	11	3			11				
A-C	668	167			668				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	576	0.008	5	0.0	0.0	6.300	A
B-A	7	2	451	0.016	7	0.0	0.0	8.122	A
C-AB	3	0.80	644	0.005	3	0.0	0.0	5.617	A
C-A	460	115			460				
A-B	9	2			9				
A-C	545	136			545				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.95	596	0.006	4	0.0	0.0	6.083	A
B-A	6	2	476	0.013	6	0.0	0.0	7.666	A
C-AB	3	0.67	665	0.004	3	0.0	0.0	5.431	A
C-A	385	96			385				
A-B	8	2			8				
A-C	457	114			457				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	151	100.000
B - Mitford Road		ONE HOUR	✓	4	100.000
C - A12 North		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	2	150
	B - Mitford Road	3	0	1
	C - A12 North	306	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	9
	B - Mitford Road	0	0	0
	C - A12 North	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	4.92	0.0	0.5	A	4	6
C-A						281	422
A-B						1	2
A-C						137	206

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	696	0.000	0	0.0	0.0	0.000	A
B-A	0	0	654	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.75	748	0.004	3	0.0	0.0	4.829	A
C-A	231	58			231				
A-B	1	0.28			1				
A-C	113	28			113				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	691	0.000	0	0.0	0.0	0.000	A
B-A	0	0	643	0.000	0	0.0	0.0	0.000	A
C-AB	4	0.90	743	0.005	4	0.0	0.0	4.869	A
C-A	275	69			275				
A-B	1	0.34			1				
A-C	135	34			135				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	684	0.000	0	0.0	0.0	0.000	A
B-A	0	0	627	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	735	0.006	4	0.0	0.0	4.924	A
C-A	337	84			337				
A-B	2	0.42			2				
A-C	165	41			165				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	684	0.000	0	0.0	0.0	0.000	A
B-A	0	0	627	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	735	0.006	4	0.0	0.0	4.924	A
C-A	337	84			337				
A-B	2	0.42			2				
A-C	165	41			165				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	691	0.000	0	0.0	0.0	0.000	A
B-A	0	0	643	0.000	0	0.0	0.0	0.000	A
C-AB	4	0.90	743	0.005	4	0.0	0.0	4.871	A
C-A	275	69			275				
A-B	1	0.34			1				
A-C	135	34			135				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	696	0.000	0	0.0	0.0	0.000	A
B-A	0	0	654	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.75	748	0.004	3	0.0	0.0	4.829	A
C-A	231	58			231				
A-B	1	0.28			1				
A-C	113	28			113				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	491	100.000
B - Mitford Road		ONE HOUR	✓	13	100.000
C - A12 North		ONE HOUR	✓	609	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	4	487
	B - Mitford Road	9	0	4
	C - A12 North	606	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	9
	B - Mitford Road	0	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.45	0.0	0.5	A	3	5
B-A	0.02	7.59	0.0	0.5	A	8	12
C-AB	0.01	5.63	0.0	0.5	A	3	4
C-A						556	834
A-B						4	6
A-C						447	670

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	600	0.004	3	0.0	0.0	6.024	A
B-A	7	2	548	0.012	7	0.0	0.0	6.652	A
C-AB	2	0.57	685	0.003	2	0.0	0.0	5.272	A
C-A	456	114			456				
A-B	3	0.75			3				
A-C	366	92			366				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.79	584	0.005	3	0.0	0.0	6.195	A
B-A	8	2	521	0.016	8	0.0	0.0	7.017	A
C-AB	3	0.68	667	0.004	3	0.0	0.0	5.416	A
C-A	544	136			544				
A-B	4	0.90			4				
A-C	438	109			438				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.97	562	0.007	4	0.0	0.0	6.447	A
B-A	10	2	484	0.020	10	0.0	0.0	7.592	A
C-AB	3	0.83	643	0.005	3	0.0	0.0	5.628	A
C-A	667	167			667				
A-B	4	1			4				
A-C	536	134			536				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.97	562	0.007	4	0.0	0.0	6.447	A
B-A	10	2	484	0.020	10	0.0	0.0	7.592	A
C-AB	3	0.83	643	0.005	3	0.0	0.0	5.628	A
C-A	667	167			667				
A-B	4	1			4				
A-C	536	134			536				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.79	584	0.005	3	0.0	0.0	6.195	A
B-A	8	2	521	0.016	8	0.0	0.0	7.020	A
C-AB	3	0.68	667	0.004	3	0.0	0.0	5.416	A
C-A	544	136			544				
A-B	4	0.90			4				
A-C	438	109			438				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	600	0.004	3	0.0	0.0	6.027	A
B-A	7	2	548	0.012	7	0.0	0.0	6.655	A
C-AB	2	0.57	685	0.003	2	0.0	0.0	5.274	A
C-A	456	114			456				
A-B	3	0.75			3				
A-C	366	92			366				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	469	100.000
B - Mitford Road		ONE HOUR	✓	15	100.000
C - A12 North		ONE HOUR	✓	677	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	10	460
	B - Mitford Road	12	0	3
	C - A12 North	673	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	11
	B - Mitford Road	0	0	0
	C - A12 North	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.59	0.0	0.5	A	2	3
B-A	0.03	7.63	0.0	0.5	A	11	17
C-AB	0.01	5.60	0.0	0.5	A	3	5
C-A						618	927
A-B						9	13
A-C						422	633

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	585	0.003	2	0.0	0.0	6.171	A
B-A	9	2	551	0.016	9	0.0	0.0	6.642	A
C-AB	3	0.67	688	0.004	3	0.0	0.0	5.252	A
C-A	507	127			507				
A-B	7	2			7				
A-C	346	87			346				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.56	570	0.004	2	0.0	0.0	6.338	A
B-A	11	3	523	0.021	11	0.0	0.0	7.024	A
C-AB	3	0.80	671	0.005	3	0.0	0.0	5.391	A
C-A	605	151			605				
A-B	9	2			9				
A-C	413	103			413				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	549	0.005	3	0.0	0.0	6.586	A
B-A	13	3	485	0.027	13	0.0	0.0	7.630	A
C-AB	4	0.97	647	0.006	4	0.0	0.0	5.596	A
C-A	741	185			741				
A-B	10	3			10				
A-C	506	127			506				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	549	0.005	3	0.0	0.0	6.586	A
B-A	13	3	485	0.027	13	0.0	0.0	7.630	A
C-AB	4	0.97	647	0.006	4	0.0	0.0	5.596	A
C-A	741	185			741				
A-B	10	3			10				
A-C	506	127			506				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	570	0.004	2	0.0	0.0	6.339	A
B-A	11	3	523	0.021	11	0.0	0.0	7.027	A
C-AB	3	0.80	671	0.005	3	0.0	0.0	5.393	A
C-A	605	151			605				
A-B	9	2			9				
A-C	413	103			413				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	585	0.003	2	0.0	0.0	6.174	A
B-A	9	2	551	0.016	9	0.0	0.0	6.645	A
C-AB	3	0.67	688	0.004	3	0.0	0.0	5.252	A
C-A	507	127			507				
A-B	7	2			7				
A-C	346	87			346				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	623	100.000
B - Mitford Road		ONE HOUR	✓	22	100.000
C - A12 North		ONE HOUR	✓	548	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	15	608
	B - Mitford Road	13	0	10
	C - A12 North	542	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	6
	B - Mitford Road	8	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.61	0.0	0.5	A	9	13
B-A	0.03	8.09	0.0	0.5	A	12	17
C-AB	0.01	5.94	0.0	0.5	A	6	8
C-A						497	746
A-B						13	20
A-C						558	837

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	603	0.012	7	0.0	0.0	6.042	A
B-A	9	2	526	0.018	9	0.0	0.0	6.963	A
C-AB	5	1	664	0.007	5	0.0	0.0	5.455	A
C-A	408	102			408				
A-B	11	3			11				
A-C	458	114			458				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	583	0.015	9	0.0	0.0	6.269	A
B-A	11	3	498	0.023	11	0.0	0.0	7.395	A
C-AB	5	1	643	0.008	5	0.0	0.0	5.649	A
C-A	487	122			487				
A-B	13	3			13				
A-C	547	137			547				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	555	0.019	10	0.0	0.0	6.612	A
B-A	14	3	459	0.030	14	0.0	0.0	8.092	A
C-AB	7	2	613	0.011	7	0.0	0.0	5.940	A
C-A	596	149			596				
A-B	16	4			16				
A-C	669	167			669				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	555	0.019	11	0.0	0.0	6.613	A
B-A	14	3	459	0.030	14	0.0	0.0	8.091	A
C-AB	7	2	613	0.011	7	0.0	0.0	5.940	A
C-A	596	149			596				
A-B	16	4			16				
A-C	669	167			669				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	583	0.015	9	0.0	0.0	6.270	A
B-A	11	3	498	0.023	11	0.0	0.0	7.399	A
C-AB	5	1	643	0.008	5	0.0	0.0	5.651	A
C-A	487	122			487				
A-B	13	3			13				
A-C	547	137			547				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	603	0.012	7	0.0	0.0	6.043	A
B-A	9	2	526	0.018	9	0.0	0.0	6.963	A
C-AB	5	1	664	0.007	5	0.0	0.0	5.457	A
C-A	408	102			408				
A-B	11	3			11				
A-C	458	114			458				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	661	100.000
B - Mitford Road		ONE HOUR	✓	14	100.000
C - A12 North		ONE HOUR	✓	489	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	10	651
	B - Mitford Road	7	0	7
	C - A12 North	486	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	3
	B - Mitford Road	14	0	0
	C - A12 North	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.54	0.0	0.5	A	6	10
B-A	0.02	8.46	0.0	0.5	A	6	10
C-AB	0.01	5.97	0.0	0.5	A	3	5
C-A						446	669
A-B						9	14
A-C						597	896

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	608	0.009	5	0.0	0.0	5.968	A
B-A	5	1	494	0.011	5	0.0	0.0	7.360	A
C-AB	3	0.67	660	0.004	3	0.0	0.0	5.473	A
C-A	366	91			366				
A-B	8	2			8				
A-C	490	122			490				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	6	2	587	0.011	6	0.0	0.0	6.194	A
B-A	6	2	469	0.013	6	0.0	0.0	7.787	A
C-AB	3	0.80	638	0.005	3	0.0	0.0	5.672	A
C-A	437	109			437				
A-B	9	2			9				
A-C	585	146			585				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	558	0.014	8	0.0	0.0	6.537	A
B-A	8	2	433	0.018	8	0.0	0.0	8.465	A
C-AB	4	0.97	607	0.006	4	0.0	0.0	5.972	A
C-A	535	134			535				
A-B	11	3			11				
A-C	716	179			716				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	558	0.014	8	0.0	0.0	6.537	A
B-A	8	2	433	0.018	8	0.0	0.0	8.465	A
C-AB	4	0.97	607	0.006	4	0.0	0.0	5.972	A
C-A	535	134			535				
A-B	11	3			11				
A-C	716	179			716				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	587	0.011	6	0.0	0.0	6.195	A
B-A	6	2	469	0.013	6	0.0	0.0	7.788	A
C-AB	3	0.80	638	0.005	3	0.0	0.0	5.674	A
C-A	437	109			437				
A-B	9	2			9				
A-C	585	146			585				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	608	0.009	5	0.0	0.0	5.969	A
B-A	5	1	494	0.011	5	0.0	0.0	7.359	A
C-AB	3	0.67	660	0.004	3	0.0	0.0	5.476	A
C-A	366	91			366				
A-B	8	2			8				
A-C	490	122			490				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	176	100.000
B - Mitford Road		ONE HOUR	✓	7	100.000
C - A12 North		ONE HOUR	✓	322	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	2	175
	B - Mitford Road	3	0	4
	C - A12 North	318	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	21
	B - Mitford Road	0	0	0
	C - A12 North	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	5.65	0.0	0.5	A	4	6
B-A	0.00	6.07	0.0	0.5	A	2	3
C-AB	0.01	5.01	0.0	0.5	A	4	6
C-A						292	438
A-B						1	2
A-C						160	240

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.75	656	0.005	3	0.0	0.0	5.511	A
B-A	2	0.47	626	0.003	2	0.0	0.0	5.769	A
C-AB	3	0.75	740	0.004	3	0.0	0.0	4.884	A
C-A	240	60			240				
A-B	1	0.28			1				
A-C	131	33			131				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	4	0.90	650	0.006	4	0.0	0.0	5.570	A
B-A	2	0.56	613	0.004	2	0.0	0.0	5.891	A
C-AB	4	0.90	733	0.005	4	0.0	0.0	4.935	A
C-A	286	72			286				
A-B	1	0.34			1				
A-C	157	39			157				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	641	0.007	4	0.0	0.0	5.654	A
B-A	3	0.69	596	0.005	3	0.0	0.0	6.068	A
C-AB	4	1	723	0.006	4	0.0	0.0	5.008	A
C-A	350	88			350				
A-B	2	0.42			2				
A-C	192	48			192				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	641	0.007	4	0.0	0.0	5.654	A
B-A	3	0.69	596	0.005	3	0.0	0.0	6.068	A
C-AB	4	1	723	0.006	4	0.0	0.0	5.008	A
C-A	350	88			350				
A-B	2	0.42			2				
A-C	192	48			192				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.90	650	0.006	4	0.0	0.0	5.573	A
B-A	2	0.56	613	0.004	2	0.0	0.0	5.891	A
C-AB	4	0.90	733	0.005	4	0.0	0.0	4.935	A
C-A	286	72			286				
A-B	1	0.34			1				
A-C	157	39			157				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.75	656	0.005	3	0.0	0.0	5.511	A
B-A	2	0.47	626	0.003	2	0.0	0.0	5.771	A
C-AB	3	0.75	740	0.004	3	0.0	0.0	4.886	A
C-A	240	60			240				
A-B	1	0.28			1				
A-C	131	33			131				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.00	0.00	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	534	100.000
B - Mitford Road		ONE HOUR	✓	16	100.000
C - A12 North		ONE HOUR	✓	626	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	5	529
	B - Mitford Road	10	0	6
	C - A12 North	622	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	18
	B - Mitford Road	0	0	0
	C - A12 North	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.59	0.0	0.5	A	5	8
B-A	0.02	8.09	0.0	0.5	A	9	14
C-AB	0.01	5.86	0.0	0.5	A	4	6
C-A						570	856
A-B						5	7
A-C						485	728

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	597	0.007	4	0.0	0.0	6.066	A
B-A	8	2	527	0.014	7	0.0	0.0	6.929	A
C-AB	3	0.76	669	0.005	3	0.0	0.0	5.406	A
C-A	468	117			468				
A-B	4	0.94			4				
A-C	398	100			398				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	5	1	578	0.009	5	0.0	0.0	6.277	A
B-A	9	2	497	0.018	9	0.0	0.0	7.372	A
C-AB	4	0.90	648	0.006	4	0.0	0.0	5.586	A
C-A	559	140			559				
A-B	4	1			4				
A-C	475	119			475				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	552	0.011	6	0.0	0.0	6.594	A
B-A	11	3	456	0.024	11	0.0	0.0	8.089	A
C-AB	4	1	619	0.007	4	0.0	0.0	5.855	A
C-A	684	171			684				
A-B	6	1			6				
A-C	582	146			582				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	552	0.011	6	0.0	0.0	6.594	A
B-A	11	3	456	0.024	11	0.0	0.0	8.089	A
C-AB	4	1	619	0.007	4	0.0	0.0	5.855	A
C-A	684	171			684				
A-B	6	1			6				
A-C	582	146			582				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	578	0.009	5	0.0	0.0	6.280	A
B-A	9	2	497	0.018	9	0.0	0.0	7.376	A
C-AB	4	0.90	648	0.006	4	0.0	0.0	5.588	A
C-A	559	140			559				
A-B	4	1			4				
A-C	475	119			475				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	597	0.007	4	0.0	0.0	6.067	A
B-A	8	2	527	0.014	8	0.0	0.0	6.929	A
C-AB	3	0.76	669	0.005	3	0.0	0.0	5.406	A
C-A	468	117			468				
A-B	4	0.94			4				
A-C	398	100			398				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	511	100.000
B - Mitford Road		ONE HOUR	✓	16	100.000
C - A12 North		ONE HOUR	✓	705	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	11	501
	B - Mitford Road	13	0	3
	C - A12 North	700	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	22
	B - Mitford Road	0	0	0
	C - A12 North	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.89	0.0	0.5	A	2	3
B-A	0.03	8.14	0.0	0.5	A	12	18
C-AB	0.01	5.84	0.0	0.5	A	4	6
C-A						643	964
A-B						10	14
A-C						459	689

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	568	0.003	2	0.0	0.0	6.355	A
B-A	10	2	532	0.018	10	0.0	0.0	6.893	A
C-AB	3	0.85	670	0.005	3	0.0	0.0	5.396	A
C-A	527	132			527				
A-B	8	2			8				
A-C	377	94			377				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.56	550	0.004	2	0.0	0.0	6.567	A
B-A	12	3	500	0.023	12	0.0	0.0	7.365	A
C-AB	4	1	650	0.006	4	0.0	0.0	5.573	A
C-A	630	157			630				
A-B	9	2			9				
A-C	450	113			450				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	526	0.005	3	0.0	0.0	6.885	A
B-A	14	4	457	0.031	14	0.0	0.0	8.135	A
C-AB	5	1	621	0.008	5	0.0	0.0	5.839	A
C-A	771	193			771				
A-B	12	3			12				
A-C	551	138			551				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	525	0.005	3	0.0	0.0	6.886	A
B-A	14	4	457	0.031	14	0.0	0.0	8.135	A
C-AB	5	1	621	0.008	5	0.0	0.0	5.839	A
C-A	771	193			771				
A-B	12	3			12				
A-C	551	138			551				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	550	0.004	2	0.0	0.0	6.567	A
B-A	12	3	500	0.023	12	0.0	0.0	7.366	A
C-AB	4	1	650	0.006	4	0.0	0.0	5.574	A
C-A	630	157			630				
A-B	9	2			9				
A-C	450	113			450				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	568	0.003	2	0.0	0.0	6.355	A
B-A	10	2	532	0.018	10	0.0	0.0	6.897	A
C-AB	3	0.85	670	0.005	3	0.0	0.0	5.398	A
C-A	527	132			527				
A-B	8	2			8				
A-C	377	94			377				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	658	100.000
B - Mitford Road		ONE HOUR	✓	23	100.000
C - A12 North		ONE HOUR	✓	583	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	16	642
	B - Mitford Road	14	0	10
	C - A12 North	576	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	11
	B - Mitford Road	7	0	0
	C - A12 North	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.85	0.0	0.5	A	9	13
B-A	0.04	9.18	0.0	0.5	A	12	19
C-AB	0.01	6.12	0.0	0.5	A	6	10
C-A						528	792
A-B						14	21
A-C						589	884

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	589	0.012	7	0.0	0.0	6.184	A
B-A	10	3	478	0.021	10	0.0	0.0	7.695	A
C-AB	5	1	653	0.008	5	0.0	0.0	5.560	A
C-A	433	108			433				
A-B	12	3			12				
A-C	483	121			483				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	567	0.015	9	0.0	0.0	6.446	A
B-A	12	3	448	0.027	12	0.0	0.0	8.255	A
C-AB	6	2	629	0.010	6	0.0	0.0	5.784	A
C-A	518	129			518				
A-B	14	3			14				
A-C	577	144			577				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	536	0.020	10	0.0	0.0	6.847	A
B-A	15	4	407	0.037	15	0.0	0.0	9.175	A
C-AB	8	2	595	0.013	8	0.0	0.0	6.125	A
C-A	634	158			634				
A-B	17	4			17				
A-C	707	177			707				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	536	0.020	11	0.0	0.0	6.848	A
B-A	15	4	407	0.037	15	0.0	0.0	9.177	A
C-AB	8	2	595	0.013	8	0.0	0.0	6.125	A
C-A	634	158			634				
A-B	17	4			17				
A-C	707	177			707				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	567	0.015	9	0.0	0.0	6.448	A
B-A	12	3	448	0.027	12	0.0	0.0	8.257	A
C-AB	6	2	629	0.010	6	0.0	0.0	5.786	A
C-A	518	129			518				
A-B	14	3			14				
A-C	577	144			577				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	589	0.012	7	0.0	0.0	6.188	A
B-A	10	3	478	0.021	10	0.0	0.0	7.697	A
C-AB	5	1	653	0.008	5	0.0	0.0	5.560	A
C-A	433	108			433				
A-B	12	3			12				
A-C	483	121			483				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	647	100.000
B - Mitford Road		ONE HOUR	✓	17	100.000
C - A12 North		ONE HOUR	✓	526	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	13	634
	B - Mitford Road	10	0	7
	C - A12 North	522	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	8
	B - Mitford Road	10	0	0
	C - A12 North	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.72	0.0	0.5	A	6	10
B-A	0.03	8.96	0.0	0.5	A	9	14
C-AB	0.01	6.02	0.0	0.5	A	4	6
C-A						479	718
A-B						12	18
A-C						582	872

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	594	0.009	5	0.0	0.0	6.117	A
B-A	8	2	477	0.016	7	0.0	0.0	7.664	A
C-AB	3	0.85	658	0.005	3	0.0	0.0	5.500	A
C-A	393	98			393				
A-B	10	2			10				
A-C	477	119			477				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	6	2	573	0.011	6	0.0	0.0	6.357	A
B-A	9	2	450	0.020	9	0.0	0.0	8.159	A
C-AB	4	1	635	0.006	4	0.0	0.0	5.706	A
C-A	469	117			469				
A-B	12	3			12				
A-C	570	142			570				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	543	0.014	8	0.0	0.0	6.721	A
B-A	11	3	413	0.027	11	0.0	0.0	8.958	A
C-AB	5	1	603	0.008	5	0.0	0.0	6.018	A
C-A	574	144			574				
A-B	14	4			14				
A-C	698	174			698				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	543	0.014	8	0.0	0.0	6.721	A
B-A	11	3	413	0.027	11	0.0	0.0	8.957	A
C-AB	5	1	603	0.008	5	0.0	0.0	6.018	A
C-A	574	144			574				
A-B	14	4			14				
A-C	698	174			698				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	572	0.011	6	0.0	0.0	6.358	A
B-A	9	2	450	0.020	9	0.0	0.0	8.161	A
C-AB	4	1	635	0.006	4	0.0	0.0	5.706	A
C-A	469	117			469				
A-B	12	3			12				
A-C	570	142			570				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	594	0.009	5	0.0	0.0	6.119	A
B-A	8	2	477	0.016	8	0.0	0.0	7.667	A
C-AB	3	0.85	658	0.005	3	0.0	0.0	5.500	A
C-A	393	98			393				
A-B	10	2			10				
A-C	477	119			477				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	163	100.000
B - Mitford Road		ONE HOUR	✓	6	100.000
C - A12 North		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	3	161
	B - Mitford Road	5	0	1
	C - A12 North	317	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	9
	B - Mitford Road	0	0	0
	C - A12 North	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.77	0.0	0.5	A	0.92	1
B-A	0.01	5.97	0.0	0.5	A	4	6
C-AB	0.01	4.95	0.0	0.5	A	4	6
C-A						291	437
A-B						2	3
A-C						147	221

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	637	0.001	0.75	0.0	0.0	5.656	A
B-A	3	0.85	634	0.005	3	0.0	0.0	5.704	A
C-AB	3	0.75	746	0.004	3	0.0	0.0	4.844	A
C-A	239	60			239				
A-B	2	0.47			2				
A-C	121	30			121				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0.90	0.22	632	0.001	0.90	0.0	0.0	5.703	A
B-A	4	1	623	0.007	4	0.0	0.0	5.814	A
C-AB	4	0.90	740	0.005	4	0.0	0.0	4.887	A
C-A	285	71			285				
A-B	2	0.56			2				
A-C	144	36			144				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	625	0.002	1	0.0	0.0	5.771	A
B-A	5	1	607	0.008	5	0.0	0.0	5.975	A
C-AB	4	1	732	0.006	4	0.0	0.0	4.947	A
C-A	349	87			349				
A-B	3	0.69			3				
A-C	177	44			177				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	625	0.002	1	0.0	0.0	5.771	A
B-A	5	1	607	0.008	5	0.0	0.0	5.975	A
C-AB	4	1	732	0.006	4	0.0	0.0	4.947	A
C-A	349	87			349				
A-B	3	0.69			3				
A-C	177	44			177				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.90	0.22	632	0.001	0.90	0.0	0.0	5.706	A
B-A	4	1	623	0.007	4	0.0	0.0	5.817	A
C-AB	4	0.90	740	0.005	4	0.0	0.0	4.889	A
C-A	285	71			285				
A-B	2	0.56			2				
A-C	144	36			144				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	637	0.001	0.75	0.0	0.0	5.656	A
B-A	3	0.85	634	0.005	3	0.0	0.0	5.704	A
C-AB	3	0.75	746	0.004	3	0.0	0.0	4.844	A
C-A	239	60			239				
A-B	2	0.47			2				
A-C	121	30			121				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	545	100.000
B - Mitford Road		ONE HOUR	✓	15	100.000
C - A12 North		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	6	539
	B - Mitford Road	10	0	5
	C - A12 North	656	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	8
	B - Mitford Road	0	0	0
	C - A12 North	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.54	0.0	0.5	A	4	6
B-A	0.02	7.92	0.0	0.5	A	9	14
C-AB	0.01	5.76	0.0	0.5	A	5	7
C-A						602	902
A-B						6	8
A-C						494	742

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	597	0.006	3	0.0	0.0	6.059	A
B-A	8	2	534	0.014	7	0.0	0.0	6.832	A
C-AB	4	0.95	677	0.006	4	0.0	0.0	5.350	A
C-A	494	123			494				
A-B	5	1			5				
A-C	406	101			406				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	4	1	580	0.007	4	0.0	0.0	6.251	A
B-A	9	2	505	0.018	9	0.0	0.0	7.251	A
C-AB	5	1	657	0.007	5	0.0	0.0	5.515	A
C-A	589	147			589				
A-B	5	1			5				
A-C	484	121			484				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	556	0.009	5	0.0	0.0	6.537	A
B-A	11	3	465	0.024	11	0.0	0.0	7.924	A
C-AB	6	1	630	0.009	6	0.0	0.0	5.760	A
C-A	722	180			722				
A-B	7	2			7				
A-C	593	148			593				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	556	0.009	5	0.0	0.0	6.538	A
B-A	11	3	465	0.024	11	0.0	0.0	7.924	A
C-AB	6	1	630	0.009	6	0.0	0.0	5.760	A
C-A	722	180			722				
A-B	7	2			7				
A-C	593	148			593				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	580	0.007	4	0.0	0.0	6.252	A
B-A	9	2	505	0.018	9	0.0	0.0	7.254	A
C-AB	5	1	657	0.007	5	0.0	0.0	5.515	A
C-A	589	147			589				
A-B	5	1			5				
A-C	484	121			484				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	597	0.006	3	0.0	0.0	6.060	A
B-A	8	2	534	0.014	8	0.0	0.0	6.832	A
C-AB	4	0.95	677	0.006	4	0.0	0.0	5.352	A
C-A	494	123			494				
A-B	5	1			5				
A-C	406	101			406				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	504	100.000
B - Mitford Road		ONE HOUR	✓	19	100.000
C - A12 North		ONE HOUR	✓	768	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	13	492
	B - Mitford Road	14	0	5
	C - A12 North	761	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	9
	B - Mitford Road	0	0	0
	C - A12 North	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.57	0.0	0.5	A	4	6
B-A	0.03	8.05	0.0	0.5	A	13	19
C-AB	0.01	5.70	0.0	0.5	A	6	9
C-A						699	1048
A-B						11	17
A-C						451	677

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	592	0.006	3	0.0	0.0	6.119	A
B-A	11	3	534	0.020	10	0.0	0.0	6.876	A
C-AB	5	1	683	0.007	5	0.0	0.0	5.312	A
C-A	573	143			573				
A-B	9	2			9				
A-C	370	93			370				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	4	1	575	0.007	4	0.0	0.0	6.301	A
B-A	13	3	504	0.025	13	0.0	0.0	7.324	A
C-AB	6	1	664	0.009	6	0.0	0.0	5.466	A
C-A	684	171			684				
A-B	11	3			11				
A-C	442	111			442				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	553	0.009	5	0.0	0.0	6.572	A
B-A	15	4	463	0.033	15	0.0	0.0	8.051	A
C-AB	7	2	639	0.011	7	0.0	0.0	5.696	A
C-A	838	210			838				
A-B	14	3			14				
A-C	541	135			541				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	553	0.009	5	0.0	0.0	6.573	A
B-A	15	4	463	0.033	15	0.0	0.0	8.051	A
C-AB	7	2	639	0.011	7	0.0	0.0	5.696	A
C-A	838	210			838				
A-B	14	3			14				
A-C	541	135			541				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	575	0.007	4	0.0	0.0	6.304	A
B-A	13	3	504	0.025	13	0.0	0.0	7.328	A
C-AB	6	1	664	0.009	6	0.0	0.0	5.469	A
C-A	684	171			684				
A-B	11	3			11				
A-C	442	111			442				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	592	0.006	3	0.0	0.0	6.122	A
B-A	11	3	534	0.020	11	0.0	0.0	6.877	A
C-AB	5	1	683	0.007	5	0.0	0.0	5.314	A
C-A	573	143			573				
A-B	9	2			9				
A-C	370	93			370				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	707	100.000
B - Mitford Road		ONE HOUR	✓	29	100.000
C - A12 North		ONE HOUR	✓	630	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	20	687
	B - Mitford Road	18	0	12
	C - A12 North	623	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	5	4
	B - Mitford Road	6	0	0
	C - A12 North	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.94	0.0	0.5	A	11	16
B-A	0.05	9.16	0.0	0.5	A	16	24
C-AB	0.01	6.15	0.0	0.5	A	6	10
C-A						571	857
A-B						18	27
A-C						630	946

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	585	0.015	9	0.0	0.0	6.243	A
B-A	13	3	485	0.027	13	0.0	0.0	7.628	A
C-AB	5	1	651	0.008	5	0.0	0.0	5.576	A
C-A	469	117			469				
A-B	15	4			15				
A-C	517	129			517				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	563	0.018	10	0.0	0.0	6.517	A
B-A	16	4	454	0.035	16	0.0	0.0	8.206	A
C-AB	6	2	626	0.010	6	0.0	0.0	5.804	A
C-A	560	140			560				
A-B	18	4			18				
A-C	618	154			618				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	13	3	531	0.024	13	0.0	0.0	6.940	A
B-A	19	5	412	0.047	19	0.0	0.0	9.158	A
C-AB	8	2	593	0.013	8	0.0	0.0	6.152	A
C-A	686	171			686				
A-B	22	5			22				
A-C	756	189			756				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	13	3	531	0.024	13	0.0	0.0	6.941	A
B-A	19	5	412	0.047	19	0.0	0.0	9.159	A
C-AB	8	2	593	0.013	8	0.0	0.0	6.152	A
C-A	686	171			686				
A-B	22	5			22				
A-C	756	189			756				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	563	0.018	10	0.0	0.0	6.522	A
B-A	16	4	454	0.035	16	0.0	0.0	8.208	A
C-AB	6	2	626	0.010	6	0.0	0.0	5.804	A
C-A	560	140			560				
A-B	18	4			18				
A-C	618	154			618				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	585	0.015	9	0.0	0.0	6.244	A
B-A	13	3	485	0.027	13	0.0	0.0	7.632	A
C-AB	5	1	651	0.008	5	0.0	0.0	5.576	A
C-A	469	117			469				
A-B	15	4			15				
A-C	517	129			517				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	727	100.000
B - Mitford Road		ONE HOUR	✓	19	100.000
C - A12 North		ONE HOUR	✓	594	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	12	715
	B - Mitford Road	10	0	9
	C - A12 North	588	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	3
	B - Mitford Road	10	0	0
	C - A12 North	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.78	0.0	0.5	A	8	12
B-A	0.03	8.70	0.0	0.5	A	9	14
C-AB	0.01	6.17	0.0	0.5	A	6	9
C-A						539	809
A-B						11	17
A-C						656	984

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	595	0.011	7	0.0	0.0	6.116	A
B-A	8	2	497	0.015	7	0.0	0.0	7.347	A
C-AB	5	1	649	0.008	5	0.0	0.0	5.585	A
C-A	442	111			442				
A-B	9	2			9				
A-C	538	135			538				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	8	2	572	0.014	8	0.0	0.0	6.380	A
B-A	9	2	467	0.019	9	0.0	0.0	7.860	A
C-AB	6	1	625	0.009	6	0.0	0.0	5.816	A
C-A	528	132			528				
A-B	11	3			11				
A-C	643	161			643				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	541	0.018	10	0.0	0.0	6.783	A
B-A	11	3	425	0.026	11	0.0	0.0	8.697	A
C-AB	7	2	591	0.012	7	0.0	0.0	6.169	A
C-A	647	162			647				
A-B	13	3			13				
A-C	787	197			787				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	541	0.018	10	0.0	0.0	6.784	A
B-A	11	3	425	0.026	11	0.0	0.0	8.697	A
C-AB	7	2	591	0.012	7	0.0	0.0	6.169	A
C-A	647	162			647				
A-B	13	3			13				
A-C	787	197			787				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	572	0.014	8	0.0	0.0	6.383	A
B-A	9	2	467	0.019	9	0.0	0.0	7.860	A
C-AB	6	1	625	0.009	6	0.0	0.0	5.818	A
C-A	528	132			528				
A-B	11	3			11				
A-C	643	161			643				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	595	0.011	7	0.0	0.0	6.118	A
B-A	8	2	497	0.015	8	0.0	0.0	7.350	A
C-AB	5	1	649	0.008	5	0.0	0.0	5.585	A
C-A	442	111			442				
A-B	9	2			9				
A-C	538	135			538				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	162	100.000
B - Mitford Road		ONE HOUR	✓	6	100.000
C - A12 North		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	3	160
	B - Mitford Road	5	0	1
	C - A12 North	320	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	8
	B - Mitford Road	0	0	0
	C - A12 North	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.77	0.0	0.5	A	0.92	1
B-A	0.01	5.98	0.0	0.5	A	4	6
C-AB	0.01	4.94	0.0	0.5	A	4	6
C-A						294	441
A-B						2	3
A-C						146	220

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	637	0.001	0.75	0.0	0.0	5.653	A
B-A	3	0.85	634	0.005	3	0.0	0.0	5.704	A
C-AB	3	0.75	746	0.004	3	0.0	0.0	4.841	A
C-A	241	60			241				
A-B	2	0.47			2				
A-C	120	30			120				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0.90	0.22	632	0.001	0.90	0.0	0.0	5.700	A
B-A	4	1	623	0.007	4	0.0	0.0	5.815	A
C-AB	4	0.90	741	0.005	4	0.0	0.0	4.883	A
C-A	288	72			288				
A-B	2	0.56			2				
A-C	144	36			144				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	625	0.002	1	0.0	0.0	5.766	A
B-A	5	1	607	0.008	5	0.0	0.0	5.975	A
C-AB	4	1	733	0.006	4	0.0	0.0	4.943	A
C-A	353	88			353				
A-B	3	0.69			3				
A-C	176	44			176				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	625	0.002	1	0.0	0.0	5.766	A
B-A	5	1	607	0.008	5	0.0	0.0	5.975	A
C-AB	4	1	733	0.006	4	0.0	0.0	4.943	A
C-A	353	88			353				
A-B	3	0.69			3				
A-C	176	44			176				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.90	0.22	632	0.001	0.90	0.0	0.0	5.702	A
B-A	4	1	623	0.007	4	0.0	0.0	5.815	A
C-AB	4	0.90	741	0.005	4	0.0	0.0	4.885	A
C-A	288	72			288				
A-B	2	0.56			2				
A-C	144	36			144				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	637	0.001	0.75	0.0	0.0	5.655	A
B-A	3	0.85	634	0.005	3	0.0	0.0	5.704	A
C-AB	3	0.75	746	0.004	3	0.0	0.0	4.841	A
C-A	241	60			241				
A-B	2	0.47			2				
A-C	120	30			120				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	546	100.000
B - Mitford Road		ONE HOUR	✓	15	100.000
C - A12 North		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	6	540
	B - Mitford Road	10	0	5
	C - A12 North	656	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	8
	B - Mitford Road	0	0	0
	C - A12 North	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.54	0.0	0.5	A	4	6
B-A	0.02	7.92	0.0	0.5	A	9	14
C-AB	0.01	5.76	0.0	0.5	A	5	7
C-A						602	902
A-B						6	8
A-C						495	743

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	597	0.006	3	0.0	0.0	6.061	A
B-A	8	2	535	0.014	7	0.0	0.0	6.830	A
C-AB	4	0.95	676	0.006	4	0.0	0.0	5.352	A
C-A	494	123			494				
A-B	5	1			5				
A-C	406	102			406				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	4	1	580	0.007	4	0.0	0.0	6.253	A
B-A	9	2	506	0.018	9	0.0	0.0	7.248	A
C-AB	5	1	657	0.007	5	0.0	0.0	5.517	A
C-A	589	147			589				
A-B	5	1			5				
A-C	485	121			485				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	555	0.009	5	0.0	0.0	6.540	A
B-A	11	3	466	0.024	11	0.0	0.0	7.919	A
C-AB	6	1	630	0.009	6	0.0	0.0	5.763	A
C-A	722	180			722				
A-B	7	2			7				
A-C	594	149			594				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	555	0.009	5	0.0	0.0	6.540	A
B-A	11	3	466	0.024	11	0.0	0.0	7.919	A
C-AB	6	1	630	0.009	6	0.0	0.0	5.763	A
C-A	722	180			722				
A-B	7	2			7				
A-C	594	149			594				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	580	0.007	4	0.0	0.0	6.256	A
B-A	9	2	506	0.018	9	0.0	0.0	7.249	A
C-AB	5	1	657	0.007	5	0.0	0.0	5.517	A
C-A	589	147			589				
A-B	5	1			5				
A-C	485	121			485				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	597	0.006	3	0.0	0.0	6.062	A
B-A	8	2	535	0.014	8	0.0	0.0	6.830	A
C-AB	4	0.95	676	0.006	4	0.0	0.0	5.354	A
C-A	494	123			494				
A-B	5	1			5				
A-C	406	102			406				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	510	100.000
B - Mitford Road		ONE HOUR	✓	19	100.000
C - A12 North		ONE HOUR	✓	761	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	13	498
	B - Mitford Road	14	0	5
	C - A12 North	754	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	10
	B - Mitford Road	0	0	0
	C - A12 North	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.60	0.0	0.5	A	4	6
B-A	0.03	8.07	0.0	0.5	A	13	19
C-AB	0.01	5.72	0.0	0.5	A	6	9
C-A						692	1038
A-B						11	17
A-C						457	685

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	590	0.006	3	0.0	0.0	6.134	A
B-A	11	3	533	0.020	10	0.0	0.0	6.888	A
C-AB	5	1	681	0.007	5	0.0	0.0	5.325	A
C-A	568	142			568				
A-B	9	2			9				
A-C	375	94			375				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	4	1	574	0.007	4	0.0	0.0	6.320	A
B-A	13	3	503	0.025	13	0.0	0.0	7.340	A
C-AB	6	1	662	0.009	6	0.0	0.0	5.483	A
C-A	678	170			678				
A-B	11	3			11				
A-C	447	112			447				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	551	0.009	5	0.0	0.0	6.597	A
B-A	15	4	461	0.033	15	0.0	0.0	8.074	A
C-AB	7	2	637	0.011	7	0.0	0.0	5.717	A
C-A	831	208			831				
A-B	14	3			14				
A-C	548	137			548				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	551	0.009	5	0.0	0.0	6.598	A
B-A	15	4	461	0.033	15	0.0	0.0	8.074	A
C-AB	7	2	637	0.011	7	0.0	0.0	5.717	A
C-A	831	208			831				
A-B	14	3			14				
A-C	548	137			548				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	574	0.007	4	0.0	0.0	6.323	A
B-A	13	3	503	0.025	13	0.0	0.0	7.341	A
C-AB	6	1	662	0.009	6	0.0	0.0	5.483	A
C-A	678	170			678				
A-B	11	3			11				
A-C	447	112			447				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.85	590	0.006	3	0.0	0.0	6.137	A
B-A	11	3	533	0.020	11	0.0	0.0	6.891	A
C-AB	5	1	681	0.007	5	0.0	0.0	5.327	A
C-A	568	142			568				
A-B	9	2			9				
A-C	375	94			375				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	714	100.000
B - Mitford Road		ONE HOUR	✓	28	100.000
C - A12 North		ONE HOUR	✓	636	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	20	694
	B - Mitford Road	17	0	12
	C - A12 North	629	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	5	4
	B - Mitford Road	6	0	0
	C - A12 North	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.93	0.0	0.5	A	11	16
B-A	0.04	9.23	0.0	0.5	A	15	23
C-AB	0.01	6.17	0.0	0.5	A	6	10
C-A						577	865
A-B						18	27
A-C						637	955

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	586	0.015	9	0.0	0.0	6.229	A
B-A	12	3	481	0.026	12	0.0	0.0	7.679	A
C-AB	5	1	650	0.008	5	0.0	0.0	5.585	A
C-A	473	118			473				
A-B	15	4			15				
A-C	523	131			523				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	564	0.018	10	0.0	0.0	6.505	A
B-A	15	4	450	0.033	15	0.0	0.0	8.265	A
C-AB	6	2	625	0.010	6	0.0	0.0	5.816	A
C-A	565	141			565				
A-B	18	4			18				
A-C	624	156			624				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	13	3	532	0.024	13	0.0	0.0	6.930	A
B-A	18	5	408	0.045	18	0.0	0.0	9.232	A
C-AB	8	2	591	0.013	8	0.0	0.0	6.168	A
C-A	692	173			692				
A-B	22	5			22				
A-C	764	191			764				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	13	3	532	0.024	13	0.0	0.0	6.931	A
B-A	18	5	408	0.045	18	0.0	0.0	9.234	A
C-AB	8	2	591	0.013	8	0.0	0.0	6.168	A
C-A	692	173			692				
A-B	22	5			22				
A-C	764	191			764				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	564	0.018	10	0.0	0.0	6.509	A
B-A	15	4	450	0.033	15	0.0	0.0	8.268	A
C-AB	6	2	625	0.010	6	0.0	0.0	5.816	A
C-A	565	141			565				
A-B	18	4			18				
A-C	624	156			624				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	586	0.015	9	0.0	0.0	6.233	A
B-A	12	3	481	0.026	12	0.0	0.0	7.683	A
C-AB	5	1	650	0.008	5	0.0	0.0	5.587	A
C-A	473	118			473				
A-B	15	4			15				
A-C	523	131			523				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35a	A12 / Mitford Road	T-Junction	Two-way	0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South		ONE HOUR	✓	734	100.000
B - Mitford Road		ONE HOUR	✓	19	100.000
C - A12 North		ONE HOUR	✓	597	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	12	722
	B - Mitford Road	10	0	9
	C - A12 North	591	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South	B - Mitford Road	C - A12 North
From	A - A12 South	0	0	3
	B - Mitford Road	10	0	0
	C - A12 North	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.80	0.0	0.5	A	8	12
B-A	0.03	8.74	0.0	0.5	A	9	14
C-AB	0.01	6.19	0.0	0.5	A	6	9
C-A						542	813
A-B						11	17
A-C						662	993

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	594	0.011	7	0.0	0.0	6.128	A
B-A	8	2	496	0.015	7	0.0	0.0	7.366	A
C-AB	5	1	648	0.008	5	0.0	0.0	5.595	A
C-A	445	111			445				
A-B	9	2			9				
A-C	543	136			543				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	8	2	571	0.014	8	0.0	0.0	6.395	A
B-A	9	2	465	0.019	9	0.0	0.0	7.886	A
C-AB	6	1	623	0.009	6	0.0	0.0	5.829	A
C-A	531	133			531				
A-B	11	3			11				
A-C	649	162			649				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	539	0.018	10	0.0	0.0	6.804	A
B-A	11	3	423	0.026	11	0.0	0.0	8.737	A
C-AB	7	2	589	0.012	7	0.0	0.0	6.187	A
C-A	650	163			650				
A-B	13	3			13				
A-C	795	199			795				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	539	0.018	10	0.0	0.0	6.805	A
B-A	11	3	423	0.026	11	0.0	0.0	8.736	A
C-AB	7	2	589	0.012	7	0.0	0.0	6.187	A
C-A	650	163			650				
A-B	13	3			13				
A-C	795	199			795				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	571	0.014	8	0.0	0.0	6.398	A
B-A	9	2	466	0.019	9	0.0	0.0	7.886	A
C-AB	6	1	623	0.009	6	0.0	0.0	5.830	A
C-A	531	133			531				
A-B	11	3			11				
A-C	649	162			649				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	594	0.011	7	0.0	0.0	6.129	A
B-A	8	2	496	0.015	8	0.0	0.0	7.369	A
C-AB	5	1	648	0.008	5	0.0	0.0	5.596	A
C-A	445	111			445				
A-B	9	2			9				
A-C	543	136			543				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200923 - J35b.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J35b\Model
Report generation date: 18/12/2020 11:35:28

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C	0.1	0.5	5.67	0.08	A	0.3	1.2	7.44	0.21	A	0.2	1.1	7.30	0.19	A	0.3	1.2	7.44	0.21	A	0.2	0.5	6.06	0.14	A
Stream B-A	0.0	0.5	6.14	0.01	A	0.0	0.5	7.64	0.04	A	0.1	0.5	7.85	0.07	A	0.1	0.5	8.41	0.10	A	0.0	0.5	7.51	0.02	A
Stream C-AB	0.0	0.5	6.17	0.04	A	0.1	0.5	6.68	0.12	A	0.2	1.1	7.22	0.19	A	0.2	1.0	6.64	0.19	A	0.3	1.3	6.72	0.23	A
2023 Reference Case																									
Stream B-C	0.1	0.5	5.72	0.08	A	0.3	1.3	7.58	0.22	A	0.2	1.2	7.49	0.20	A	0.3	1.3	7.74	0.22	A	0.2	0.5	6.38	0.16	A
Stream B-A	0.0	0.5	6.18	0.01	A	0.1	0.5	7.84	0.06	A	0.1	0.5	8.11	0.08	A	0.1	0.5	8.79	0.12	A	0.1	0.5	7.78	0.05	A
Stream C-AB	0.0	0.5	6.21	0.05	A	0.1	0.5	6.73	0.13	A	0.3	1.2	7.48	0.21	A	0.2	1.1	6.83	0.20	A	0.3	1.4	6.87	0.24	A
2023 Early Years																									
Stream B-C	0.1	0.5	5.79	0.09	A	0.3	1.1	8.19	0.26	A	0.3	1.2	7.66	0.21	A	0.3	1.4	7.90	0.23	A	0.3	1.2	7.09	0.21	A
Stream B-A	0.0	0.5	6.38	0.01	A	0.1	0.5	8.68	0.06	A	0.1	0.5	8.45	0.08	A	0.1	0.5	8.96	0.12	A	0.1	0.5	8.58	0.06	A
Stream C-AB	0.1	0.5	6.57	0.09	A	0.2	1.0	7.42	0.19	A	0.3	1.3	7.65	0.22	A	0.3	1.2	7.00	0.21	A	0.5	2.1	8.08	0.33	A
2028 Reference Case																									
Stream B-C	0.1	0.5	5.77	0.08	A	0.3	1.3	7.72	0.22	A	0.2	1.1	7.55	0.20	A	0.3	1.4	8.10	0.24	A	0.2	0.5	6.69	0.17	A
Stream B-A	0.0	0.5	6.22	0.02	A	0.1	0.5	8.05	0.07	A	0.1	0.5	8.37	0.08	A	0.2	0.5	9.16	0.14	A	0.1	0.5	8.16	0.08	A
Stream C-AB	0.0	0.5	6.25	0.05	A	0.1	0.5	6.81	0.13	A	0.3	1.3	7.66	0.23	A	0.3	1.2	7.04	0.21	A	0.3	1.4	7.04	0.25	A
2028 Peak Construction																									
Stream B-C	0.1	0.5	5.81	0.08	A	0.3	1.3	7.85	0.23	A	0.3	1.2	7.73	0.21	A	0.5	2.0	9.08	0.32	A	0.3	1.2	7.14	0.21	A
Stream B-A	0.0	0.5	6.33	0.02	A	0.1	0.5	8.34	0.07	A	0.1	0.5	8.78	0.09	A	0.2	0.5	9.86	0.15	A	0.1	0.5	8.68	0.09	A
Stream C-AB	0.1	0.5	6.45	0.07	A	0.2	0.5	7.09	0.16	A	0.4	1.3	8.20	0.27	A	0.3	1.1	7.56	0.26	A	0.5	2.2	8.05	0.33	A
2034 Reference Case																									
Stream B-C	0.1	0.5	5.81	0.08	A	0.3	1.3	7.95	0.23	A	0.3	1.2	7.94	0.21	A	0.3	1.4	8.53	0.24	A	0.2	0.5	7.00	0.17	A
Stream B-A	0.0	0.5	6.27	0.02	A	0.1	0.5	8.38	0.08	A	0.1	0.5	8.79	0.10	A	0.2	0.7	9.81	0.17	A	0.1	0.5	8.71	0.11	A
Stream C-AB	0.1	0.5	6.30	0.05	A	0.2	0.5	6.93	0.13	A	0.3	1.3	7.84	0.22	A	0.3	1.2	7.19	0.21	A	0.4	1.2	7.41	0.26	A
2034 Operational Led																									
Stream B-C	0.1	0.5	5.82	0.09	A	0.3	1.3	7.96	0.23	A	0.3	1.3	8.00	0.22	A	0.3	1.4	8.53	0.24	A	0.2	0.5	7.03	0.17	A
Stream B-A	0.0	0.5	6.29	0.02	A	0.1	0.5	8.42	0.08	A	0.1	0.5	9.31	0.11	A	0.2	0.7	9.84	0.17	A	0.1	0.5	8.74	0.11	A
Stream C-AB	0.1	0.5	6.33	0.06	A	0.2	0.5	7.01	0.14	A	0.5	2.5	9.35	0.35	A	0.3	1.2	7.18	0.21	A	0.3	1.1	7.37	0.26	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

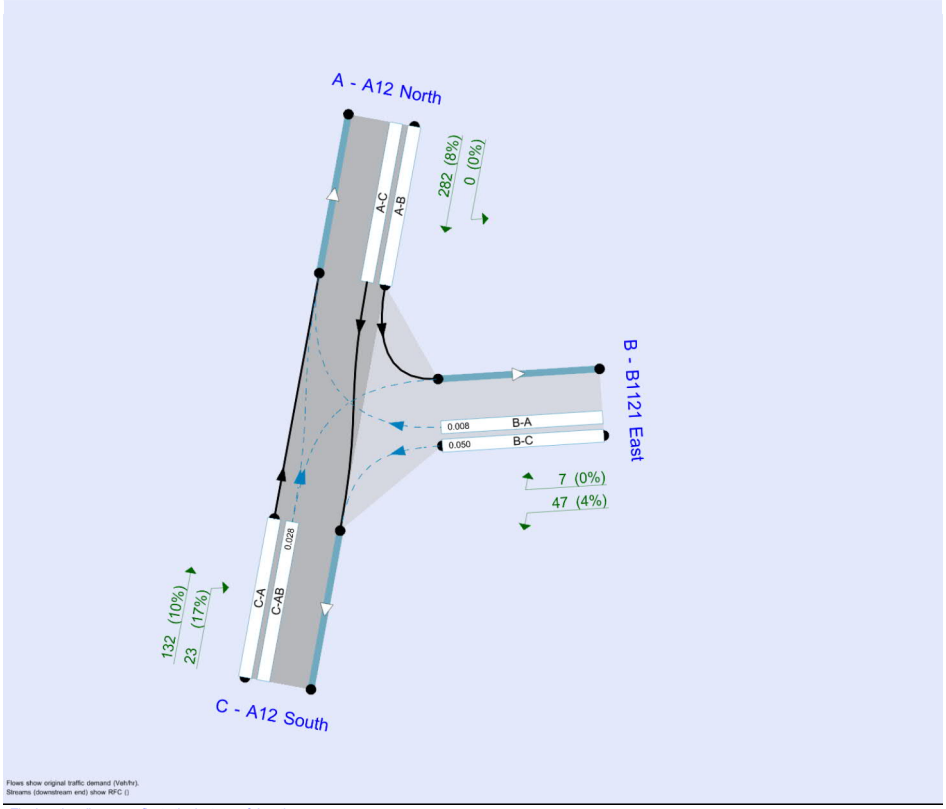
File summary

File Description

Title	A12 / B1121 Main Road
Location	52°11'52.98"N, 1°28'46.90"E
Site number	35b
Date	09/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
Description	Give way width of the minor arm is 5m, due to the junctions 9 restriction. The kerbed reserve width cannot be considered as more than 10m.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	0.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 North		Major
B	B1121 East		Minor
C	A12 South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 South	12.65	✓	10.00	✓	4.80	69.3	✓	17.80

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B1121 East	One lane plus flare	10.00	9.40	7.10	5.60	4.80	✓	3.00	206	72

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J35b	B-A	681	0.072	0.182	0.115	0.260
J35b	B-C	792	0.086	0.218	-	-
J35b	C-B	788	0.217	0.217	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	282	100.000
B - B1121 East		ONE HOUR	✓	54	100.000
C - A12 South		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	282
	B - B1121 East	7	0	47
	C - A12 South	132	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	0	0	4

	C - A12 South	10	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	5.67	0.1	0.5	A	43	65
B-A	0.01	6.14	0.0	0.5	A	6	10
C-AB	0.04	6.17	0.0	0.5	A	21	32
C-A						121	182
A-B						0	0
A-C						259	388

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	35	9	710	0.050	35	0.0	0.1	5.336	A
B-A	5	1	621	0.008	5	0.0	0.0	5.843	A
C-AB	17	4	629	0.028	17	0.0	0.0	5.887	A
C-A	99	25			99				
A-B	0	0			0				
A-C	212	53			212				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	42	11	700	0.060	42	0.1	0.1	5.472	A
B-A	6	2	610	0.010	6	0.0	0.0	5.965	A
C-AB	21	5	620	0.033	21	0.0	0.0	6.001	A
C-A	119	30			119				
A-B	0	0			0				
A-C	254	63			254				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	52	13	687	0.075	52	0.1	0.1	5.668	A
B-A	8	2	594	0.013	8	0.0	0.0	6.142	A
C-AB	25	6	609	0.042	25	0.0	0.0	6.166	A
C-A	145	36			145				
A-B	0	0			0				
A-C	310	78			310				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	52	13	687	0.075	52	0.1	0.1	5.668	A
B-A	8	2	594	0.013	8	0.0	0.0	6.142	A
C-AB	25	6	609	0.042	25	0.0	0.0	6.166	A
C-A	145	36			145				
A-B	0	0			0				
A-C	310	78			310				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	42	11	700	0.060	42	0.1	0.1	5.473	A
B-A	6	2	610	0.010	6	0.0	0.0	5.968	A
C-AB	21	5	620	0.033	21	0.0	0.0	6.004	A
C-A	119	30			119				
A-B	0	0			0				
A-C	254	63			254				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	35	9	710	0.050	35	0.1	0.1	5.339	A
B-A	5	1	621	0.008	5	0.0	0.0	5.843	A
C-AB	17	4	629	0.028	17	0.0	0.0	5.888	A
C-A	99	25			99				
A-B	0	0			0				
A-C	212	53			212				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.03	0.25	0.46	0.48			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	537	100.000
B - B1121 East		ONE HOUR	✓	137	100.000
C - A12 South		ONE HOUR	✓	442	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	537
	B - B1121 East	20	0	117
	C - A12 South	374	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	7
	B - B1121 East	0	0	5
	C - A12 South	11	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	7.44	0.3	1.2	A	107	161
B-A	0.04	7.64	0.0	0.5	A	18	28
C-AB	0.12	6.68	0.1	0.5	A	62	94
C-A						343	515
A-B						0	0
A-C						493	739

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	88	22	657	0.134	87	0.0	0.2	6.319	A
B-A	15	4	553	0.027	15	0.0	0.0	6.682	A
C-AB	51	13	655	0.078	51	0.0	0.1	5.955	A
C-A	282	70			282				
A-B	0	0			0				
A-C	404	101			404				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	105	26	638	0.165	105	0.2	0.2	6.751	A
B-A	18	4	528	0.034	18	0.0	0.0	7.054	A
C-AB	61	15	638	0.096	61	0.1	0.1	6.241	A
C-A	336	84			336				
A-B	0	0			0				
A-C	483	121			483				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	129	32	613	0.210	129	0.2	0.3	7.434	A
B-A	22	6	493	0.045	22	0.0	0.0	7.638	A
C-AB	75	19	614	0.122	75	0.1	0.1	6.674	A
C-A	412	103			412				
A-B	0	0			0				
A-C	591	148			591				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	129	32	613	0.210	129	0.3	0.3	7.440	A
B-A	22	6	493	0.045	22	0.0	0.0	7.639	A
C-AB	75	19	614	0.122	75	0.1	0.1	6.677	A
C-A	412	103			412				
A-B	0	0			0				
A-C	591	148			591				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	105	26	638	0.165	105	0.3	0.2	6.760	A
B-A	18	4	528	0.034	18	0.0	0.0	7.059	A
C-AB	61	15	638	0.096	61	0.1	0.1	6.247	A
C-A	336	84			336				
A-B	0	0			0				
A-C	483	121			483				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	88	22	657	0.134	88	0.2	0.2	6.335	A
B-A	15	4	553	0.027	15	0.0	0.0	6.690	A
C-AB	51	13	655	0.078	51	0.1	0.1	5.962	A
C-A	282	70			282				
A-B	0	0			0				
A-C	404	101			404				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.14	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.30	0.90	1.23			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.14	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	535	100.000
B - B1121 East		ONE HOUR	✓	138	100.000
C - A12 South		ONE HOUR	✓	466	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	535
	B - B1121 East	31	0	107
	C - A12 South	357	109	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 East	0	0	4
	C - A12 South	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.19	7.30	0.2	1.1	A	98	147
B-A	0.07	7.85	0.1	0.5	A	28	43
C-AB	0.19	7.22	0.2	1.1	A	100	150
C-A						328	491
A-B						0	0
A-C						491	736

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	655	0.123	80	0.0	0.1	6.253	A
B-A	23	6	557	0.042	23	0.0	0.0	6.742	A
C-AB	82	21	659	0.125	81	0.0	0.1	6.229	A
C-A	269	67			269				
A-B	0	0			0				
A-C	403	101			403				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	96	24	637	0.151	96	0.1	0.2	6.658	A
B-A	28	7	530	0.053	28	0.0	0.1	7.167	A
C-AB	98	24	642	0.153	98	0.1	0.2	6.614	A
C-A	321	80			321				
A-B	0	0			0				
A-C	481	120			481				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	29	611	0.193	118	0.2	0.2	7.298	A
B-A	34	9	493	0.069	34	0.1	0.1	7.844	A
C-AB	120	30	618	0.194	120	0.2	0.2	7.216	A
C-A	393	98			393				
A-B	0	0			0				
A-C	589	147			589				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	29	611	0.193	118	0.2	0.2	7.304	A
B-A	34	9	493	0.069	34	0.1	0.1	7.846	A
C-AB	120	30	618	0.194	120	0.2	0.2	7.222	A
C-A	393	98			393				
A-B	0	0			0				
A-C	589	147			589				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	96	24	637	0.151	96	0.2	0.2	6.670	A
B-A	28	7	530	0.053	28	0.1	0.1	7.174	A
C-AB	98	24	642	0.153	98	0.2	0.2	6.625	A
C-A	321	80			321				
A-B	0	0			0				
A-C	481	120			481				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	655	0.123	81	0.2	0.1	6.267	A
B-A	23	6	557	0.042	23	0.1	0.0	6.749	A
C-AB	82	21	659	0.125	82	0.2	0.1	6.245	A
C-A	269	67			269				
A-B	0	0			0				
A-C	403	101			403				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.24	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.28	0.66	1.09			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.24	0.03	0.28	0.68	1.10			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	407	100.000
B - B1121 East		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	615	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	407
	B - B1121 East	42	0	115
	C - A12 South	503	112	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	7	0	7
	C - A12 South	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	7.44	0.3	1.2	A	106	158
B-A	0.10	8.41	0.1	0.5	A	39	58
C-AB	0.19	6.64	0.2	1.0	A	103	154
C-A						462	692
A-B						0	0
A-C						373	560

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	646	0.134	86	0.0	0.2	6.420	A
B-A	32	8	532	0.059	31	0.0	0.1	7.189	A
C-AB	84	21	698	0.121	84	0.0	0.1	5.859	A
C-A	379	95			379				
A-B	0	0			0				
A-C	306	77			306				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	103	26	631	0.164	103	0.2	0.2	6.817	A
B-A	38	9	508	0.074	38	0.1	0.1	7.658	A
C-AB	101	25	684	0.147	101	0.1	0.2	6.167	A
C-A	452	113			452				
A-B	0	0			0				
A-C	366	91			366				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	610	0.207	126	0.2	0.3	7.437	A
B-A	46	12	475	0.097	46	0.1	0.1	8.402	A
C-AB	123	31	665	0.185	123	0.2	0.2	6.634	A
C-A	554	138			554				
A-B	0	0			0				
A-C	448	112			448				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	610	0.208	127	0.3	0.3	7.443	A
B-A	46	12	474	0.097	46	0.1	0.1	8.406	A
C-AB	123	31	665	0.185	123	0.2	0.2	6.639	A
C-A	554	138			554				
A-B	0	0			0				
A-C	448	112			448				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	103	26	631	0.164	104	0.3	0.2	6.830	A
B-A	38	9	508	0.074	38	0.1	0.1	7.666	A
C-AB	101	25	684	0.147	101	0.2	0.2	6.174	A
C-A	452	113			452				
A-B	0	0			0				
A-C	366	91			366				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	646	0.134	87	0.2	0.2	6.440	A
B-A	32	8	532	0.059	32	0.1	0.1	7.202	A
C-AB	84	21	698	0.121	84	0.2	0.1	5.874	A
C-A	379	95			379				
A-B	0	0			0				
A-C	306	77			306				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.08	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.23	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.30	0.88	1.21			N/A	N/A
B-A	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.23	0.03	0.28	0.50	0.96			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	361	100.000
B - B1121 East		ONE HOUR	✓	100	100.000
C - A12 South		ONE HOUR	✓	689	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	361
	B - B1121 East	11	0	89
	C - A12 South	545	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	3
	B - B1121 East	0	0	1
	C - A12 South	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.14	6.06	0.2	0.5	A	82	123
B-A	0.02	7.51	0.0	0.5	A	10	15
C-AB	0.23	6.72	0.3	1.3	A	132	198
C-A						500	750
A-B						0	0
A-C						331	497

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67	17	722	0.093	67	0.0	0.1	5.493	A
B-A	8	2	551	0.015	8	0.0	0.0	6.635	A
C-AB	108	27	722	0.150	108	0.0	0.2	5.855	A
C-A	410	103			410				
A-B	0	0			0				
A-C	272	68			272				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	80	20	709	0.113	80	0.1	0.1	5.722	A
B-A	10	2	526	0.019	10	0.0	0.0	6.977	A
C-AB	129	32	710	0.182	129	0.2	0.2	6.195	A
C-A	490	122			490				
A-B	0	0			0				
A-C	325	81			325				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	98	24	692	0.142	98	0.1	0.2	6.059	A
B-A	12	3	491	0.025	12	0.0	0.0	7.509	A
C-AB	159	40	694	0.228	158	0.2	0.3	6.717	A
C-A	600	150			600				
A-B	0	0			0				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	98	24	692	0.142	98	0.2	0.2	6.061	A
B-A	12	3	491	0.025	12	0.0	0.0	7.510	A
C-AB	159	40	694	0.228	159	0.3	0.3	6.723	A
C-A	600	150			600				
A-B	0	0			0				
A-C	397	99			397				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	709	0.113	80	0.2	0.1	5.725	A
B-A	10	2	526	0.019	10	0.0	0.0	6.979	A
C-AB	129	32	710	0.182	130	0.3	0.2	6.206	A
C-A	490	122			490				
A-B	0	0			0				
A-C	325	81			325				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67	17	721	0.093	67	0.1	0.1	5.503	A
B-A	8	2	551	0.015	8	0.0	0.0	6.638	A
C-AB	108	27	722	0.150	109	0.2	0.2	5.870	A
C-A	410	103			410				
A-B	0	0			0				
A-C	272	68			272				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.00	0.00	0.10	0.10			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.29	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.29	0.03	0.31	1.04	1.33			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.13	0.00	0.00	0.13	0.13			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.00	0.00	0.10	0.10			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	0.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	292	100.000
B - B1121 East		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	163	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	292
	B - B1121 East	8	0	49
	C - A12 South	138	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	0	0	4
	C - A12 South	10	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	5.72	0.1	0.5	A	45	68
B-A	0.01	6.18	0.0	0.5	A	7	10
C-AB	0.05	6.21	0.0	0.5	A	23	34
C-A						126	189
A-B						0	0
A-C						268	402

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	37	9	707	0.052	37	0.0	0.1	5.366	A
B-A	6	1	619	0.009	6	0.0	0.0	5.867	A
C-AB	19	5	627	0.030	19	0.0	0.0	5.915	A
C-A	104	26			104				
A-B	0	0			0				
A-C	220	55			220				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	44	11	697	0.063	44	0.1	0.1	5.509	A
B-A	7	2	607	0.011	7	0.0	0.0	5.996	A
C-AB	23	6	619	0.036	22	0.0	0.0	6.038	A
C-A	124	31			124				
A-B	0	0			0				
A-C	263	66			263				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	54	14	684	0.079	54	0.1	0.1	5.716	A
B-A	8	2	590	0.014	8	0.0	0.0	6.183	A
C-AB	28	7	607	0.045	28	0.0	0.0	6.214	A
C-A	152	38			152				
A-B	0	0			0				
A-C	322	80			322				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	54	14	684	0.079	54	0.1	0.1	5.716	A
B-A	8	2	590	0.014	8	0.0	0.0	6.183	A
C-AB	28	7	607	0.045	28	0.0	0.0	6.214	A
C-A	152	38			152				
A-B	0	0			0				
A-C	322	80			322				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	44	11	697	0.063	44	0.1	0.1	5.512	A
B-A	7	2	607	0.011	7	0.0	0.0	5.996	A
C-AB	23	6	619	0.036	23	0.0	0.0	6.041	A
C-A	124	31			124				
A-B	0	0			0				
A-C	263	66			263				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	37	9	707	0.052	37	0.1	0.1	5.369	A
B-A	6	1	619	0.009	6	0.0	0.0	5.867	A
C-AB	19	5	627	0.030	19	0.0	0.0	5.920	A
C-A	104	26			104				
A-B	0	0			0				
A-C	220	55			220				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	548	100.000
B - B1121 East		ONE HOUR	✓	143	100.000
C - A12 South		ONE HOUR	✓	489	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	548
	B - B1121 East	25	0	119
	C - A12 South	420	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	7
	B - B1121 East	0	0	5
	C - A12 South	11	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	7.58	0.3	1.3	A	109	163
B-A	0.06	7.84	0.1	0.5	A	23	34
C-AB	0.13	6.73	0.1	0.5	A	64	96
C-A						385	578
A-B						0	0
A-C						503	755

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	651	0.137	89	0.0	0.2	6.397	A
B-A	19	5	550	0.034	18	0.0	0.0	6.769	A
C-AB	52	13	653	0.080	52	0.0	0.1	5.985	A
C-A	316	79			316				
A-B	0	0			0				
A-C	413	103			413				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	107	27	632	0.169	106	0.2	0.2	6.850	A
B-A	22	6	523	0.042	22	0.0	0.0	7.180	A
C-AB	63	16	636	0.098	62	0.1	0.1	6.281	A
C-A	377	94			377				
A-B	0	0			0				
A-C	493	123			493				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	131	33	605	0.216	130	0.2	0.3	7.569	A
B-A	27	7	487	0.056	27	0.0	0.1	7.834	A
C-AB	77	19	611	0.125	76	0.1	0.1	6.730	A
C-A	462	116			462				
A-B	0	0			0				
A-C	604	151			604				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	131	33	605	0.216	131	0.3	0.3	7.579	A
B-A	27	7	486	0.056	27	0.1	0.1	7.836	A
C-AB	77	19	611	0.125	77	0.1	0.1	6.732	A
C-A	462	116			462				
A-B	0	0			0				
A-C	604	151			604				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	107	27	632	0.169	107	0.3	0.2	6.863	A
B-A	22	6	523	0.042	22	0.1	0.0	7.186	A
C-AB	63	16	636	0.098	63	0.1	0.1	6.284	A
C-A	377	94			377				
A-B	0	0			0				
A-C	493	123			493				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	651	0.137	89	0.2	0.2	6.415	A
B-A	19	5	550	0.034	19	0.0	0.0	6.777	A
C-AB	52	13	653	0.080	52	0.1	0.1	5.992	A
C-A	316	79			316				
A-B	0	0			0				
A-C	413	103			413				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.14	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.95	1.26			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.14	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	567	100.000
B - B1121 East		ONE HOUR	✓	143	100.000
C - A12 South		ONE HOUR	✓	500	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	567
	B - B1121 East	34	0	109
	C - A12 South	383	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 East	0	0	4
	C - A12 South	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	7.49	0.2	1.2	A	100	150
B-A	0.08	8.11	0.1	0.5	A	31	46
C-AB	0.21	7.48	0.3	1.2	A	108	162
C-A						351	527
A-B						0	0
A-C						520	780

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	82	21	648	0.127	82	0.0	0.1	6.345	A
B-A	25	6	549	0.046	25	0.0	0.0	6.869	A
C-AB	89	22	654	0.136	88	0.0	0.2	6.356	A
C-A	288	72			288				
A-B	0	0			0				
A-C	427	107			427				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	98	25	628	0.156	98	0.1	0.2	6.785	A
B-A	30	8	520	0.058	30	0.0	0.1	7.343	A
C-AB	106	26	636	0.166	106	0.2	0.2	6.790	A
C-A	344	86			344				
A-B	0	0			0				
A-C	510	127			510				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	120	30	601	0.200	120	0.2	0.2	7.482	A
B-A	37	9	481	0.077	37	0.1	0.1	8.108	A
C-AB	130	32	611	0.212	129	0.2	0.3	7.475	A
C-A	421	105			421				
A-B	0	0			0				
A-C	624	156			624				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	120	30	601	0.200	120	0.2	0.2	7.488	A
B-A	37	9	481	0.077	37	0.1	0.1	8.114	A
C-AB	130	32	611	0.212	130	0.3	0.3	7.481	A
C-A	421	105			421				
A-B	0	0			0				
A-C	624	156			624				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	98	25	628	0.156	98	0.2	0.2	6.797	A
B-A	30	8	520	0.058	30	0.1	0.1	7.348	A
C-AB	106	26	636	0.166	106	0.3	0.2	6.802	A
C-A	344	86			344				
A-B	0	0			0				
A-C	510	127			510				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	82	21	648	0.127	82	0.2	0.1	6.365	A
B-A	25	6	549	0.046	25	0.1	0.0	6.878	A
C-AB	89	22	654	0.136	89	0.2	0.2	6.375	A
C-A	288	72			288				
A-B	0	0			0				
A-C	427	107			427				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.27	0.03	0.26	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.29	0.78	1.15			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.27	0.03	0.30	0.92	1.24			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	436	100.000
B - B1121 East		ONE HOUR	✓	170	100.000
C - A12 South		ONE HOUR	✓	659	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	436
	B - B1121 East	50	0	121
	C - A12 South	539	119	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	7	0	7
	C - A12 South	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	7.74	0.3	1.3	A	111	166
B-A	0.12	8.79	0.1	0.5	A	46	68
C-AB	0.20	6.83	0.2	1.1	A	109	164
C-A						495	742
A-B						0	0
A-C						400	600

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	637	0.143	90	0.0	0.2	6.576	A
B-A	37	9	526	0.071	37	0.0	0.1	7.360	A
C-AB	90	22	693	0.130	89	0.0	0.1	5.960	A
C-A	406	102			406				
A-B	0	0			0				
A-C	328	82			328				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	108	27	621	0.175	108	0.2	0.2	7.025	A
B-A	45	11	500	0.089	45	0.1	0.1	7.905	A
C-AB	107	27	678	0.158	107	0.1	0.2	6.300	A
C-A	485	121			485				
A-B	0	0			0				
A-C	392	98			392				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	598	0.222	133	0.2	0.3	7.732	A
B-A	55	14	464	0.118	55	0.1	0.1	8.786	A
C-AB	131	33	658	0.199	131	0.2	0.2	6.824	A
C-A	594	148			594				
A-B	0	0			0				
A-C	480	120			480				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	598	0.222	133	0.3	0.3	7.742	A
B-A	55	14	464	0.118	55	0.1	0.1	8.792	A
C-AB	131	33	658	0.199	131	0.2	0.2	6.830	A
C-A	594	148			594				
A-B	0	0			0				
A-C	480	120			480				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	108	27	620	0.175	109	0.3	0.2	7.040	A
B-A	45	11	500	0.089	45	0.1	0.1	7.914	A
C-AB	107	27	678	0.158	107	0.2	0.2	6.308	A
C-A	485	121			485				
A-B	0	0			0				
A-C	392	98			392				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	637	0.143	91	0.2	0.2	6.598	A
B-A	37	9	526	0.071	37	0.1	0.1	7.376	A
C-AB	90	22	693	0.130	90	0.2	0.1	5.972	A
C-A	406	102			406				
A-B	0	0			0				
A-C	328	82			328				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.13	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.25	0.03	0.26	0.46	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.03	0.31	1.00	1.30			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.25	0.03	0.29	0.77	1.14			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	389	100.000
B - B1121 East		ONE HOUR	✓	119	100.000
C - A12 South		ONE HOUR	✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	389
	B - B1121 East	23	0	96
	C - A12 South	582	148	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	3
	B - B1121 East	0	0	1
	C - A12 South	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.16	6.38	0.2	0.5	A	88	132
B-A	0.05	7.78	0.1	0.5	A	21	32
C-AB	0.24	6.87	0.3	1.4	A	136	204
C-A						534	801
A-B						0	0
A-C						357	536

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	703	0.102	72	0.0	0.1	5.697	A
B-A	18	4	553	0.032	17	0.0	0.0	6.722	A
C-AB	112	28	717	0.155	111	0.0	0.2	5.928	A
C-A	438	110			438				
A-B	0	0			0				
A-C	293	73			293				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	86	22	689	0.125	86	0.1	0.1	5.967	A
B-A	21	5	526	0.040	21	0.0	0.0	7.130	A
C-AB	133	33	705	0.189	133	0.2	0.2	6.297	A
C-A	523	131			523				
A-B	0	0			0				
A-C	350	87			350				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	105	26	670	0.157	105	0.1	0.2	6.373	A
B-A	26	6	489	0.053	26	0.0	0.1	7.775	A
C-AB	163	41	687	0.237	163	0.2	0.3	6.861	A
C-A	641	160			641				
A-B	0	0			0				
A-C	429	107			429				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	105	26	670	0.157	105	0.2	0.2	6.375	A
B-A	26	6	488	0.053	26	0.1	0.1	7.777	A
C-AB	163	41	687	0.237	163	0.3	0.3	6.869	A
C-A	641	160			641				
A-B	0	0			0				
A-C	429	107			429				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	689	0.125	86	0.2	0.1	5.973	A
B-A	21	5	526	0.040	21	0.1	0.0	7.133	A
C-AB	133	33	705	0.189	133	0.3	0.2	6.308	A
C-A	523	131			523				
A-B	0	0			0				
A-C	350	87			350				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	703	0.102	72	0.1	0.1	5.709	A
B-A	18	4	553	0.032	18	0.0	0.0	6.728	A
C-AB	112	28	717	0.155	112	0.2	0.2	5.949	A
C-A	438	110			438				
A-B	0	0			0				
A-C	293	73			293				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.00	0.00	0.11	0.11			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.31	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.03	0.25	0.46	0.48			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.31	0.03	0.31	1.09	1.39			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.11	0.00	0.00	0.11	0.11			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	305	100.000
B - B1121 East		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	223	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	305
	B - B1121 East	8	0	54
	C - A12 South	172	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	0	0	4
	C - A12 South	10	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.09	5.79	0.1	0.5	A	50	74
B-A	0.01	6.38	0.0	0.5	A	7	10
C-AB	0.09	6.57	0.1	0.5	A	47	70
C-A						158	236
A-B						0	0
A-C						280	420

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	707	0.058	40	0.0	0.1	5.404	A
B-A	6	1	607	0.009	6	0.0	0.0	5.989	A
C-AB	38	10	625	0.061	38	0.0	0.1	6.129	A
C-A	129	32			129				
A-B	0	0			0				
A-C	230	57			230				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	49	12	696	0.070	49	0.1	0.1	5.559	A
B-A	7	2	592	0.011	7	0.0	0.0	6.146	A
C-AB	46	11	616	0.074	46	0.1	0.1	6.310	A
C-A	154	39			154				
A-B	0	0			0				
A-C	274	69			274				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	60	15	682	0.087	59	0.1	0.1	5.786	A
B-A	8	2	573	0.014	8	0.0	0.0	6.376	A
C-AB	56	14	604	0.093	56	0.1	0.1	6.571	A
C-A	189	47			189				
A-B	0	0			0				
A-C	336	84			336				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	60	15	682	0.087	60	0.1	0.1	5.786	A
B-A	8	2	573	0.014	8	0.0	0.0	6.377	A
C-AB	56	14	604	0.093	56	0.1	0.1	6.571	A
C-A	189	47			189				
A-B	0	0			0				
A-C	336	84			336				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	49	12	696	0.070	49	0.1	0.1	5.563	A
B-A	7	2	592	0.011	7	0.0	0.0	6.147	A
C-AB	46	11	616	0.074	46	0.1	0.1	6.314	A
C-A	154	39			154				
A-B	0	0			0				
A-C	274	69			274				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	706	0.058	41	0.1	0.1	5.407	A
B-A	6	1	607	0.009	6	0.0	0.0	5.990	A
C-AB	38	10	625	0.061	38	0.1	0.1	6.138	A
C-A	129	32			129				
A-B	0	0			0				
A-C	230	57			230				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.08	0.03	0.25	0.46	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.10	0.00	0.00	0.10	0.10			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	602	100.000
B - B1121 East		ONE HOUR	✓	165	100.000
C - A12 South		ONE HOUR	✓	660	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	602
	B - B1121 East	26	0	140
	C - A12 South	558	103	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	7
	B - B1121 East	0	0	5
	C - A12 South	11	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	8.19	0.3	1.1	A	128	192
B-A	0.06	8.68	0.1	0.5	A	24	35
C-AB	0.19	7.42	0.2	1.0	A	94	141
C-A						512	768
A-B						0	0
A-C						553	829

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	105	26	643	0.163	104	0.0	0.2	6.671	A
B-A	19	5	520	0.037	19	0.0	0.0	7.187	A
C-AB	77	19	644	0.120	77	0.0	0.1	6.337	A
C-A	420	105			420				
A-B	0	0			0				
A-C	453	113			453				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	125	31	622	0.202	125	0.2	0.3	7.240	A
B-A	23	6	488	0.047	23	0.0	0.0	7.746	A
C-AB	92	23	625	0.148	92	0.1	0.2	6.754	A
C-A	501	125			501				
A-B	0	0			0				
A-C	541	135			541				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	154	38	593	0.259	153	0.3	0.3	8.178	A
B-A	28	7	443	0.064	28	0.0	0.1	8.672	A
C-AB	113	28	598	0.189	113	0.2	0.2	7.412	A
C-A	614	153			614				
A-B	0	0			0				
A-C	663	166			663				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	154	38	593	0.259	154	0.3	0.3	8.193	A
B-A	28	7	443	0.064	28	0.1	0.1	8.675	A
C-AB	113	28	598	0.189	113	0.2	0.2	7.418	A
C-A	614	153			614				
A-B	0	0			0				
A-C	663	166			663				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	125	31	622	0.202	126	0.3	0.3	7.258	A
B-A	23	6	488	0.047	23	0.1	0.1	7.752	A
C-AB	92	23	625	0.148	92	0.2	0.2	6.762	A
C-A	501	125			501				
A-B	0	0			0				
A-C	541	135			541				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	105	26	643	0.163	105	0.3	0.2	6.696	A
B-A	19	5	520	0.037	19	0.1	0.0	7.197	A
C-AB	77	19	644	0.120	77	0.2	0.1	6.351	A
C-A	420	105			420				
A-B	0	0			0				
A-C	453	113			453				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.23	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.31	1.10	1.10			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.23	0.03	0.28	0.56	1.04			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.00	0.00	0.26	0.26			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	584	100.000
B - B1121 East		ONE HOUR	✓	150	100.000
C - A12 South		ONE HOUR	✓	577	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	584
	B - B1121 East	35	0	115
	C - A12 South	454	124	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 East	0	0	4
	C - A12 South	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	7.66	0.3	1.2	A	106	158
B-A	0.08	8.45	0.1	0.5	A	32	48
C-AB	0.22	7.65	0.3	1.3	A	114	170
C-A						416	624
A-B						0	0
A-C						536	804

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	646	0.134	86	0.0	0.2	6.427	A
B-A	26	7	538	0.048	26	0.0	0.1	7.027	A
C-AB	93	23	651	0.143	92	0.0	0.2	6.436	A
C-A	342	85			342				
A-B	0	0			0				
A-C	440	110			440				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	103	26	625	0.165	103	0.2	0.2	6.898	A
B-A	31	8	507	0.061	31	0.1	0.1	7.565	A
C-AB	111	28	632	0.176	111	0.2	0.2	6.904	A
C-A	408	102			408				
A-B	0	0			0				
A-C	525	131			525				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	596	0.212	126	0.2	0.3	7.653	A
B-A	38	10	464	0.082	38	0.1	0.1	8.441	A
C-AB	136	34	607	0.225	136	0.2	0.3	7.642	A
C-A	499	125			499				
A-B	0	0			0				
A-C	643	161			643				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	596	0.212	127	0.3	0.3	7.663	A
B-A	38	10	464	0.082	38	0.1	0.1	8.446	A
C-AB	136	34	607	0.225	136	0.3	0.3	7.651	A
C-A	499	125			499				
A-B	0	0			0				
A-C	643	161			643				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	103	26	625	0.166	104	0.3	0.2	6.912	A
B-A	31	8	507	0.061	31	0.1	0.1	7.573	A
C-AB	111	28	632	0.176	112	0.3	0.2	6.914	A
C-A	408	102			408				
A-B	0	0			0				
A-C	525	131			525				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	645	0.134	87	0.2	0.2	6.445	A
B-A	26	7	538	0.048	26	0.1	0.1	7.041	A
C-AB	93	23	651	0.143	93	0.2	0.2	6.459	A
C-A	342	85			342				
A-B	0	0			0				
A-C	440	110			440				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.92	1.24			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.29	0.03	0.31	1.02	1.31			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	452	100.000
B - B1121 East		ONE HOUR	✓	176	100.000
C - A12 South		ONE HOUR	✓	676	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	452
	B - B1121 East	50	0	127
	C - A12 South	548	127	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	7	0	7
	C - A12 South	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	7.90	0.3	1.4	A	116	174
B-A	0.12	8.96	0.1	0.5	A	46	68
C-AB	0.21	7.00	0.3	1.2	A	117	175
C-A						503	755
A-B						0	0
A-C						415	622

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	95	24	635	0.150	95	0.0	0.2	6.649	A
B-A	37	9	520	0.072	37	0.0	0.1	7.447	A
C-AB	96	24	690	0.139	95	0.0	0.2	6.045	A
C-A	413	103			413				
A-B	0	0			0				
A-C	340	85			340				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	114	28	619	0.184	114	0.2	0.2	7.125	A
B-A	45	11	493	0.091	45	0.1	0.1	8.018	A
C-AB	114	29	675	0.169	114	0.2	0.2	6.417	A
C-A	493	123			493				
A-B	0	0			0				
A-C	406	102			406				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	139	35	595	0.234	139	0.2	0.3	7.892	A
B-A	55	14	456	0.120	55	0.1	0.1	8.957	A
C-AB	140	35	654	0.214	140	0.2	0.3	6.994	A
C-A	604	151			604				
A-B	0	0			0				
A-C	497	124			497				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	139	35	595	0.234	139	0.3	0.3	7.904	A
B-A	55	14	456	0.120	55	0.1	0.1	8.963	A
C-AB	140	35	654	0.214	140	0.3	0.3	7.000	A
C-A	604	151			604				
A-B	0	0			0				
A-C	497	124			497				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	114	28	618	0.184	114	0.3	0.2	7.142	A
B-A	45	11	493	0.091	45	0.1	0.1	8.029	A
C-AB	114	29	675	0.169	115	0.3	0.2	6.426	A
C-A	493	123			493				
A-B	0	0			0				
A-C	406	102			406				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	95	24	635	0.150	96	0.2	0.2	6.672	A
B-A	37	9	520	0.072	38	0.1	0.1	7.464	A
C-AB	96	24	690	0.139	96	0.2	0.2	6.061	A
C-A	413	103			413				
A-B	0	0			0				
A-C	340	85			340				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.30	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.13	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.27	0.03	0.25	0.46	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.30	0.03	0.31	1.07	1.38			N/A	N/A
B-A	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.27	0.03	0.30	0.94	1.25			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	494	100.000
B - B1121 East		ONE HOUR	✓	151	100.000
C - A12 South		ONE HOUR	✓	790	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	494
	B - B1121 East	26	0	125
	C - A12 South	594	196	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	3
	B - B1121 East	0	0	1
	C - A12 South	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	7.09	0.3	1.2	A	114	172
B-A	0.06	8.58	0.1	0.5	A	24	36
C-AB	0.33	8.08	0.5	2.1	A	180	270
C-A						545	818
A-B						0	0
A-C						453	680

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	94	23	687	0.137	93	0.0	0.2	6.052	A
B-A	20	5	525	0.038	20	0.0	0.0	7.128	A
C-AB	148	37	700	0.211	147	0.0	0.3	6.498	A
C-A	447	112			447				
A-B	0	0			0				
A-C	372	93			372				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	112	28	670	0.167	112	0.2	0.2	6.451	A
B-A	24	6	493	0.048	24	0.0	0.1	7.676	A
C-AB	176	44	684	0.258	176	0.3	0.3	7.088	A
C-A	534	133			534				
A-B	0	0			0				
A-C	444	111			444				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	137	34	645	0.213	137	0.2	0.3	7.079	A
B-A	29	7	449	0.065	29	0.1	0.1	8.578	A
C-AB	216	54	661	0.327	215	0.3	0.5	8.063	A
C-A	654	163			654				
A-B	0	0			0				
A-C	544	136			544				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	137	34	645	0.213	137	0.3	0.3	7.085	A
B-A	29	7	448	0.065	29	0.1	0.1	8.582	A
C-AB	216	54	661	0.327	216	0.5	0.5	8.082	A
C-A	654	163			654				
A-B	0	0			0				
A-C	544	136			544				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	112	28	670	0.167	112	0.3	0.2	6.463	A
B-A	24	6	492	0.048	24	0.1	0.1	7.684	A
C-AB	176	44	684	0.258	177	0.5	0.4	7.113	A
C-A	534	133			534				
A-B	0	0			0				
A-C	444	111			444				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	94	23	687	0.137	94	0.2	0.2	6.071	A
B-A	20	5	524	0.038	20	0.1	0.0	7.140	A
C-AB	148	37	700	0.211	148	0.4	0.3	6.531	A
C-A	447	112			447				
A-B	0	0			0				
A-C	372	93			372				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.34	0.00	0.00	0.34	0.34			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.25	0.46	0.48			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.48	0.03	0.25	0.48	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.92	1.24			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.48	0.03	0.30	1.34	2.15			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.35	0.00	0.00	0.35	0.35			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	0.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	303	100.000
B - B1121 East		ONE HOUR	✓	59	100.000
C - A12 South		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	303
	B - B1121 East	9	0	50
	C - A12 South	145	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	0	0	4
	C - A12 South	10	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	5.77	0.1	0.5	A	46	69
B-A	0.02	6.22	0.0	0.5	A	8	12
C-AB	0.05	6.25	0.0	0.5	A	24	36
C-A						133	199
A-B						0	0
A-C						278	417

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	38	9	704	0.054	37	0.0	0.1	5.401	A
B-A	6	2	618	0.010	6	0.0	0.0	5.882	A
C-AB	20	5	626	0.031	19	0.0	0.0	5.938	A
C-A	109	27			109				
A-B	0	0			0				
A-C	228	57			228				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	45	11	693	0.065	45	0.1	0.1	5.550	A
B-A	8	2	606	0.013	8	0.0	0.0	6.019	A
C-AB	23	6	617	0.038	23	0.0	0.0	6.067	A
C-A	130	33			130				
A-B	0	0			0				
A-C	273	68			273				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	55	14	679	0.081	55	0.1	0.1	5.768	A
B-A	9	2	588	0.016	9	0.0	0.0	6.218	A
C-AB	29	7	604	0.047	29	0.0	0.0	6.252	A
C-A	159	40			159				
A-B	0	0			0				
A-C	334	83			334				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	55	14	679	0.081	55	0.1	0.1	5.768	A
B-A	9	2	588	0.016	9	0.0	0.0	6.218	A
C-AB	29	7	604	0.047	29	0.0	0.0	6.252	A
C-A	159	40			159				
A-B	0	0			0				
A-C	334	83			334				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	45	11	693	0.065	45	0.1	0.1	5.554	A
B-A	8	2	606	0.013	8	0.0	0.0	6.019	A
C-AB	23	6	617	0.038	23	0.0	0.0	6.068	A
C-A	130	33			130				
A-B	0	0			0				
A-C	273	68			273				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	38	9	704	0.054	38	0.1	0.1	5.404	A
B-A	6	2	618	0.010	6	0.0	0.0	5.885	A
C-AB	20	5	626	0.031	20	0.0	0.0	5.941	A
C-A	109	27			109				
A-B	0	0			0				
A-C	228	57			228				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.05	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	565	100.000
B - B1121 East		ONE HOUR	✓	148	100.000
C - A12 South		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	565
	B - B1121 East	29	0	120
	C - A12 South	461	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	7
	B - B1121 East	0	0	5
	C - A12 South	11	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	7.72	0.3	1.3	A	110	165
B-A	0.07	8.05	0.1	0.5	A	26	39
C-AB	0.13	6.81	0.1	0.5	A	66	98
C-A						423	634
A-B						0	0
A-C						519	778

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	22	645	0.140	89	0.0	0.2	6.476	A
B-A	22	5	546	0.039	21	0.0	0.0	6.866	A
C-AB	54	13	650	0.083	53	0.0	0.1	6.027	A
C-A	347	87			347				
A-B	0	0			0				
A-C	426	106			426				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	107	27	625	0.172	107	0.2	0.2	6.952	A
B-A	26	6	517	0.050	26	0.0	0.1	7.320	A
C-AB	64	16	632	0.102	64	0.1	0.1	6.338	A
C-A	414	104			414				
A-B	0	0			0				
A-C	508	127			508				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	132	33	598	0.220	131	0.2	0.3	7.715	A
B-A	32	8	479	0.066	31	0.1	0.1	8.051	A
C-AB	79	20	607	0.130	79	0.1	0.1	6.810	A
C-A	507	127			507				
A-B	0	0			0				
A-C	622	156			622				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	132	33	598	0.220	132	0.3	0.3	7.725	A
B-A	32	8	478	0.066	32	0.1	0.1	8.054	A
C-AB	79	20	607	0.130	79	0.1	0.1	6.813	A
C-A	507	127			507				
A-B	0	0			0				
A-C	622	156			622				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	107	27	625	0.172	108	0.3	0.2	6.966	A
B-A	26	6	517	0.050	26	0.1	0.1	7.323	A
C-AB	64	16	632	0.102	64	0.1	0.1	6.343	A
C-A	414	104			414				
A-B	0	0			0				
A-C	508	127			508				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	22	645	0.140	90	0.2	0.2	6.494	A
B-A	22	5	545	0.040	22	0.1	0.0	6.874	A
C-AB	54	13	650	0.083	54	0.1	0.1	6.035	A
C-A	347	87			347				
A-B	0	0			0				
A-C	426	106			426				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.15	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.03	0.30	0.99	1.29			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.15	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	583	100.000
B - B1121 East		ONE HOUR	✓	143	100.000
C - A12 South		ONE HOUR	✓	555	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	583
	B - B1121 East	36	0	107
	C - A12 South	431	125	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 East	0	0	4
	C - A12 South	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	7.55	0.2	1.1	A	98	147
B-A	0.08	8.37	0.1	0.5	A	33	49
C-AB	0.23	7.66	0.3	1.3	A	114	172
C-A						395	593
A-B						0	0
A-C						535	802

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	643	0.125	80	0.0	0.1	6.382	A
B-A	27	7	542	0.049	27	0.0	0.1	6.979	A
C-AB	94	23	651	0.144	93	0.0	0.2	6.444	A
C-A	324	81			324				
A-B	0	0			0				
A-C	439	110			439				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	96	24	623	0.154	96	0.1	0.2	6.830	A
B-A	32	8	511	0.063	32	0.1	0.1	7.506	A
C-AB	112	28	633	0.177	112	0.2	0.2	6.913	A
C-A	387	97			387				
A-B	0	0			0				
A-C	524	131			524				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	29	595	0.198	118	0.2	0.2	7.546	A
B-A	39	10	469	0.083	39	0.1	0.1	8.363	A
C-AB	137	34	607	0.226	137	0.2	0.3	7.656	A
C-A	474	119			474				
A-B	0	0			0				
A-C	642	160			642				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	29	594	0.198	118	0.2	0.2	7.552	A
B-A	39	10	469	0.083	39	0.1	0.1	8.368	A
C-AB	137	34	607	0.226	137	0.3	0.3	7.665	A
C-A	474	119			474				
A-B	0	0			0				
A-C	642	160			642				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	96	24	623	0.155	96	0.2	0.2	6.843	A
B-A	32	8	511	0.063	32	0.1	0.1	7.514	A
C-AB	112	28	633	0.177	112	0.3	0.2	6.923	A
C-A	387	97			387				
A-B	0	0			0				
A-C	524	131			524				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	643	0.125	81	0.2	0.1	6.399	A
B-A	27	7	542	0.049	27	0.1	0.1	6.993	A
C-AB	94	23	651	0.144	94	0.2	0.2	6.466	A
C-A	324	81			324				
A-B	0	0			0				
A-C	439	110			439				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.29	0.76	1.14			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.29	0.03	0.31	1.03	1.32			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	469	100.000
B - B1121 East		ONE HOUR	✓	183	100.000
C - A12 South		ONE HOUR	✓	680	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	469
	B - B1121 East	59	0	125
	C - A12 South	553	126	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	7	0	7
	C - A12 South	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.10	0.3	1.4	A	114	172
B-A	0.14	9.16	0.2	0.5	A	54	81
C-AB	0.21	7.04	0.3	1.2	A	116	174
C-A						508	762
A-B						0	0
A-C						430	645

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	94	23	624	0.150	93	0.0	0.2	6.768	A
B-A	44	11	524	0.084	44	0.0	0.1	7.500	A
C-AB	95	24	687	0.138	94	0.0	0.2	6.067	A
C-A	417	104			417				
A-B	0	0			0				
A-C	353	88			353				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	112	28	607	0.185	112	0.2	0.2	7.271	A
B-A	53	13	496	0.106	53	0.1	0.1	8.120	A
C-AB	113	28	671	0.169	113	0.2	0.2	6.447	A
C-A	498	124			498				
A-B	0	0			0				
A-C	421	105			421				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	137	34	582	0.236	137	0.2	0.3	8.084	A
B-A	65	16	458	0.141	64	0.1	0.2	9.149	A
C-AB	139	35	650	0.214	139	0.2	0.3	7.038	A
C-A	609	152			609				
A-B	0	0			0				
A-C	516	129			516				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	137	34	582	0.236	137	0.3	0.3	8.097	A
B-A	65	16	458	0.141	65	0.2	0.2	9.158	A
C-AB	139	35	650	0.214	139	0.3	0.3	7.043	A
C-A	609	152			609				
A-B	0	0			0				
A-C	516	129			516				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	112	28	607	0.185	112	0.3	0.2	7.291	A
B-A	53	13	496	0.106	53	0.2	0.1	8.133	A
C-AB	113	28	671	0.169	114	0.3	0.2	6.458	A
C-A	498	124			498				
A-B	0	0			0				
A-C	421	105			421				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	94	23	624	0.150	94	0.2	0.2	6.792	A
B-A	44	11	523	0.084	44	0.1	0.1	7.515	A
C-AB	95	24	687	0.138	95	0.2	0.2	6.083	A
C-A	417	104			417				
A-B	0	0			0				
A-C	353	88			353				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.16	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.27	0.03	0.25	0.46	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.31	1.08	1.39			N/A	N/A
B-A	0.16	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.27	0.03	0.30	0.93	1.25			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	428	100.000
B - B1121 East		ONE HOUR	✓	135	100.000
C - A12 South		ONE HOUR	✓	780	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	428
	B - B1121 East	35	0	100
	C - A12 South	629	151	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	3
	B - B1121 East	0	0	1
	C - A12 South	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	6.69	0.2	0.5	A	91	137
B-A	0.08	8.16	0.1	0.5	A	32	49
C-AB	0.25	7.04	0.3	1.4	A	139	208
C-A						577	866
A-B						0	0
A-C						393	589

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	686	0.109	75	0.0	0.1	5.885	A
B-A	27	7	550	0.048	26	0.0	0.1	6.876	A
C-AB	114	28	711	0.160	113	0.0	0.2	6.016	A
C-A	473	118			473				
A-B	0	0			0				
A-C	322	81			322				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	90	22	670	0.134	89	0.1	0.2	6.199	A
B-A	32	8	520	0.061	32	0.1	0.1	7.365	A
C-AB	136	34	697	0.195	136	0.2	0.2	6.415	A
C-A	565	141			565				
A-B	0	0			0				
A-C	385	96			385				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	648	0.169	110	0.2	0.2	6.682	A
B-A	39	10	480	0.081	39	0.1	0.1	8.159	A
C-AB	166	42	677	0.246	166	0.2	0.3	7.034	A
C-A	692	173			692				
A-B	0	0			0				
A-C	471	118			471				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	648	0.169	110	0.2	0.2	6.686	A
B-A	39	10	480	0.081	39	0.1	0.1	8.164	A
C-AB	166	42	677	0.246	166	0.3	0.3	7.042	A
C-A	692	173			692				
A-B	0	0			0				
A-C	471	118			471				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	22	670	0.134	90	0.2	0.2	6.209	A
B-A	32	8	520	0.061	32	0.1	0.1	7.369	A
C-AB	136	34	697	0.195	136	0.3	0.2	6.427	A
C-A	565	141			565				
A-B	0	0			0				
A-C	385	96			385				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	686	0.109	75	0.2	0.1	5.900	A
B-A	27	7	550	0.048	27	0.1	0.1	6.882	A
C-AB	114	28	711	0.160	114	0.2	0.2	6.034	A
C-A	473	118			473				
A-B	0	0			0				
A-C	322	81			322				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.32	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.03	0.26	0.47	0.50			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.32	0.03	0.31	1.13	1.44			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	315	100.000
B - B1121 East		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	210	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	315
	B - B1121 East	10	0	50
	C - A12 South	170	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	0	0	4
	C - A12 South	10	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	5.81	0.1	0.5	A	46	69
B-A	0.02	6.33	0.0	0.5	A	9	13
C-AB	0.07	6.45	0.1	0.5	A	37	55
C-A						156	234
A-B						0	0
A-C						289	434

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	38	9	700	0.054	37	0.0	0.1	5.433	A
B-A	7	2	613	0.012	7	0.0	0.0	5.944	A
C-AB	30	8	624	0.048	30	0.0	0.1	6.062	A
C-A	128	32			128				
A-B	0	0			0				
A-C	237	59			237				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	45	11	689	0.065	45	0.1	0.1	5.588	A
B-A	9	2	599	0.014	9	0.0	0.0	6.100	A
C-AB	36	9	614	0.059	36	0.1	0.1	6.222	A
C-A	153	38			153				
A-B	0	0			0				
A-C	283	71			283				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	55	14	674	0.082	55	0.1	0.1	5.814	A
B-A	10	3	579	0.018	10	0.0	0.0	6.329	A
C-AB	44	11	602	0.073	44	0.1	0.1	6.454	A
C-A	187	47			187				
A-B	0	0			0				
A-C	347	87			347				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	55	14	674	0.082	55	0.1	0.1	5.815	A
B-A	10	3	579	0.018	10	0.0	0.0	6.329	A
C-AB	44	11	602	0.073	44	0.1	0.1	6.454	A
C-A	187	47			187				
A-B	0	0			0				
A-C	347	87			347				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	45	11	689	0.065	45	0.1	0.1	5.590	A
B-A	9	2	599	0.014	9	0.0	0.0	6.100	A
C-AB	36	9	614	0.059	36	0.1	0.1	6.226	A
C-A	153	38			153				
A-B	0	0			0				
A-C	283	71			283				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	38	9	700	0.054	38	0.1	0.1	5.439	A
B-A	7	2	613	0.012	7	0.0	0.0	5.947	A
C-AB	30	8	624	0.048	30	0.1	0.1	6.065	A
C-A	128	32			128				
A-B	0	0			0				
A-C	237	59			237				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	582	100.000
B - B1121 East		ONE HOUR	✓	151	100.000
C - A12 South		ONE HOUR	✓	590	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	582
	B - B1121 East	30	0	122
	C - A12 South	504	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	7
	B - B1121 East	0	0	5
	C - A12 South	11	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	7.85	0.3	1.3	A	112	167
B-A	0.07	8.34	0.1	0.5	A	27	41
C-AB	0.16	7.09	0.2	0.5	A	79	119
C-A						462	693
A-B						0	0
A-C						534	801

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	641	0.143	91	0.0	0.2	6.532	A
B-A	22	6	536	0.042	22	0.0	0.0	7.004	A
C-AB	65	16	648	0.101	65	0.0	0.1	6.173	A
C-A	379	95			379				
A-B	0	0			0				
A-C	438	110			438				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	109	27	621	0.176	109	0.2	0.2	7.032	A
B-A	27	7	506	0.053	27	0.0	0.1	7.510	A
C-AB	78	19	629	0.124	78	0.1	0.1	6.529	A
C-A	453	113			453				
A-B	0	0			0				
A-C	523	131			523				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	134	33	593	0.226	134	0.2	0.3	7.836	A
B-A	33	8	464	0.070	33	0.1	0.1	8.338	A
C-AB	95	24	603	0.158	95	0.1	0.2	7.087	A
C-A	555	139			555				
A-B	0	0			0				
A-C	641	160			641				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	134	33	593	0.226	134	0.3	0.3	7.846	A
B-A	33	8	464	0.070	33	0.1	0.1	8.340	A
C-AB	95	24	603	0.158	95	0.2	0.2	7.090	A
C-A	555	139			555				
A-B	0	0			0				
A-C	641	160			641				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	621	0.176	110	0.3	0.2	7.047	A
B-A	27	7	506	0.053	27	0.1	0.1	7.517	A
C-AB	78	19	629	0.124	78	0.2	0.1	6.536	A
C-A	453	113			453				
A-B	0	0			0				
A-C	523	131			523				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	641	0.143	92	0.2	0.2	6.553	A
B-A	22	6	536	0.042	22	0.1	0.0	7.013	A
C-AB	65	16	648	0.101	65	0.1	0.1	6.185	A
C-A	379	95			379				
A-B	0	0			0				
A-C	438	110			438				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.31	1.02	1.32			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.19	0.03	0.25	0.46	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	609	100.000
B - B1121 East		ONE HOUR	✓	148	100.000
C - A12 South		ONE HOUR	✓	618	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	609
	B - B1121 East	38	0	110
	C - A12 South	472	147	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 East	0	0	4
	C - A12 South	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	7.73	0.3	1.2	A	101	151
B-A	0.09	8.78	0.1	0.5	A	34	52
C-AB	0.27	8.20	0.4	1.3	A	135	202
C-A						433	649
A-B						0	0
A-C						559	838

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	83	21	638	0.130	82	0.0	0.1	6.470	A
B-A	28	7	530	0.053	28	0.0	0.1	7.169	A
C-AB	110	28	647	0.171	110	0.0	0.2	6.692	A
C-A	355	89			355				
A-B	0	0			0				
A-C	458	115			458				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	99	25	617	0.160	99	0.1	0.2	6.951	A
B-A	34	8	497	0.068	34	0.1	0.1	7.771	A
C-AB	132	33	627	0.210	132	0.2	0.3	7.257	A
C-A	424	106			424				
A-B	0	0			0				
A-C	547	137			547				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	587	0.207	121	0.2	0.3	7.725	A
B-A	41	10	451	0.092	41	0.1	0.1	8.776	A
C-AB	162	40	601	0.269	161	0.3	0.4	8.183	A
C-A	519	130			519				
A-B	0	0			0				
A-C	670	168			670				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	587	0.207	121	0.3	0.3	7.735	A
B-A	41	10	451	0.092	41	0.1	0.1	8.782	A
C-AB	162	40	601	0.269	162	0.4	0.4	8.197	A
C-A	519	130			519				
A-B	0	0			0				
A-C	670	168			670				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99	25	616	0.160	99	0.3	0.2	6.965	A
B-A	34	8	497	0.068	34	0.1	0.1	7.779	A
C-AB	132	33	627	0.210	132	0.4	0.3	7.274	A
C-A	424	106			424				
A-B	0	0			0				
A-C	547	137			547				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	83	21	638	0.130	83	0.2	0.2	6.488	A
B-A	28	7	530	0.053	28	0.1	0.1	7.183	A
C-AB	110	28	647	0.171	111	0.3	0.2	6.719	A
C-A	355	89			355				
A-B	0	0			0				
A-C	458	115			458				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.36	0.03	0.26	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.30	0.87	1.20			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.37	0.03	0.31	1.23	1.31			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	502	100.000
B - B1121 East		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	740	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	502
	B - B1121 East	61	0	167
	C - A12 South	589	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	7	0	7
	C - A12 South	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	9.08	0.5	2.0	A	153	229
B-A	0.15	9.86	0.2	0.5	A	56	84
C-AB	0.26	7.56	0.3	1.1	A	138	207
C-A						541	811
A-B						0	0
A-C						460	691

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	125	31	626	0.200	124	0.0	0.2	7.159	A
B-A	46	11	503	0.091	45	0.0	0.1	7.854	A
C-AB	113	28	681	0.166	112	0.0	0.2	6.315	A
C-A	444	111			444				
A-B	0	0			0				
A-C	378	94			378				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	150	37	607	0.247	150	0.2	0.3	7.866	A
B-A	55	14	473	0.115	54	0.1	0.1	8.588	A
C-AB	135	34	665	0.203	135	0.2	0.3	6.789	A
C-A	530	132			530				
A-B	0	0			0				
A-C	451	113			451				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	183	46	580	0.316	183	0.3	0.5	9.059	A
B-A	67	17	432	0.155	67	0.1	0.2	9.851	A
C-AB	165	41	642	0.258	165	0.3	0.3	7.552	A
C-A	649	162			649				
A-B	0	0			0				
A-C	552	138			552				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	183	46	580	0.316	183	0.5	0.5	9.084	A
B-A	67	17	432	0.155	67	0.2	0.2	9.862	A
C-AB	165	41	642	0.258	165	0.3	0.3	7.556	A
C-A	649	162			649				
A-B	0	0			0				
A-C	552	138			552				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	150	37	607	0.247	150	0.5	0.3	7.895	A
B-A	55	14	473	0.115	55	0.2	0.1	8.605	A
C-AB	135	34	665	0.203	135	0.3	0.3	6.806	A
C-A	530	132			530				
A-B	0	0			0				
A-C	451	113			451				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	125	31	626	0.200	126	0.3	0.3	7.203	A
B-A	46	11	503	0.091	46	0.1	0.1	7.876	A
C-AB	113	28	681	0.166	113	0.3	0.2	6.338	A
C-A	444	111			444				
A-B	0	0			0				
A-C	378	94			378				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.46	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.18	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.34	0.03	0.25	0.46	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.46	0.03	0.30	1.35	1.98			N/A	N/A
B-A	0.18	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.35	0.03	0.31	1.07	1.07			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	465	100.000
B - B1121 East		ONE HOUR	✓	162	100.000
C - A12 South		ONE HOUR	✓	808	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	465
	B - B1121 East	39	0	123
	C - A12 South	607	201	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	3
	B - B1121 East	0	0	1
	C - A12 South	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	7.14	0.3	1.2	A	113	169
B-A	0.09	8.68	0.1	0.5	A	36	54
C-AB	0.33	8.05	0.5	2.2	A	185	277
C-A						557	835
A-B						0	0
A-C						427	640

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	681	0.136	92	0.0	0.2	6.105	A
B-A	30	7	534	0.055	29	0.0	0.1	7.126	A
C-AB	151	38	704	0.215	150	0.0	0.3	6.485	A
C-A	457	114			457				
A-B	0	0			0				
A-C	350	88			350				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	110	28	664	0.166	110	0.2	0.2	6.503	A
B-A	35	9	502	0.070	35	0.1	0.1	7.709	A
C-AB	181	45	689	0.262	180	0.3	0.4	7.069	A
C-A	546	136			546				
A-B	0	0			0				
A-C	418	105			418				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	639	0.211	135	0.2	0.3	7.131	A
B-A	43	11	458	0.094	43	0.1	0.1	8.675	A
C-AB	221	55	668	0.331	221	0.4	0.5	8.034	A
C-A	668	167			668				
A-B	0	0			0				
A-C	512	128			512				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	639	0.211	135	0.3	0.3	7.137	A
B-A	43	11	458	0.095	43	0.1	0.1	8.681	A
C-AB	221	55	668	0.331	221	0.5	0.5	8.053	A
C-A	668	167			668				
A-B	0	0			0				
A-C	512	128			512				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	28	663	0.166	111	0.3	0.2	6.515	A
B-A	35	9	502	0.070	35	0.1	0.1	7.718	A
C-AB	181	45	689	0.262	181	0.5	0.4	7.095	A
C-A	546	136			546				
A-B	0	0			0				
A-C	418	105			418				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	681	0.136	93	0.2	0.2	6.124	A
B-A	30	7	534	0.055	30	0.1	0.1	7.139	A
C-AB	151	38	704	0.215	152	0.4	0.3	6.518	A
C-A	457	114			457				
A-B	0	0			0				
A-C	350	88			350				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.08	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.35	0.00	0.00	0.35	0.35			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.49	0.03	0.25	0.49	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.91	1.23			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.49	0.03	0.30	1.33	2.22			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.36	0.00	0.00	0.36	0.36			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	314	100.000
B - B1121 East		ONE HOUR	✓	61	100.000
C - A12 South		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	314
	B - B1121 East	9	0	52
	C - A12 South	155	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	0	0	4
	C - A12 South	10	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	5.81	0.1	0.5	A	48	72
B-A	0.02	6.27	0.0	0.5	A	8	12
C-AB	0.05	6.30	0.1	0.5	A	26	39
C-A						142	213
A-B						0	0
A-C						288	433

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	39	10	703	0.056	39	0.0	0.1	5.424	A
B-A	6	2	615	0.010	6	0.0	0.0	5.918	A
C-AB	21	5	624	0.034	21	0.0	0.0	5.969	A
C-A	116	29			116				
A-B	0	0			0				
A-C	237	59			237				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	47	12	692	0.068	47	0.1	0.1	5.580	A
B-A	8	2	601	0.013	8	0.0	0.0	6.062	A
C-AB	25	6	615	0.041	25	0.0	0.0	6.106	A
C-A	139	35			139				
A-B	0	0			0				
A-C	283	71			283				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	57	14	677	0.085	57	0.1	0.1	5.809	A
B-A	9	2	583	0.016	9	0.0	0.0	6.273	A
C-AB	31	8	602	0.051	31	0.0	0.1	6.302	A
C-A	170	43			170				
A-B	0	0			0				
A-C	346	87			346				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	57	14	677	0.085	57	0.1	0.1	5.809	A
B-A	9	2	583	0.016	9	0.0	0.0	6.273	A
C-AB	31	8	602	0.051	31	0.1	0.1	6.302	A
C-A	170	43			170				
A-B	0	0			0				
A-C	346	87			346				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	47	12	692	0.068	47	0.1	0.1	5.584	A
B-A	8	2	601	0.013	8	0.0	0.0	6.062	A
C-AB	25	6	615	0.041	25	0.1	0.0	6.107	A
C-A	139	35			139				
A-B	0	0			0				
A-C	283	71			283				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	39	10	703	0.056	39	0.1	0.1	5.429	A
B-A	6	2	615	0.010	6	0.0	0.0	5.918	A
C-AB	21	5	624	0.034	21	0.0	0.0	5.975	A
C-A	116	29			116				
A-B	0	0			0				
A-C	237	59			237				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.05	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	594	100.000
B - B1121 East		ONE HOUR	✓	155	100.000
C - A12 South		ONE HOUR	✓	581	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	594
	B - B1121 East	35	0	121
	C - A12 South	508	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	7
	B - B1121 East	0	0	5
	C - A12 South	11	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	7.95	0.3	1.3	A	111	166
B-A	0.08	8.38	0.1	0.5	A	32	48
C-AB	0.13	6.93	0.2	0.5	A	67	101
C-A						466	699
A-B						0	0
A-C						545	818

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	635	0.143	90	0.0	0.2	6.596	A
B-A	26	7	540	0.048	26	0.0	0.1	7.008	A
C-AB	55	14	646	0.086	55	0.0	0.1	6.091	A
C-A	382	96			382				
A-B	0	0			0				
A-C	447	112			447				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	108	27	614	0.176	108	0.2	0.2	7.111	A
B-A	31	8	509	0.061	31	0.1	0.1	7.525	A
C-AB	66	17	626	0.106	66	0.1	0.1	6.423	A
C-A	456	114			456				
A-B	0	0			0				
A-C	534	134			534				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	585	0.227	132	0.2	0.3	7.943	A
B-A	38	10	468	0.081	38	0.1	0.1	8.375	A
C-AB	81	20	600	0.135	81	0.1	0.2	6.931	A
C-A	559	140			559				
A-B	0	0			0				
A-C	654	164			654				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	585	0.227	133	0.3	0.3	7.954	A
B-A	38	10	468	0.081	38	0.1	0.1	8.379	A
C-AB	81	20	600	0.135	81	0.2	0.2	6.934	A
C-A	559	140			559				
A-B	0	0			0				
A-C	654	164			654				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	108	27	614	0.176	109	0.3	0.2	7.126	A
B-A	31	8	509	0.061	31	0.1	0.1	7.532	A
C-AB	66	17	626	0.106	66	0.2	0.1	6.429	A
C-A	456	114			456				
A-B	0	0			0				
A-C	534	134			534				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	635	0.143	91	0.2	0.2	6.617	A
B-A	26	7	539	0.048	26	0.1	0.1	7.012	A
C-AB	55	14	646	0.086	55	0.1	0.1	6.100	A
C-A	382	96			382				
A-B	0	0			0				
A-C	447	112			447				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.15	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.31	1.03	1.33			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.16	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	645	100.000
B - B1121 East		ONE HOUR	✓	152	100.000
C - A12 South		ONE HOUR	✓	580	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	645
	B - B1121 East	42	0	110
	C - A12 South	460	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 East	0	0	4
	C - A12 South	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	7.94	0.3	1.2	A	101	151
B-A	0.10	8.79	0.1	0.5	A	38	57
C-AB	0.22	7.84	0.3	1.3	A	111	166
C-A						422	633
A-B						0	0
A-C						592	888

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	83	21	629	0.132	82	0.0	0.2	6.575	A
B-A	31	8	533	0.059	31	0.0	0.1	7.162	A
C-AB	91	23	641	0.142	90	0.0	0.2	6.527	A
C-A	346	87			346				
A-B	0	0			0				
A-C	485	121			485				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	99	25	606	0.163	99	0.2	0.2	7.089	A
B-A	37	9	501	0.075	37	0.1	0.1	7.769	A
C-AB	109	27	620	0.175	108	0.2	0.2	7.028	A
C-A	413	103			413				
A-B	0	0			0				
A-C	580	145			580				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	575	0.211	121	0.2	0.3	7.925	A
B-A	46	11	455	0.101	46	0.1	0.1	8.786	A
C-AB	133	33	592	0.225	133	0.2	0.3	7.831	A
C-A	506	127			506				
A-B	0	0			0				
A-C	710	177			710				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	575	0.211	121	0.3	0.3	7.935	A
B-A	46	11	455	0.101	46	0.1	0.1	8.793	A
C-AB	133	33	592	0.225	133	0.3	0.3	7.840	A
C-A	506	127			506				
A-B	0	0			0				
A-C	710	177			710				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99	25	606	0.163	99	0.3	0.2	7.104	A
B-A	37	9	500	0.075	37	0.1	0.1	7.777	A
C-AB	109	27	620	0.175	109	0.3	0.2	7.042	A
C-A	413	103			413				
A-B	0	0			0				
A-C	580	145			580				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	83	21	629	0.132	83	0.2	0.2	6.597	A
B-A	31	8	533	0.059	31	0.1	0.1	7.172	A
C-AB	91	23	641	0.142	91	0.2	0.2	6.550	A
C-A	346	87			346				
A-B	0	0			0				
A-C	485	121			485				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.91	1.23			N/A	N/A
B-A	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.29	0.03	0.31	1.01	1.31			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	529	100.000
B - B1121 East		ONE HOUR	✓	191	100.000
C - A12 South		ONE HOUR	✓	749	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	529
	B - B1121 East	69	0	123
	C - A12 South	626	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	7	0	7
	C - A12 South	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.53	0.3	1.4	A	113	169
B-A	0.17	9.81	0.2	0.7	A	63	95
C-AB	0.21	7.19	0.3	1.2	A	112	168
C-A						575	862
A-B						0	0
A-C						485	728

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	605	0.153	92	0.0	0.2	6.998	A
B-A	52	13	516	0.100	51	0.0	0.1	7.737	A
C-AB	92	23	677	0.136	91	0.0	0.2	6.143	A
C-A	472	118			472				
A-B	0	0			0				
A-C	398	100			398				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	110	28	585	0.188	110	0.2	0.2	7.572	A
B-A	62	15	485	0.127	62	0.1	0.1	8.493	A
C-AB	110	27	659	0.167	110	0.2	0.2	6.549	A
C-A	563	141			563				
A-B	0	0			0				
A-C	475	119			475				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	557	0.242	135	0.2	0.3	8.513	A
B-A	76	19	443	0.171	75	0.1	0.2	9.794	A
C-AB	135	34	635	0.212	134	0.2	0.3	7.187	A
C-A	690	172			690				
A-B	0	0			0				
A-C	582	146			582				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	557	0.242	135	0.3	0.3	8.528	A
B-A	76	19	443	0.171	76	0.2	0.2	9.807	A
C-AB	135	34	635	0.212	135	0.3	0.3	7.193	A
C-A	690	172			690				
A-B	0	0			0				
A-C	582	146			582				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	28	585	0.188	111	0.3	0.2	7.591	A
B-A	62	15	485	0.127	62	0.2	0.1	8.511	A
C-AB	110	27	659	0.167	110	0.3	0.2	6.560	A
C-A	563	141			563				
A-B	0	0			0				
A-C	475	119			475				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	605	0.153	93	0.2	0.2	7.027	A
B-A	52	13	516	0.100	52	0.1	0.1	7.758	A
C-AB	92	23	677	0.136	92	0.2	0.2	6.161	A
C-A	472	118			472				
A-B	0	0			0				
A-C	398	100			398				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.20	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.27	0.03	0.26	0.46	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.32	0.03	0.31	1.12	1.42			N/A	N/A
B-A	0.20	0.03	0.27	0.48	0.66			N/A	N/A
C-AB	0.27	0.03	0.30	0.92	1.24			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	499	100.000
B - B1121 East		ONE HOUR	✓	140	100.000
C - A12 South		ONE HOUR	✓	841	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	499
	B - B1121 East	45	0	95
	C - A12 South	683	158	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	3
	B - B1121 East	0	0	1
	C - A12 South	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	7.00	0.2	0.5	A	87	130
B-A	0.11	8.71	0.1	0.5	A	42	62
C-AB	0.26	7.41	0.4	1.2	A	145	218
C-A						627	940
A-B						0	0
A-C						458	687

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	71	18	662	0.108	71	0.0	0.1	6.082	A
B-A	34	9	542	0.063	34	0.0	0.1	7.079	A
C-AB	119	30	699	0.170	118	0.0	0.2	6.192	A
C-A	514	129			514				
A-B	0	0			0				
A-C	376	94			376				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	85	21	644	0.132	85	0.1	0.2	6.440	A
B-A	41	10	509	0.080	41	0.1	0.1	7.688	A
C-AB	142	36	683	0.208	142	0.2	0.3	6.655	A
C-A	614	153			614				
A-B	0	0			0				
A-C	449	112			449				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	618	0.169	104	0.2	0.2	6.996	A
B-A	50	12	463	0.108	50	0.1	0.1	8.708	A
C-AB	174	44	660	0.264	174	0.3	0.4	7.390	A
C-A	752	188			752				
A-B	0	0			0				
A-C	550	137			550				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	618	0.169	104	0.2	0.2	7.004	A
B-A	50	12	463	0.108	50	0.1	0.1	8.714	A
C-AB	174	44	660	0.264	174	0.4	0.4	7.406	A
C-A	752	188			752				
A-B	0	0			0				
A-C	550	137			550				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	85	21	644	0.132	85	0.2	0.2	6.448	A
B-A	41	10	509	0.080	41	0.1	0.1	7.695	A
C-AB	142	36	683	0.208	142	0.4	0.3	6.670	A
C-A	614	153			614				
A-B	0	0			0				
A-C	449	112			449				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	71	18	662	0.108	71	0.2	0.1	6.099	A
B-A	34	9	542	0.063	34	0.1	0.1	7.090	A
C-AB	119	30	699	0.170	119	0.3	0.2	6.216	A
C-A	514	129			514				
A-B	0	0			0				
A-C	376	94			376				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.35	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.03	0.26	0.47	0.50			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.36	0.03	0.31	1.21	1.21			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	317	100.000
B - B1121 East		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	185	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	317
	B - B1121 East	9	0	53
	C - A12 South	155	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	0	0	4
	C - A12 South	10	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.09	5.82	0.1	0.5	A	49	73
B-A	0.02	6.29	0.0	0.5	A	8	12
C-AB	0.06	6.33	0.1	0.5	A	28	41
C-A						142	213
A-B						0	0
A-C						291	437

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	40	10	702	0.057	40	0.0	0.1	5.432	A
B-A	6	2	613	0.010	6	0.0	0.0	5.930	A
C-AB	23	6	623	0.036	22	0.0	0.0	5.989	A
C-A	116	29			116				
A-B	0	0			0				
A-C	239	60			239				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	48	12	691	0.069	48	0.1	0.1	5.591	A
B-A	8	2	600	0.013	8	0.0	0.0	6.076	A
C-AB	27	7	614	0.044	27	0.0	0.0	6.130	A
C-A	139	35			139				
A-B	0	0			0				
A-C	285	71			285				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	58	15	676	0.086	58	0.1	0.1	5.824	A
B-A	9	2	582	0.016	9	0.0	0.0	6.290	A
C-AB	33	8	601	0.055	33	0.0	0.1	6.334	A
C-A	170	43			170				
A-B	0	0			0				
A-C	349	87			349				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	58	15	676	0.086	58	0.1	0.1	5.824	A
B-A	9	2	582	0.016	9	0.0	0.0	6.290	A
C-AB	33	8	601	0.055	33	0.1	0.1	6.334	A
C-A	170	43			170				
A-B	0	0			0				
A-C	349	87			349				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	48	12	691	0.069	48	0.1	0.1	5.592	A
B-A	8	2	600	0.013	8	0.0	0.0	6.079	A
C-AB	27	7	614	0.044	27	0.1	0.0	6.134	A
C-A	139	35			139				
A-B	0	0			0				
A-C	285	71			285				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	40	10	702	0.057	40	0.1	0.1	5.435	A
B-A	6	2	613	0.010	6	0.0	0.0	5.930	A
C-AB	23	6	623	0.036	23	0.0	0.0	5.992	A
C-A	116	29			116				
A-B	0	0			0				
A-C	239	60			239				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.06	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	595	100.000
B - B1121 East		ONE HOUR	✓	155	100.000
C - A12 South		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	595
	B - B1121 East	35	0	121
	C - A12 South	511	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	7
	B - B1121 East	0	0	5
	C - A12 South	11	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	7.96	0.3	1.3	A	111	166
B-A	0.08	8.42	0.1	0.5	A	32	48
C-AB	0.14	7.01	0.2	0.5	A	72	108
C-A						469	703
A-B						0	0
A-C						546	819

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	635	0.143	90	0.0	0.2	6.598	A
B-A	26	7	538	0.048	26	0.0	0.1	7.023	A
C-AB	59	15	645	0.092	59	0.0	0.1	6.132	A
C-A	384	96			384				
A-B	0	0			0				
A-C	448	112			448				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	108	27	614	0.176	108	0.2	0.2	7.115	A
B-A	31	8	508	0.061	31	0.1	0.1	7.554	A
C-AB	71	18	626	0.113	71	0.1	0.1	6.477	A
C-A	459	115			459				
A-B	0	0			0				
A-C	535	134			535				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	585	0.227	132	0.2	0.3	7.948	A
B-A	38	10	466	0.082	38	0.1	0.1	8.418	A
C-AB	86	22	600	0.144	86	0.1	0.2	7.009	A
C-A	562	141			562				
A-B	0	0			0				
A-C	655	164			655				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	585	0.227	133	0.3	0.3	7.959	A
B-A	38	10	465	0.082	38	0.1	0.1	8.423	A
C-AB	86	22	600	0.144	86	0.2	0.2	7.012	A
C-A	562	141			562				
A-B	0	0			0				
A-C	655	164			655				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	108	27	614	0.176	109	0.3	0.2	7.127	A
B-A	31	8	508	0.061	31	0.1	0.1	7.558	A
C-AB	71	18	626	0.113	71	0.2	0.1	6.481	A
C-A	459	115			459				
A-B	0	0			0				
A-C	535	134			535				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	635	0.143	91	0.2	0.2	6.622	A
B-A	26	7	538	0.048	26	0.1	0.1	7.033	A
C-AB	59	15	645	0.092	59	0.1	0.1	6.141	A
C-A	384	96			384				
A-B	0	0			0				
A-C	448	112			448				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.26	0.46	0.48			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.17	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.31	1.03	1.33			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	2.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	638	100.000
B - B1121 East		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	654	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	638
	B - B1121 East	44	0	113
	C - A12 South	465	190	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 East	0	0	4
	C - A12 South	13	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	8.00	0.3	1.3	A	104	156
B-A	0.11	9.31	0.1	0.5	A	40	60
C-AB	0.35	9.35	0.5	2.5	A	174	261
C-A						426	640
A-B						0	0
A-C						585	878

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	85	21	629	0.135	84	0.0	0.2	6.603	A
B-A	33	8	520	0.063	33	0.0	0.1	7.385	A
C-AB	143	36	642	0.222	142	0.0	0.3	7.178	A
C-A	350	87			350				
A-B	0	0			0				
A-C	480	120			480				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	102	25	606	0.168	101	0.2	0.2	7.128	A
B-A	39	10	484	0.081	39	0.1	0.1	8.092	A
C-AB	171	43	622	0.274	170	0.3	0.4	7.965	A
C-A	418	104			418				
A-B	0	0			0				
A-C	573	143			573				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	124	31	575	0.217	124	0.2	0.3	7.988	A
B-A	48	12	435	0.110	48	0.1	0.1	9.302	A
C-AB	209	52	594	0.352	208	0.4	0.5	9.323	A
C-A	512	128			512				
A-B	0	0			0				
A-C	702	176			702				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	124	31	575	0.217	124	0.3	0.3	7.998	A
B-A	48	12	435	0.110	48	0.1	0.1	9.312	A
C-AB	209	52	594	0.352	209	0.5	0.5	9.354	A
C-A	512	128			512				
A-B	0	0			0				
A-C	702	176			702				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	102	25	606	0.168	102	0.3	0.2	7.141	A
B-A	39	10	484	0.081	39	0.1	0.1	8.103	A
C-AB	171	43	622	0.274	171	0.5	0.4	7.999	A
C-A	418	104			418				
A-B	0	0			0				
A-C	573	143			573				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	85	21	629	0.135	85	0.2	0.2	6.625	A
B-A	33	8	519	0.063	33	0.1	0.1	7.400	A
C-AB	143	36	642	0.222	143	0.4	0.3	7.223	A
C-A	350	87			350				
A-B	0	0			0				
A-C	480	120			480				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.53	0.03	0.26	0.53	0.53			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.03	0.30	0.96	1.27			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.54	0.03	0.30	1.33	2.52			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.38	0.00	0.00	0.38	0.38			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	535	100.000
B - B1121 East		ONE HOUR	✓	189	100.000
C - A12 South		ONE HOUR	✓	755	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	535
	B - B1121 East	69	0	121
	C - A12 South	634	120	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	8
	B - B1121 East	7	0	7
	C - A12 South	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.53	0.3	1.4	A	111	166
B-A	0.17	9.84	0.2	0.7	A	63	95
C-AB	0.21	7.18	0.3	1.2	A	110	165
C-A						582	873
A-B						0	0
A-C						491	736

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	604	0.150	90	0.0	0.2	7.003	A
B-A	52	13	516	0.100	51	0.0	0.1	7.746	A
C-AB	90	23	676	0.134	90	0.0	0.2	6.138	A
C-A	478	119			478				
A-B	0	0			0				
A-C	403	101			403				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	108	27	583	0.186	108	0.2	0.2	7.572	A
B-A	62	15	485	0.127	62	0.1	0.1	8.509	A
C-AB	108	27	658	0.164	108	0.2	0.2	6.542	A
C-A	570	143			570				
A-B	0	0			0				
A-C	481	120			481				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	555	0.239	132	0.2	0.3	8.510	A
B-A	76	19	442	0.171	75	0.1	0.2	9.825	A
C-AB	132	33	633	0.209	132	0.2	0.3	7.177	A
C-A	699	175			699				
A-B	0	0			0				
A-C	589	147			589				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	555	0.239	133	0.3	0.3	8.525	A
B-A	76	19	442	0.171	76	0.2	0.2	9.838	A
C-AB	132	33	633	0.209	132	0.3	0.3	7.182	A
C-A	699	175			699				
A-B	0	0			0				
A-C	589	147			589				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	108	27	583	0.186	109	0.3	0.2	7.594	A
B-A	62	15	484	0.127	62	0.2	0.1	8.527	A
C-AB	108	27	658	0.164	108	0.3	0.2	6.553	A
C-A	570	143			570				
A-B	0	0			0				
A-C	481	120			481				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	603	0.151	91	0.2	0.2	7.029	A
B-A	52	13	515	0.100	52	0.1	0.1	7.768	A
C-AB	90	23	676	0.134	91	0.2	0.2	6.156	A
C-A	478	119			478				
A-B	0	0			0				
A-C	403	101			403				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.20	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.26	0.03	0.26	0.46	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.31	1.10	1.41			N/A	N/A
B-A	0.21	0.03	0.27	0.48	0.68			N/A	N/A
C-AB	0.26	0.03	0.30	0.89	1.22			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35b	A12 / B1121 Main Road	T-Junction	Two-way	1.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	503	100.000
B - B1121 East		ONE HOUR	✓	141	100.000
C - A12 South		ONE HOUR	✓	846	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	503
	B - B1121 East	45	0	96
	C - A12 South	691	155	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 East	C - A12 South
From	A - A12 North	0	0	3
	B - B1121 East	0	0	1
	C - A12 South	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	7.03	0.2	0.5	A	88	132
B-A	0.11	8.74	0.1	0.5	A	42	62
C-AB	0.26	7.37	0.3	1.1	A	142	213
C-A						634	951
A-B						0	0
A-C						462	693

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	662	0.109	72	0.0	0.1	6.092	A
B-A	34	9	541	0.063	34	0.0	0.1	7.095	A
C-AB	117	29	698	0.167	116	0.0	0.2	6.177	A
C-A	520	130			520				
A-B	0	0			0				
A-C	379	95			379				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	86	22	643	0.134	86	0.1	0.2	6.454	A
B-A	41	10	508	0.080	41	0.1	0.1	7.709	A
C-AB	139	35	682	0.205	139	0.2	0.3	6.632	A
C-A	621	155			621				
A-B	0	0			0				
A-C	452	113			452				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	105	26	618	0.171	105	0.2	0.2	7.020	A
B-A	50	12	462	0.108	50	0.1	0.1	8.738	A
C-AB	171	43	659	0.259	170	0.3	0.3	7.362	A
C-A	761	190			761				
A-B	0	0			0				
A-C	554	139			554				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	105	26	618	0.171	105	0.2	0.2	7.027	A
B-A	50	12	462	0.108	50	0.1	0.1	8.744	A
C-AB	171	43	659	0.259	171	0.3	0.3	7.371	A
C-A	761	190			761				
A-B	0	0			0				
A-C	554	139			554				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	643	0.134	86	0.2	0.2	6.463	A
B-A	41	10	507	0.080	41	0.1	0.1	7.716	A
C-AB	139	35	682	0.205	140	0.3	0.3	6.649	A
C-A	621	155			621				
A-B	0	0			0				
A-C	452	113			452				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	662	0.109	72	0.2	0.1	6.108	A
B-A	34	9	541	0.063	34	0.1	0.1	7.109	A
C-AB	117	29	698	0.167	117	0.3	0.2	6.199	A
C-A	520	130			520				
A-B	0	0			0				
A-C	379	95			379				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.35	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.03	0.26	0.47	0.50			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.35	0.03	0.31	1.10	1.10			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 201020 J35c_Model_CV.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J35c\Model
Report generation date: 18/12/2020 11:42:32

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.0	0.5	5.34	0.03	A	0.1	0.5	5.44	0.06	A	0.1	0.5	5.59	0.06	A	0.0	0.5	5.14	0.02	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2023 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.1	0.5	5.47	0.05	A	0.1	0.5	5.69	0.10	A	0.1	0.5	5.82	0.10	A	0.0	0.5	5.29	0.05	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2023 Early Years																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.1	0.5	5.60	0.06	A	0.1	0.5	5.80	0.11	A	0.1	0.5	5.84	0.10	A	0.0	0.5	5.40	0.05	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2028 Reference Case																								
Stream B-AC	0.0	~1	0.00	0.00	A	0.1	0.5	5.72	0.09	A	0.2	0.5	6.14	0.16	A	0.2	0.5	6.08	0.13	A	0.1	0.5	5.68	0.11	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2028 Peak Construction																								
Stream B-AC	0.0	0.5	4.90	0.01	A	0.1	0.5	5.77	0.09	A	0.2	0.5	6.22	0.17	A	0.2	0.5	6.17	0.14	A	0.1	0.5	5.81	0.11	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2034 Reference Case																								
Stream B-AC	0.0	0.5	4.87	0.01	A	0.1	0.5	5.97	0.13	A	0.3	1.2	6.46	0.20	A	0.2	0.7	6.37	0.18	A	0.2	0.5	6.02	0.16	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
	2034 Operational Led																								
Stream B-AC	0.0	0.5	4.88	0.01	A	0.1	0.5	5.98	0.13	A	0.3	1.2	6.68	0.21	A	0.2	0.6	6.35	0.17	A	0.2	0.5	6.01	0.16	A
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

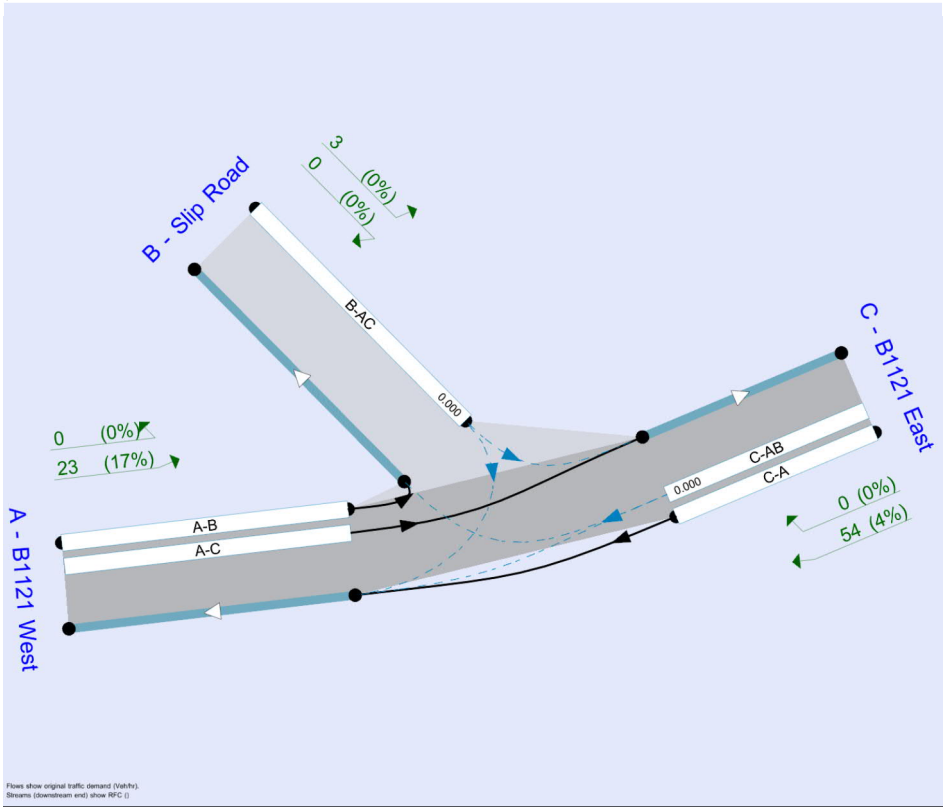
File Description

Title	B1121 Main Road / Slip Road
Location	52°11'52.91"N, 1°28'48.37"E

Site number	35c
Date	09/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
Description	Although the minor arm is single carriageway (entry only), it has been modelled as dual carriageway in Junctions 9 as it is a limitation. The junction has been coded as one way from A to C as right turn movement is prohibited from major arm.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1121 West		Major
B	Slip Road		Minor
C	B1121 East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B1121 East	9.50			32.6	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Slip Road	One lane	4.90	45	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J35c	B-A	594	0.092	0.232	0.146	0.331
J35c	B-C	753	0.098	0.247	-	-
J35c	C-B	593	0.195	0.195	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	23	100.000
B - Slip Road		ONE HOUR	✓	3	100.000
C - B1121 East		ONE HOUR	✓	54	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	23
	B - Slip Road	0	0	3
	C - B1121 East	54	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	17
	B - Slip Road	0	0	0
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						50	74
A-B						0	0
A-C						21	32

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	655	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	41	10			41				
A-B	0	0			0				
A-C	17	4			17				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	654	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	49	12			49				
A-B	0	0			0				
A-C	21	5			21				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	651	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
A-B	0	0			0				
A-C	25	6			25				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	651	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
A-B	0	0			0				
A-C	25	6			25				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	654	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	49	12			49				
A-B	0	0			0				
A-C	21	5			21				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	655	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	41	10			41				
A-B	0	0			0				
A-C	17	4			17				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	68	100.000
B - Slip Road		ONE HOUR	✓	17	100.000
C - B1121 East		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	68
	B - Slip Road	0	0	17
	C - B1121 East	137	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	6
	C - B1121 East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.03	5.34	0.0	0.5	A	16	23
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						126	189
A-B						0	0
A-C						62	94

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	13	3	699	0.018	13	0.0	0.0	5.247	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	103	26			103				
A-B	0	0			0				
A-C	51	13			51				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	15	4	696	0.022	15	0.0	0.0	5.285	A

C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	123	31			123				
A-B	0	0			0				
A-C	61	15			61				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	19	5	693	0.027	19	0.0	0.0	5.339	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	151	38			151				
A-B	0	0			0				
A-C	75	19			75				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	19	5	693	0.027	19	0.0	0.0	5.339	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	151	38			151				
A-B	0	0			0				
A-C	75	19			75				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	15	4	696	0.022	15	0.0	0.0	5.288	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	123	31			123				
A-B	0	0			0				
A-C	61	15			61				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	13	3	699	0.018	13	0.0	0.0	5.249	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	103	26			103				
A-B	0	0			0				
A-C	51	13			51				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	109	100.000
B - Slip Road		ONE HOUR	✓	38	100.000
C - B1121 East		ONE HOUR	✓	138	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	109
	B - Slip Road	0	0	38
	C - B1121 East	138	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	3
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	5.44	0.1	0.5	A	35	52
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						127	190
A-B						0	0
A-C						100	150

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	29	7	713	0.040	28	0.0	0.0	5.256	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	104	26			104				
A-B	0	0			0				
A-C	82	21			82				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	9	709	0.048	34	0.0	0.1	5.333	A

C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	124	31			124				
A-B	0	0			0				
A-C	98	24			98				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	42	10	703	0.059	42	0.1	0.1	5.440	A
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	A
C-A	152	38			152				
A-B	0	0			0				
A-C	120	30			120				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	42	10	703	0.059	42	0.1	0.1	5.440	A
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	A
C-A	152	38			152				
A-B	0	0			0				
A-C	120	30			120				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	9	709	0.048	34	0.1	0.1	5.334	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	124	31			124				
A-B	0	0			0				
A-C	98	24			98				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	29	7	713	0.040	29	0.1	0.0	5.259	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	104	26			104				
A-B	0	0			0				
A-C	82	21			82				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	112	100.000
B - Slip Road		ONE HOUR	✓	40	100.000
C - B1121 East		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	112
	B - Slip Road	0	0	40
	C - B1121 East	157	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	3
	B - Slip Road	0	0	5
	C - B1121 East	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	5.59	0.1	0.5	A	37	55
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						144	216
A-B						0	0
A-C						103	154

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	30	8	697	0.043	30	0.0	0.0	5.395	A
C-AB	0	0	538	0.000	0	0.0	0.0	0.000	A
C-A	118	30			118				
A-B	0	0			0				
A-C	84	21			84				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	36	9	693	0.052	36	0.0	0.1	5.478	A

C-AB	0	0	535	0.000	0	0.0	0.0	0.000	A
C-A	141	35			141				
A-B	0	0			0				
A-C	101	25			101				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	688	0.064	44	0.1	0.1	5.593	A
C-AB	0	0	531	0.000	0	0.0	0.0	0.000	A
C-A	173	43			173				
A-B	0	0			0				
A-C	123	31			123				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	688	0.064	44	0.1	0.1	5.593	A
C-AB	0	0	531	0.000	0	0.0	0.0	0.000	A
C-A	173	43			173				
A-B	0	0			0				
A-C	123	31			123				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	36	9	693	0.052	36	0.1	0.1	5.479	A
C-AB	0	0	535	0.000	0	0.0	0.0	0.000	A
C-A	141	35			141				
A-B	0	0			0				
A-C	101	25			101				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	30	8	697	0.043	30	0.1	0.0	5.398	A
C-AB	0	0	538	0.000	0	0.0	0.0	0.000	A
C-A	118	30			118				
A-B	0	0			0				
A-C	84	21			84				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	144	100.000
B - Slip Road		ONE HOUR	✓	12	100.000
C - B1121 East		ONE HOUR	✓	100	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	144
	B - Slip Road	0	0	12
	C - B1121 East	100	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	1
	B - Slip Road	0	0	0
	C - B1121 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.02	5.14	0.0	0.5	A	11	17
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						92	138
A-B						0	0
A-C						132	198

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	9	2	726	0.012	9	0.0	0.0	5.018	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	0	0			0				
A-C	108	27			108				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	11	3	721	0.015	11	0.0	0.0	5.068	A

C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
A-B	0	0			0				
A-C	129	32			129				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	13	3	714	0.019	13	0.0	0.0	5.138	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	110	28			110				
A-B	0	0			0				
A-C	159	40			159				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	13	3	714	0.019	13	0.0	0.0	5.138	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	110	28			110				
A-B	0	0			0				
A-C	159	40			159				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	11	3	721	0.015	11	0.0	0.0	5.070	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
A-B	0	0			0				
A-C	129	32			129				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	9	2	726	0.012	9	0.0	0.0	5.021	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	0	0			0				
A-C	108	27			108				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	25	100.000
B - Slip Road		ONE HOUR	✓	4	100.000
C - B1121 East		ONE HOUR	✓	57	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	25
	B - Slip Road	0	0	4
	C - B1121 East	57	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	17
	B - Slip Road	0	0	0
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						52	78
A-B						0	0
A-C						23	34

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	655	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	43	11			43				
A-B	0	0			0				
A-C	19	5			19				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	653	0.000	0	0.0	0.0	0.000	A

C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	51	13			51				
A-B	0	0			0				
A-C	23	6			23				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	650	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	62	16			62				
A-B	0	0			0				
A-C	28	7			28				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	650	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	62	16			62				
A-B	0	0			0				
A-C	28	7			28				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	653	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	51	13			51				
A-B	0	0			0				
A-C	23	6			23				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	655	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	43	11			43				
A-B	0	0			0				
A-C	19	5			19				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	70	100.000
B - Slip Road		ONE HOUR	✓	31	100.000
C - B1121 East		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	70
	B - Slip Road	0	0	31
	C - B1121 East	143	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	6
	C - B1121 East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	5.47	0.1	0.5	A	29	43
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						131	197
A-B						0	0
A-C						64	96

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	698	0.034	23	0.0	0.0	5.331	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	108	27			108				
A-B	0	0			0				
A-C	52	13			52				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	696	0.041	28	0.0	0.0	5.390	A

C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	129	32			129				
A-B	0	0			0				
A-C	63	16			63				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	692	0.050	34	0.0	0.1	5.471	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	158	39			158				
A-B	0	0			0				
A-C	77	19			77				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	692	0.050	35	0.1	0.1	5.471	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	158	39			158				
A-B	0	0			0				
A-C	77	19			77				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	696	0.041	28	0.1	0.0	5.391	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	129	32			129				
A-B	0	0			0				
A-C	63	16			63				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	698	0.034	24	0.0	0.0	5.336	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	108	27			108				
A-B	0	0			0				
A-C	52	13			52				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	118	100.000
B - Slip Road		ONE HOUR	✓	62	100.000
C - B1121 East		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	118
	B - Slip Road	0	0	62
	C - B1121 East	143	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	3
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	5.69	0.1	0.5	A	57	85
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						131	196
A-B						0	0
A-C						108	162

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	711	0.066	46	0.0	0.1	5.411	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	89	22			89				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	56	14	707	0.079	56	0.1	0.1	5.527	A

C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	128	32			128				
A-B	0	0			0				
A-C	106	26			106				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	68	17	701	0.098	68	0.1	0.1	5.690	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	157	39			157				
A-B	0	0			0				
A-C	130	32			130				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	68	17	701	0.098	68	0.1	0.1	5.690	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	157	39			157				
A-B	0	0			0				
A-C	130	32			130				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	56	14	707	0.079	56	0.1	0.1	5.531	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	128	32			128				
A-B	0	0			0				
A-C	106	26			106				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	711	0.066	47	0.1	0.1	5.416	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	89	22			89				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	119	100.000
B - Slip Road		ONE HOUR	✓	61	100.000
C - B1121 East		ONE HOUR	✓	170	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	119
	B - Slip Road	0	0	61
	C - B1121 East	170	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	3
	B - Slip Road	0	0	5
	C - B1121 East	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	5.82	0.1	0.5	A	56	84
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						156	234
A-B						0	0
A-C						109	164

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	46	11	696	0.066	46	0.0	0.1	5.535	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	128	32			128				
A-B	0	0			0				
A-C	90	22			90				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55	14	691	0.079	55	0.1	0.1	5.654	A

C-AB	0	0	534	0.000	0	0.0	0.0	0.000	A
C-A	153	38			153				
A-B	0	0			0				
A-C	107	27			107				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	686	0.098	67	0.1	0.1	5.820	A
C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	188	47			188				
A-B	0	0			0				
A-C	131	33			131				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	686	0.098	67	0.1	0.1	5.820	A
C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	188	47			188				
A-B	0	0			0				
A-C	131	33			131				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55	14	691	0.079	55	0.1	0.1	5.655	A
C-AB	0	0	534	0.000	0	0.0	0.0	0.000	A
C-A	153	38			153				
A-B	0	0			0				
A-C	107	27			107				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	46	11	696	0.066	46	0.1	0.1	5.541	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	128	32			128				
A-B	0	0			0				
A-C	90	22			90				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	148	100.000
B - Slip Road		ONE HOUR	✓	29	100.000
C - B1121 East		ONE HOUR	✓	119	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	148
	B - Slip Road	0	0	29
	C - B1121 East	119	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	1
	B - Slip Road	0	0	0
	C - B1121 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	5.29	0.0	0.5	A	27	41
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						109	164
A-B						0	0
A-C						136	204

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	6	725	0.031	22	0.0	0.0	5.118	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
A-B	0	0			0				
A-C	112	28			112				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	720	0.037	26	0.0	0.0	5.189	A

C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	133	33			133				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	713	0.045	32	0.0	0.0	5.291	A
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	A
C-A	131	33			131				
A-B	0	0			0				
A-C	163	41			163				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	713	0.045	32	0.0	0.0	5.291	A
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	A
C-A	131	33			131				
A-B	0	0			0				
A-C	163	41			163				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	720	0.037	27	0.0	0.0	5.192	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	133	33			133				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	6	725	0.031	22	0.0	0.0	5.118	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	90	22			90				
A-B	0	0			0				
A-C	112	28			112				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.26	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	51	100.000
B - Slip Road		ONE HOUR	✓	4	100.000
C - B1121 East		ONE HOUR	✓	62	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	51
	B - Slip Road	0	0	4
	C - B1121 East	62	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	17
	B - Slip Road	0	0	0
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						56	85
A-B						0	0
A-C						47	70

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	649	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	46	12			46				
A-B	0	0			0				
A-C	38	10			38				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	646	0.000	0	0.0	0.0	0.000	A

C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	55	14			55				
A-B	0	0			0				
A-C	46	11			46				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	642	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	56	14			56				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	642	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	568	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	56	14			56				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	646	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	570	0.000	0	0.0	0.0	0.000	A
C-A	55	14			55				
A-B	0	0			0				
A-C	46	11			46				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	649	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	46	12			46				
A-B	0	0			0				
A-C	38	10			38				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	103	100.000
B - Slip Road		ONE HOUR	✓	37	100.000
C - B1121 East		ONE HOUR	✓	165	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	103
	B - Slip Road	0	0	37
	C - B1121 East	165	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	6
	C - B1121 East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	5.60	0.1	0.5	A	34	51
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						152	227
A-B						0	0
A-C						94	141

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	692	0.041	28	0.0	0.0	5.417	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	124	31			124				
A-B	0	0			0				
A-C	77	19			77				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	8	689	0.049	34	0.0	0.1	5.495	A

C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	148	37			148				
A-B	0	0			0				
A-C	92	23			92				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	41	10	683	0.060	41	0.1	0.1	5.603	A
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	182	45			182				
A-B	0	0			0				
A-C	113	28			113				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	41	10	683	0.060	41	0.1	0.1	5.603	A
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	182	45			182				
A-B	0	0			0				
A-C	113	28			113				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	8	689	0.049	34	0.1	0.1	5.496	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	148	37			148				
A-B	0	0			0				
A-C	92	23			92				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	692	0.041	28	0.1	0.0	5.420	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	124	31			124				
A-B	0	0			0				
A-C	77	19			77				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	124	100.000
B - Slip Road		ONE HOUR	✓	71	100.000
C - B1121 East		ONE HOUR	✓	150	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	124
	B - Slip Road	0	0	71
	C - B1121 East	150	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	3
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	5.80	0.1	0.5	A	65	98
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						137	206
A-B						0	0
A-C						114	170

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	710	0.075	53	0.0	0.1	5.476	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	0	0			0				
A-C	93	23			93				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	706	0.091	64	0.1	0.1	5.609	A

C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	135	34			135				
A-B	0	0			0				
A-C	111	28			111				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	78	20	699	0.112	78	0.1	0.1	5.796	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	165	41			165				
A-B	0	0			0				
A-C	136	34			136				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	78	20	699	0.112	78	0.1	0.1	5.796	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	165	41			165				
A-B	0	0			0				
A-C	136	34			136				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	706	0.091	64	0.1	0.1	5.610	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	135	34			135				
A-B	0	0			0				
A-C	111	28			111				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	710	0.075	54	0.1	0.1	5.484	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	0	0			0				
A-C	93	23			93				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	127	100.000
B - Slip Road		ONE HOUR	✓	61	100.000
C - B1121 East		ONE HOUR	✓	176	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	127
	B - Slip Road	0	0	61
	C - B1121 East	176	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	3
	B - Slip Road	0	0	5
	C - B1121 East	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	5.84	0.1	0.5	A	56	84
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						162	243
A-B						0	0
A-C						117	175

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	46	11	694	0.066	46	0.0	0.1	5.548	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	96	24			96				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55	14	690	0.080	55	0.1	0.1	5.669	A

C-AB	0	0	532	0.000	0	0.0	0.0	0.000	A
C-A	159	40			159				
A-B	0	0			0				
A-C	114	29			114				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	684	0.098	67	0.1	0.1	5.840	A
C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
C-A	194	49			194				
A-B	0	0			0				
A-C	140	35			140				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	684	0.098	67	0.1	0.1	5.840	A
C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
C-A	194	49			194				
A-B	0	0			0				
A-C	140	35			140				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	55	14	690	0.080	55	0.1	0.1	5.673	A
C-AB	0	0	532	0.000	0	0.0	0.0	0.000	A
C-A	159	40			159				
A-B	0	0			0				
A-C	114	29			114				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	46	11	694	0.066	46	0.1	0.1	5.553	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	96	24			96				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	196	100.000
B - Slip Road		ONE HOUR	✓	29	100.000
C - B1121 East		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	196
	B - Slip Road	0	0	29
	C - B1121 East	151	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	1
	B - Slip Road	0	0	0
	C - B1121 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	5.40	0.0	0.5	A	27	41
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						139	208
A-B						0	0
A-C						180	270

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	6	716	0.031	22	0.0	0.0	5.184	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	114	28			114				
A-B	0	0			0				
A-C	148	37			148				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	709	0.037	26	0.0	0.0	5.271	A

C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	136	34			136				
A-B	0	0			0				
A-C	176	44			176				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	699	0.046	32	0.0	0.0	5.396	A
C-AB	0	0	547	0.000	0	0.0	0.0	0.000	A
C-A	166	42			166				
A-B	0	0			0				
A-C	216	54			216				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	699	0.046	32	0.0	0.0	5.396	A
C-AB	0	0	547	0.000	0	0.0	0.0	0.000	A
C-A	166	42			166				
A-B	0	0			0				
A-C	216	54			216				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	26	7	709	0.037	27	0.0	0.0	5.273	A
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	136	34			136				
A-B	0	0			0				
A-C	176	44			176				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	6	716	0.031	22	0.0	0.0	5.184	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	114	28			114				
A-B	0	0			0				
A-C	148	37			148				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	26	100.000
B - Slip Road		ONE HOUR	✓	4	100.000
C - B1121 East		ONE HOUR	✓	59	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	26
	B - Slip Road	0	0	4
	C - B1121 East	59	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	17
	B - Slip Road	0	0	0
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						54	81
A-B						0	0
A-C						24	36

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	654	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	20	5			20				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	652	0.000	0	0.0	0.0	0.000	A

C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
A-B	0	0			0				
A-C	23	6			23				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	650	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	64	16			64				
A-B	0	0			0				
A-C	29	7			29				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	650	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	64	16			64				
A-B	0	0			0				
A-C	29	7			29				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	652	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
A-B	0	0			0				
A-C	23	6			23				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	654	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	20	5			20				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	72	100.000
B - Slip Road		ONE HOUR	✓	57	100.000
C - B1121 East		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	72
	B - Slip Road	0	0	57
	C - B1121 East	148	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	6
	C - B1121 East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	5.72	0.1	0.5	A	53	79
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						136	204
A-B						0	0
A-C						66	98

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	43	11	698	0.062	43	0.0	0.1	5.491	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	112	28			112				
A-B	0	0			0				
A-C	54	13			54				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	696	0.074	52	0.1	0.1	5.590	A

C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	64	16			64				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	63	16	692	0.091	63	0.1	0.1	5.724	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	163	41			163				
A-B	0	0			0				
A-C	79	20			79				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	63	16	692	0.091	63	0.1	0.1	5.724	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	163	41			163				
A-B	0	0			0				
A-C	79	20			79				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	696	0.074	52	0.1	0.1	5.591	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	64	16			64				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	43	11	698	0.062	43	0.1	0.1	5.497	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	112	28			112				
A-B	0	0			0				
A-C	54	13			54				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	125	100.000
B - Slip Road		ONE HOUR	✓	102	100.000
C - B1121 East		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	125
	B - Slip Road	0	0	102
	C - B1121 East	143	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	3
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.16	6.14	0.2	0.5	A	94	141
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						131	196
A-B						0	0
A-C						114	172

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	77	19	710	0.108	76	0.0	0.1	5.678	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	94	23			94				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	92	23	705	0.130	92	0.1	0.1	5.866	A

C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	128	32			128				
A-B	0	0			0				
A-C	112	28			112				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	112	28	699	0.161	112	0.1	0.2	6.133	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	157	39			157				
A-B	0	0			0				
A-C	137	34			137				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	112	28	699	0.161	112	0.2	0.2	6.136	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	157	39			157				
A-B	0	0			0				
A-C	137	34			137				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	92	23	705	0.130	92	0.2	0.2	5.871	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	128	32			128				
A-B	0	0			0				
A-C	112	28			112				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	77	19	710	0.108	77	0.2	0.1	5.689	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	107	27			107				
A-B	0	0			0				
A-C	94	23			94				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	126	100.000
B - Slip Road		ONE HOUR	✓	83	100.000
C - B1121 East		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	126
	B - Slip Road	0	0	83
	C - B1121 East	183	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	3
	B - Slip Road	0	0	5
	C - B1121 East	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	6.08	0.2	0.5	A	76	114
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						168	252
A-B						0	0
A-C						116	174

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	63	16	694	0.090	62	0.0	0.1	5.689	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	138	35			138				
A-B	0	0			0				
A-C	95	24			95				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	75	19	690	0.108	75	0.1	0.1	5.850	A

C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	165	41			165				
A-B	0	0			0				
A-C	113	28			113				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	91	23	684	0.134	91	0.1	0.2	6.074	A
C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
C-A	202	50			202				
A-B	0	0			0				
A-C	139	35			139				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	91	23	684	0.134	91	0.2	0.2	6.076	A
C-AB	0	0	528	0.000	0	0.0	0.0	0.000	A
C-A	202	50			202				
A-B	0	0			0				
A-C	139	35			139				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	75	19	690	0.108	75	0.2	0.1	5.854	A
C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	165	41			165				
A-B	0	0			0				
A-C	113	28			113				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	63	16	694	0.090	63	0.1	0.1	5.698	A
C-AB	0	0	536	0.000	0	0.0	0.0	0.000	A
C-A	138	35			138				
A-B	0	0			0				
A-C	95	24			95				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	151	100.000
B - Slip Road		ONE HOUR	✓	71	100.000
C - B1121 East		ONE HOUR	✓	135	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	151
	B - Slip Road	0	0	71
	C - B1121 East	135	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	1
	B - Slip Road	0	0	0
	C - B1121 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	5.68	0.1	0.5	A	66	98
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						124	186
A-B						0	0
A-C						139	208

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	725	0.074	53	0.0	0.1	5.359	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	102	25			102				
A-B	0	0			0				
A-C	114	28			114				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	719	0.089	64	0.1	0.1	5.493	A

C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	0	0			0				
A-C	136	34			136				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	712	0.111	79	0.1	0.1	5.685	A
C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
C-A	149	37			149				
A-B	0	0			0				
A-C	166	42			166				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	712	0.111	79	0.1	0.1	5.685	A
C-AB	0	0	557	0.000	0	0.0	0.0	0.000	A
C-A	149	37			149				
A-B	0	0			0				
A-C	166	42			166				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	719	0.089	64	0.1	0.1	5.497	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	0	0			0				
A-C	136	34			136				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	725	0.074	54	0.1	0.1	5.364	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	102	25			102				
A-B	0	0			0				
A-C	114	28			114				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	40	100.000
B - Slip Road		ONE HOUR	✓	5	100.000
C - B1121 East		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	40
	B - Slip Road	0	0	5
	C - B1121 East	60	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	17
	B - Slip Road	0	0	0
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.01	4.90	0.0	0.5	A	5	7
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						55	82
A-B						0	0
A-C						37	55

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	4	0.95	745	0.005	4	0.0	0.0	4.859	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	0	0			0				
A-C	30	8			30				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	5	1	743	0.006	5	0.0	0.0	4.875	A

C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	54	13			54				
A-B	0	0			0				
A-C	36	9			36				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	6	1	740	0.007	6	0.0	0.0	4.898	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	66	16			66				
A-B	0	0			0				
A-C	44	11			44				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	6	1	740	0.007	6	0.0	0.0	4.898	A
C-AB	0	0	571	0.000	0	0.0	0.0	0.000	A
C-A	66	16			66				
A-B	0	0			0				
A-C	44	11			44				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	5	1	743	0.006	5	0.0	0.0	4.875	A
C-AB	0	0	572	0.000	0	0.0	0.0	0.000	A
C-A	54	13			54				
A-B	0	0			0				
A-C	36	9			36				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	4	0.95	745	0.005	4	0.0	0.0	4.859	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	0	0			0				
A-C	30	8			30				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	87	100.000
B - Slip Road		ONE HOUR	✓	58	100.000
C - B1121 East		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	87
	B - Slip Road	0	0	58
	C - B1121 East	151	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	6
	C - B1121 East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	5.77	0.1	0.5	A	54	80
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						139	208
A-B						0	0
A-C						79	119

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	695	0.063	44	0.0	0.1	5.522	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	114	28			114				
A-B	0	0			0				
A-C	65	16			65				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	692	0.076	52	0.1	0.1	5.627	A

C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	136	34			136				
A-B	0	0			0				
A-C	78	19			78				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	688	0.093	64	0.1	0.1	5.772	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	166	42			166				
A-B	0	0			0				
A-C	95	24			95				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	688	0.093	64	0.1	0.1	5.772	A
C-AB	0	0	559	0.000	0	0.0	0.0	0.000	A
C-A	166	42			166				
A-B	0	0			0				
A-C	95	24			95				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	52	13	692	0.076	53	0.1	0.1	5.628	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	136	34			136				
A-B	0	0			0				
A-C	78	19			78				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	695	0.063	44	0.1	0.1	5.529	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	114	28			114				
A-B	0	0			0				
A-C	65	16			65				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	147	100.000
B - Slip Road		ONE HOUR	✓	104	100.000
C - B1121 East		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	147
	B - Slip Road	0	0	104
	C - B1121 East	148	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	3
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	6.22	0.2	0.5	A	96	143
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						135	203
A-B						0	0
A-C						135	202

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	78	20	706	0.111	78	0.0	0.1	5.724	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	111	28			111				
A-B	0	0			0				
A-C	110	28			110				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	23	700	0.134	93	0.1	0.2	5.929	A

C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	132	33			132				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	115	29	693	0.165	114	0.2	0.2	6.222	A
C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
C-A	163	41			163				
A-B	0	0			0				
A-C	162	40			162				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	115	29	693	0.165	115	0.2	0.2	6.225	A
C-AB	0	0	549	0.000	0	0.0	0.0	0.000	A
C-A	163	41			163				
A-B	0	0			0				
A-C	162	40			162				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	23	700	0.134	94	0.2	0.2	5.937	A
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	132	33			132				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	78	20	706	0.111	78	0.2	0.1	5.738	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	111	28			111				
A-B	0	0			0				
A-C	110	28			110				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	150	100.000
B - Slip Road		ONE HOUR	✓	85	100.000
C - B1121 East		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	150
	B - Slip Road	0	0	85
	C - B1121 East	227	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	3
	B - Slip Road	0	0	5
	C - B1121 East	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.14	6.17	0.2	0.5	A	78	117
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						209	313
A-B						0	0
A-C						138	207

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	690	0.093	64	0.0	0.1	5.743	A
C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	113	28			113				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	685	0.112	76	0.1	0.1	5.917	A

C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	204	51			204				
A-B	0	0			0				
A-C	135	34			135				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	23	677	0.138	93	0.1	0.2	6.163	A
C-AB	0	0	523	0.000	0	0.0	0.0	0.000	A
C-A	250	63			250				
A-B	0	0			0				
A-C	165	41			165				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	23	677	0.138	94	0.2	0.2	6.166	A
C-AB	0	0	523	0.000	0	0.0	0.0	0.000	A
C-A	250	63			250				
A-B	0	0			0				
A-C	165	41			165				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	685	0.112	77	0.2	0.1	5.922	A
C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	204	51			204				
A-B	0	0			0				
A-C	135	34			135				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	690	0.093	64	0.1	0.1	5.751	A
C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	113	28			113				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	201	100.000
B - Slip Road		ONE HOUR	✓	71	100.000
C - B1121 East		ONE HOUR	✓	162	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	201
	B - Slip Road	0	0	71
	C - B1121 East	162	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	1
	B - Slip Road	0	0	0
	C - B1121 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	5.81	0.1	0.5	A	66	98
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						149	223
A-B						0	0
A-C						185	277

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	716	0.075	53	0.0	0.1	5.435	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	122	30			122				
A-B	0	0			0				
A-C	151	38			151				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	708	0.091	64	0.1	0.1	5.589	A

C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	146	36			146				
A-B	0	0			0				
A-C	181	45			181				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	698	0.113	79	0.1	0.1	5.811	A
C-AB	0	0	546	0.000	0	0.0	0.0	0.000	A
C-A	178	45			178				
A-B	0	0			0				
A-C	221	55			221				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	698	0.113	79	0.1	0.1	5.811	A
C-AB	0	0	546	0.000	0	0.0	0.0	0.000	A
C-A	178	45			178				
A-B	0	0			0				
A-C	221	55			221				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	708	0.091	64	0.1	0.1	5.593	A
C-AB	0	0	554	0.000	0	0.0	0.0	0.000	A
C-A	146	36			146				
A-B	0	0			0				
A-C	181	45			181				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	716	0.075	54	0.1	0.1	5.442	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	122	30			122				
A-B	0	0			0				
A-C	151	38			151				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	28	100.000
B - Slip Road		ONE HOUR	✓	5	100.000
C - B1121 East		ONE HOUR	✓	61	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	28
	B - Slip Road	0	0	5
	C - B1121 East	61	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	17
	B - Slip Road	0	0	0
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.01	4.87	0.0	0.5	A	5	7
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						56	83
A-B						0	0
A-C						26	39

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	4	0.95	747	0.005	4	0.0	0.0	4.842	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	46	11			46				
A-B	0	0			0				
A-C	21	5			21				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	5	1	746	0.006	5	0.0	0.0	4.855	A

C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	54	14			54				
A-B	0	0			0				
A-C	25	6			25				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	6	1	744	0.007	6	0.0	0.0	4.872	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	67	17			67				
A-B	0	0			0				
A-C	31	8			31				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	6	1	744	0.007	6	0.0	0.0	4.872	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	67	17			67				
A-B	0	0			0				
A-C	31	8			31				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	5	1	746	0.006	5	0.0	0.0	4.857	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	54	14			54				
A-B	0	0			0				
A-C	25	6			25				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	4	0.95	747	0.005	4	0.0	0.0	4.844	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	46	11			46				
A-B	0	0			0				
A-C	21	5			21				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	74	100.000
B - Slip Road		ONE HOUR	✓	80	100.000
C - B1121 East		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	74
	B - Slip Road	0	0	80
	C - B1121 East	155	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	6
	C - B1121 East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	5.97	0.1	0.5	A	74	111
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						142	214
A-B						0	0
A-C						67	101

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	61	15	698	0.087	60	0.0	0.1	5.642	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	0	0			0				
A-C	55	14			55				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	695	0.104	72	0.1	0.1	5.779	A

C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	0	0			0				
A-C	66	17			66				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	88	22	691	0.128	88	0.1	0.1	5.968	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	81	20			81				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	88	22	691	0.128	88	0.1	0.1	5.970	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	81	20			81				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	695	0.104	72	0.1	0.1	5.784	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	0	0			0				
A-C	66	17			66				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	61	15	698	0.087	61	0.1	0.1	5.650	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	0	0			0				
A-C	55	14			55				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	2.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	121	100.000
B - Slip Road		ONE HOUR	✓	130	100.000
C - B1121 East		ONE HOUR	✓	152	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	121
	B - Slip Road	0	0	130
	C - B1121 East	152	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	3
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	6.46	0.3	1.2	A	119	179
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						139	209
A-B						0	0
A-C						111	166

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	98	24	711	0.138	97	0.0	0.2	5.861	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	114	29			114				
A-B	0	0			0				
A-C	91	23			91				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	117	29	706	0.166	117	0.2	0.2	6.105	A

C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	136	34			136				
A-B	0	0			0				
A-C	109	27			109				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	143	36	700	0.205	143	0.2	0.3	6.458	A
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	167	42			167				
A-B	0	0			0				
A-C	133	33			133				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	143	36	700	0.205	143	0.3	0.3	6.463	A
C-AB	0	0	555	0.000	0	0.0	0.0	0.000	A
C-A	167	42			167				
A-B	0	0			0				
A-C	133	33			133				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	117	29	706	0.166	117	0.3	0.2	6.114	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	136	34			136				
A-B	0	0			0				
A-C	109	27			109				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	98	24	711	0.138	98	0.2	0.2	5.876	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	114	29			114				
A-B	0	0			0				
A-C	91	23			91				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.29	0.85	1.19			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	122	100.000
B - Slip Road		ONE HOUR	✓	109	100.000
C - B1121 East		ONE HOUR	✓	191	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	122
	B - Slip Road	0	0	109
	C - B1121 East	191	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	3
	B - Slip Road	0	0	5
	C - B1121 East	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.18	6.37	0.2	0.7	A	100	150
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						176	263
A-B						0	0
A-C						112	168

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	82	21	695	0.118	82	0.0	0.1	5.862	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	144	36			144				
A-B	0	0			0				
A-C	92	23			92				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	98	25	691	0.142	98	0.1	0.2	6.069	A

C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	172	43			172				
A-B	0	0			0				
A-C	110	27			110				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	120	30	685	0.175	120	0.2	0.2	6.370	A
C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	211	53			211				
A-B	0	0			0				
A-C	135	34			135				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	120	30	685	0.175	120	0.2	0.2	6.373	A
C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	211	53			211				
A-B	0	0			0				
A-C	135	34			135				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	98	25	691	0.142	98	0.2	0.2	6.075	A
C-AB	0	0	533	0.000	0	0.0	0.0	0.000	A
C-A	172	43			172				
A-B	0	0			0				
A-C	110	27			110				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	82	21	695	0.118	82	0.2	0.1	5.874	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	144	36			144				
A-B	0	0			0				
A-C	92	23			92				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.03	0.27	0.48	0.69			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	158	100.000
B - Slip Road		ONE HOUR	✓	101	100.000
C - B1121 East		ONE HOUR	✓	140	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	158
	B - Slip Road	0	0	101
	C - B1121 East	140	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	1
	B - Slip Road	0	0	0
	C - B1121 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.16	6.02	0.2	0.5	A	93	140
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						128	193
A-B						0	0
A-C						145	218

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	724	0.106	76	0.0	0.1	5.554	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	105	26			105				
A-B	0	0			0				
A-C	119	30			119				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	91	23	718	0.127	91	0.1	0.1	5.744	A

C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	126	31			126				
A-B	0	0			0				
A-C	142	36			142				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	112	28	710	0.157	112	0.1	0.2	6.014	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	154	39			154				
A-B	0	0			0				
A-C	174	44			174				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	112	28	710	0.157	112	0.2	0.2	6.017	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	154	39			154				
A-B	0	0			0				
A-C	174	44			174				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	91	23	718	0.127	91	0.2	0.1	5.747	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	126	31			126				
A-B	0	0			0				
A-C	142	36			142				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	724	0.106	76	0.1	0.1	5.563	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	105	26			105				
A-B	0	0			0				
A-C	119	30			119				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	0.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	30	100.000
B - Slip Road		ONE HOUR	✓	5	100.000
C - B1121 East		ONE HOUR	✓	62	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	30
	B - Slip Road	0	0	5
	C - B1121 East	62	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	17
	B - Slip Road	0	0	0
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.01	4.88	0.0	0.5	A	5	7
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						56	85
A-B						0	0
A-C						28	41

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	4	0.95	747	0.005	4	0.0	0.0	4.845	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	46	12			46				
A-B	0	0			0				
A-C	23	6			23				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	5	1	745	0.006	5	0.0	0.0	4.858	A

C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	55	14			55				
A-B	0	0			0				
A-C	27	7			27				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	6	1	744	0.007	6	0.0	0.0	4.876	A
C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	33	8			33				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	6	1	744	0.007	6	0.0	0.0	4.876	A
C-AB	0	0	573	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	33	8			33				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	5	1	745	0.006	5	0.0	0.0	4.858	A
C-AB	0	0	574	0.000	0	0.0	0.0	0.000	A
C-A	55	14			55				
A-B	0	0			0				
A-C	27	7			27				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	4	0.95	747	0.005	4	0.0	0.0	4.847	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	46	12			46				
A-B	0	0			0				
A-C	23	6			23				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	79	100.000
B - Slip Road		ONE HOUR	✓	80	100.000
C - B1121 East		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	79
	B - Slip Road	0	0	80
	C - B1121 East	155	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	6
	C - B1121 East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	5.98	0.1	0.5	A	74	111
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						142	214
A-B						0	0
A-C						72	108

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	61	15	697	0.087	60	0.0	0.1	5.650	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	0	0			0				
A-C	59	15			59				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	694	0.104	72	0.1	0.1	5.789	A

C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	0	0			0				
A-C	71	18			71				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	88	22	690	0.128	88	0.1	0.1	5.981	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	86	22			86				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	88	22	690	0.128	88	0.1	0.1	5.983	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	171	43			171				
A-B	0	0			0				
A-C	86	22			86				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	694	0.104	72	0.1	0.1	5.794	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	139	35			139				
A-B	0	0			0				
A-C	71	18			71				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	61	15	697	0.087	61	0.1	0.1	5.660	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	117	29			117				
A-B	0	0			0				
A-C	59	15			59				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	190	100.000
B - Slip Road		ONE HOUR	✓	129	100.000
C - B1121 East		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	190
	B - Slip Road	0	0	129
	C - B1121 East	157	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	6
	B - Slip Road	0	0	3
	C - B1121 East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	6.68	0.3	1.2	A	118	178
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						144	216
A-B						0	0
A-C						174	261

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	698	0.139	97	0.0	0.2	5.983	A
C-AB	0	0	553	0.000	0	0.0	0.0	0.000	A
C-A	118	29			118				
A-B	0	0			0				
A-C	143	36			143				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	116	29	691	0.168	116	0.2	0.2	6.263	A

C-AB	0	0	548	0.000	0	0.0	0.0	0.000	A
C-A	141	35			141				
A-B	0	0			0				
A-C	171	43			171				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	142	36	681	0.209	142	0.2	0.3	6.677	A
C-AB	0	0	540	0.000	0	0.0	0.0	0.000	A
C-A	172	43			172				
A-B	0	0			0				
A-C	209	52			209				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	142	36	681	0.209	142	0.3	0.3	6.682	A
C-AB	0	0	540	0.000	0	0.0	0.0	0.000	A
C-A	172	43			172				
A-B	0	0			0				
A-C	209	52			209				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	116	29	691	0.168	116	0.3	0.2	6.270	A
C-AB	0	0	548	0.000	0	0.0	0.0	0.000	A
C-A	141	35			141				
A-B	0	0			0				
A-C	171	43			171				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	698	0.139	97	0.2	0.2	5.998	A
C-AB	0	0	553	0.000	0	0.0	0.0	0.000	A
C-A	118	29			118				
A-B	0	0			0				
A-C	143	36			143				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.30	0.89	1.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	120	100.000
B - Slip Road		ONE HOUR	✓	108	100.000
C - B1121 East		ONE HOUR	✓	189	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	120
	B - Slip Road	0	0	108
	C - B1121 East	189	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	3
	B - Slip Road	0	0	5
	C - B1121 East	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	6.35	0.2	0.6	A	99	149
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						174	261
A-B						0	0
A-C						110	165

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	81	20	696	0.117	81	0.0	0.1	5.851	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	143	36			143				
A-B	0	0			0				
A-C	90	23			90				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	691	0.141	97	0.1	0.2	6.056	A

C-AB	0	0	534	0.000	0	0.0	0.0	0.000	A
C-A	170	43			170				
A-B	0	0			0				
A-C	108	27			108				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	119	30	685	0.174	119	0.2	0.2	6.352	A
C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	208	52			208				
A-B	0	0			0				
A-C	132	33			132				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	119	30	685	0.174	119	0.2	0.2	6.354	A
C-AB	0	0	529	0.000	0	0.0	0.0	0.000	A
C-A	208	52			208				
A-B	0	0			0				
A-C	132	33			132				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	691	0.141	97	0.2	0.2	6.064	A
C-AB	0	0	534	0.000	0	0.0	0.0	0.000	A
C-A	170	43			170				
A-B	0	0			0				
A-C	108	27			108				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	81	20	696	0.117	81	0.2	0.1	5.863	A
C-AB	0	0	537	0.000	0	0.0	0.0	0.000	A
C-A	143	36			143				
A-B	0	0			0				
A-C	90	23			90				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.03	0.26	0.48	0.60			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J35c	B1121 Main Road / Slip Road	T-Junction	Two-way	1.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1121 West		ONE HOUR	✓	155	100.000
B - Slip Road		ONE HOUR	✓	101	100.000
C - B1121 East		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	155
	B - Slip Road	0	0	101
	C - B1121 East	141	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1121 West	B - Slip Road	C - B1121 East
From	A - B1121 West	0	0	1
	B - Slip Road	0	0	0
	C - B1121 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.16	6.01	0.2	0.5	A	93	140
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						129	194
A-B						0	0
A-C						142	213

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	724	0.105	76	0.0	0.1	5.550	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	106	27			106				
A-B	0	0			0				
A-C	117	29			117				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	91	23	719	0.127	91	0.1	0.1	5.737	A

C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	127	32			127				
A-B	0	0			0				
A-C	139	35			139				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	112	28	711	0.157	112	0.1	0.2	6.006	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	155	39			155				
A-B	0	0			0				
A-C	171	43			171				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	112	28	711	0.157	112	0.2	0.2	6.009	A
C-AB	0	0	556	0.000	0	0.0	0.0	0.000	A
C-A	155	39			155				
A-B	0	0			0				
A-C	171	43			171				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	91	23	719	0.127	91	0.2	0.1	5.740	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	127	32			127				
A-B	0	0			0				
A-C	139	35			139				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	724	0.105	76	0.1	0.1	5.560	A
C-AB	0	0	567	0.000	0	0.0	0.0	0.000	A
C-A	106	27			106				
A-B	0	0			0				
A-C	117	29			117				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200923 - J36a_Model_CV.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J36a\Model
Report generation date: 18/12/2020 11:46:23

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
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»2023 Early Years , 6-7 AM
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»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C	0.0	0.5	5.04	0.00	A	0.0	0.5	5.71	0.02	A	0.0	0.5	7.07	0.02	A	0.0	0.5	5.75	0.02	A	0.0	0.5	7.24	0.01	A
Stream B-A	0.0	0.5	6.71	0.04	A	0.1	0.5	9.30	0.12	A	0.2	1.1	10.73	0.20	B	0.3	1.3	9.96	0.22	A	0.2	1.0	8.69	0.19	A
Stream C-AB	0.0	0.5	5.09	0.00	A	0.0	0.5	7.48	0.01	A	0.0	0.5	5.64	0.01	A	0.0	0.5	5.50	0.01	A	0.0	0.5	5.29	0.01	A
2023 Reference Case																									
Stream B-C	0.0	0.5	5.08	0.00	A	0.0	0.5	5.72	0.02	A	0.0	0.5	7.12	0.02	A	0.0	0.5	5.83	0.02	A	0.0	0.5	7.34	0.01	A
Stream B-A	0.0	0.5	6.77	0.04	A	0.1	0.5	9.52	0.12	A	0.3	1.2	11.05	0.20	B	0.3	1.4	10.34	0.24	B	0.3	1.2	9.10	0.21	A
Stream C-AB	0.0	0.5	5.13	0.00	A	0.0	0.5	7.48	0.01	A	0.0	0.5	5.69	0.01	A	0.0	0.5	5.56	0.01	A	0.0	0.5	5.33	0.01	A
2023 Early Years																									
Stream B-C	0.0	0.5	5.12	0.00	A	0.0	0.5	6.02	0.02	A	0.0	0.5	7.24	0.02	A	0.0	0.5	5.90	0.02	A	0.0	0.5	7.84	0.01	A
Stream B-A	0.1	0.5	6.97	0.05	A	0.3	1.2	11.83	0.21	B	0.3	1.4	12.11	0.23	B	0.3	1.4	10.68	0.24	B	0.3	1.4	10.42	0.23	B
Stream C-AB	0.0	0.5	5.16	0.00	A	0.0	0.5	7.66	0.01	A	0.0	0.5	5.74	0.01	A	0.0	0.5	5.61	0.01	A	0.0	0.5	5.66	0.01	A
2028 Reference Case																									
Stream B-C	0.0	0.5	5.11	0.00	A	0.0	0.5	5.74	0.02	A	0.0	0.5	7.16	0.02	A	0.0	0.5	5.93	0.02	A	0.0	0.5	7.46	0.01	A
Stream B-A	0.0	0.5	6.84	0.05	A	0.2	0.5	9.73	0.13	A	0.3	1.3	11.45	0.22	B	0.3	1.4	10.64	0.25	B	0.3	1.2	9.44	0.21	A
Stream C-AB	0.0	0.5	5.15	0.00	A	0.0	0.5	7.48	0.01	A	0.0	0.5	5.68	0.01	A	0.0	0.5	5.64	0.01	A	0.0	0.5	5.41	0.01	A
2028 Peak Construction																									
Stream B-C	0.0	0.5	5.17	0.00	A	0.0	0.5	5.86	0.02	A	0.0	0.5	7.28	0.02	A	0.0	0.5	6.16	0.02	A	0.0	0.5	7.75	0.01	A
Stream B-A	0.1	0.5	7.25	0.06	A	0.2	0.5	10.63	0.15	B	0.3	1.3	12.08	0.22	B	0.3	1.5	11.73	0.26	B	0.3	1.3	10.15	0.22	B
Stream C-AB	0.0	0.5	5.19	0.00	A	0.0	0.5	7.61	0.01	A	0.0	0.5	5.78	0.01	A	0.0	0.5	5.82	0.01	A	0.0	0.5	5.62	0.01	A
2034 Reference Case																									
Stream B-C	0.0	0.5	5.12	0.00	A	0.0	0.5	5.78	0.02	A	0.0	0.5	7.32	0.02	A	0.0	0.5	6.11	0.02	A	0.0	0.5	7.61	0.01	A
Stream B-A	0.1	0.5	6.93	0.05	A	0.2	0.5	10.07	0.14	B	0.3	1.4	12.23	0.24	B	0.4	1.1	11.47	0.26	B	0.2	1.2	9.67	0.20	A
Stream C-AB	0.0	0.5	5.17	0.00	A	0.0	0.5	7.51	0.01	A	0.0	0.5	5.76	0.01	A	0.0	0.5	5.77	0.01	A	0.0	0.5	5.55	0.01	A
2034 Operational Led																									
Stream B-C	0.0	0.5	5.15	0.00	A	0.0	0.5	5.79	0.02	A	0.0	0.5	7.44	0.03	A	0.0	0.5	6.14	0.02	A	0.0	0.5	7.61	0.01	A
Stream B-A	0.0	0.5	6.99	0.04	A	0.2	0.5	10.09	0.13	B	0.4	1.7	13.42	0.30	B	0.3	1.5	11.56	0.25	B	0.2	0.7	9.52	0.17	A
Stream C-AB	0.0	0.5	5.18	0.00	A	0.0	0.5	7.55	0.01	A	0.0	0.5	5.75	0.01	A	0.0	0.5	5.81	0.01	A	0.0	0.5	5.59	0.01	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

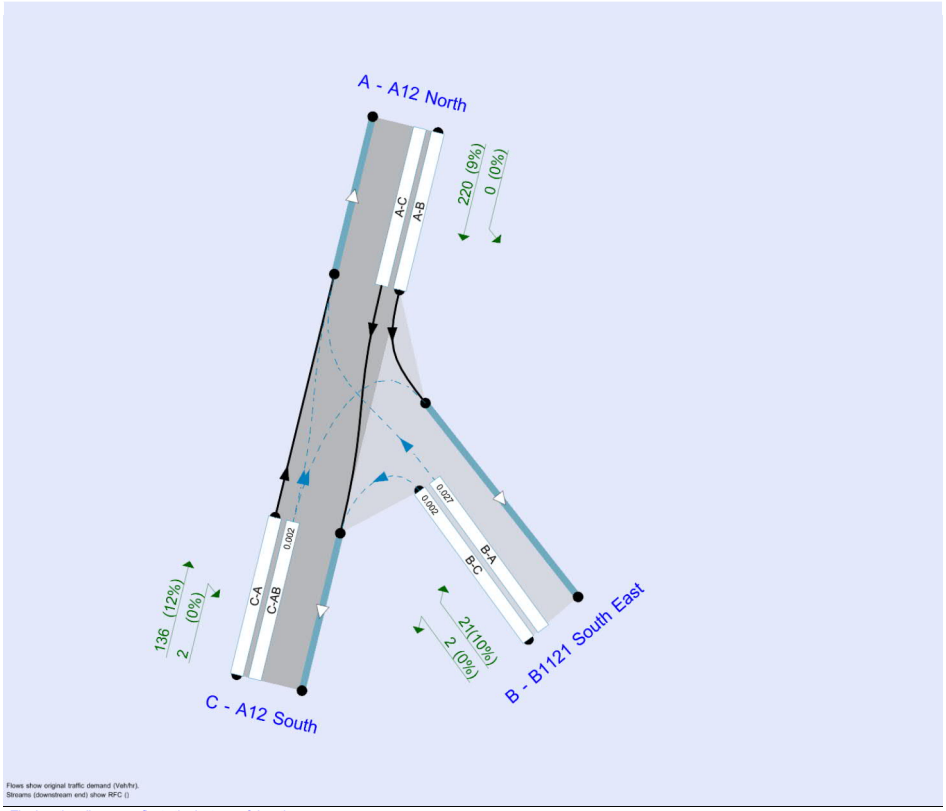
File summary

File Description

Title	A12 / Main Road
Location	52.239159, 1.488233
Site number	36a
Date	01/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	The Give way widths on minor arm has been modelled as 10m as Junctions 9 restricts the give way width to 10m. The right turn traffic entering from the access road on slip road has not been considered in the model.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 North		Major
B	B1121 South East		Minor
C	A12 South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 South	7.65		✓	3.50	194.0	✓	13.53

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B1121 South East	One lane plus flare	10.00	10.00	9.30	6.90	5.70	✓	3.00	45	232

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J36a	B-A	729	0.123	0.311	0.196	0.445
J36a	B-C	799	0.114	0.287	-	-
J36a	C-B	783	0.282	0.282	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	220	100.000
B - B1121 South East		ONE HOUR	✓	23	100.000
C - A12 South		ONE HOUR	✓	138	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	220
	B - B1121 South East	21	0	2
	C - A12 South	136	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	10	0	0
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.04	0.0	0.5	A	2	3
B-A	0.04	6.71	0.0	0.5	A	19	29
C-AB	0.00	5.09	0.0	0.5	A	2	3
C-A						125	187
A-B						0	0
A-C						202	303

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	743	0.002	1	0.0	0.0	4.856	A
B-A	16	4	593	0.027	16	0.0	0.0	6.234	A
C-AB	2	0.38	733	0.002	1	0.0	0.0	4.922	A
C-A	102	26			102				
A-B	0	0			0				
A-C	166	41			166				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	732	0.002	2	0.0	0.0	4.932	A
B-A	19	5	579	0.033	19	0.0	0.0	6.424	A
C-AB	2	0.45	723	0.002	2	0.0	0.0	4.992	A
C-A	122	31			122				
A-B	0	0			0				
A-C	198	49			198				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	716	0.003	2	0.0	0.0	5.041	A
B-A	23	6	560	0.041	23	0.0	0.0	6.707	A
C-AB	2	0.55	709	0.003	2	0.0	0.0	5.090	A
C-A	150	37			150				
A-B	0	0			0				
A-C	242	61			242				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	716	0.003	2	0.0	0.0	5.041	A
B-A	23	6	560	0.041	23	0.0	0.0	6.707	A
C-AB	2	0.55	709	0.003	2	0.0	0.0	5.090	A
C-A	150	37			150				
A-B	0	0			0				
A-C	242	61			242				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	732	0.002	2	0.0	0.0	4.934	A
B-A	19	5	579	0.033	19	0.0	0.0	6.427	A
C-AB	2	0.45	723	0.002	2	0.0	0.0	4.992	A
C-A	122	31			122				
A-B	0	0			0				
A-C	198	49			198				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	743	0.002	2	0.0	0.0	4.859	A
B-A	16	4	593	0.027	16	0.0	0.0	6.234	A
C-AB	2	0.38	733	0.002	2	0.0	0.0	4.924	A
C-A	102	26			102				
A-B	0	0			0				
A-C	166	41			166				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A

C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	404	100.000
B - B1121 South East		ONE HOUR	✓	58	100.000
C - A12 South		ONE HOUR	✓	370	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	404
	B - B1121 South East	47	0	11
	C - A12 South	367	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	10
	B - B1121 South East	11	0	0
	C - A12 South	10	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.71	0.0	0.5	A	10	15
B-A	0.12	9.30	0.1	0.5	A	43	65
C-AB	0.01	7.48	0.0	0.5	A	3	4
C-A						337	505
A-B						0	0
A-C						371	556

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	695	0.012	8	0.0	0.0	5.242	A
B-A	35	9	507	0.070	35	0.0	0.1	7.617	A
C-AB	2	0.56	517	0.004	2	0.0	0.0	6.993	A
C-A	276	69			276				
A-B	0	0			0				
A-C	304	76			304				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	2	673	0.015	10	0.0	0.0	5.426	A
B-A	42	11	479	0.088	42	0.1	0.1	8.246	A
C-AB	3	0.67	503	0.005	3	0.0	0.0	7.191	A
C-A	330	82			330				
A-B	0	0			0				
A-C	363	91			363				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	643	0.019	12	0.0	0.0	5.706	A
B-A	52	13	439	0.118	52	0.1	0.1	9.297	A
C-AB	3	1	484	0.007	3	0.0	0.0	7.484	A
C-A	404	101			404				
A-B	0	0			0				
A-C	445	111			445				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	643	0.019	12	0.0	0.0	5.707	A
B-A	52	13	439	0.118	52	0.1	0.1	9.299	A
C-AB	3	1	484	0.007	3	0.0	0.0	7.484	A
C-A	404	101			404				
A-B	0	0			0				
A-C	445	111			445				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	673	0.015	10	0.0	0.0	5.428	A
B-A	42	11	479	0.088	42	0.1	0.1	8.255	A
C-AB	3	0.67	503	0.005	3	0.0	0.0	7.191	A
C-A	330	82			330				
A-B	0	0			0				
A-C	363	91			363				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	695	0.012	8	0.0	0.0	5.243	A
B-A	35	9	507	0.070	35	0.1	0.1	7.629	A
C-AB	2	0.56	517	0.004	2	0.0	0.0	6.994	A
C-A	276	69			276				
A-B	0	0			0				
A-C	304	76			304				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.13	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	423	100.000
B - B1121 South East		ONE HOUR	✓	84	100.000
C - A12 South		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	423
	B - B1121 South East	74	0	10
	C - A12 South	344	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 South East	18	0	20
	C - A12 South	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.07	0.0	0.5	A	9	14
B-A	0.20	10.73	0.2	1.1	B	68	102
C-AB	0.01	5.64	0.0	0.5	A	5	7
C-A						316	473
A-B						0	0
A-C						388	582

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	568	0.013	7	0.0	0.0	6.422	A
B-A	56	14	481	0.116	55	0.0	0.1	8.440	A
C-AB	4	0.94	688	0.005	4	0.0	0.0	5.261	A
C-A	259	65			259				
A-B	0	0			0				
A-C	318	80			318				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	548	0.016	9	0.0	0.0	6.676	A
B-A	67	17	454	0.146	66	0.1	0.2	9.276	A
C-AB	4	1	669	0.007	4	0.0	0.0	5.413	A
C-A	309	77			309				
A-B	0	0			0				
A-C	380	95			380				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	520	0.021	11	0.0	0.0	7.069	A
B-A	81	20	417	0.195	81	0.2	0.2	10.710	B
C-AB	6	1	644	0.009	5	0.0	0.0	5.639	A
C-A	379	95			379				
A-B	0	0			0				
A-C	466	116			466				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	520	0.021	11	0.0	0.0	7.071	A
B-A	81	20	417	0.195	81	0.2	0.2	10.727	B
C-AB	6	1	644	0.009	6	0.0	0.0	5.639	A
C-A	379	95			379				
A-B	0	0			0				
A-C	466	116			466				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	548	0.016	9	0.0	0.0	6.681	A
B-A	67	17	454	0.146	67	0.2	0.2	9.298	A
C-AB	4	1	669	0.007	5	0.0	0.0	5.413	A
C-A	309	77			309				
A-B	0	0			0				
A-C	380	95			380				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	568	0.013	8	0.0	0.0	6.425	A
B-A	56	14	481	0.116	56	0.2	0.1	8.468	A
C-AB	4	0.94	688	0.005	4	0.0	0.0	5.261	A
C-A	259	65			259				
A-B	0	0			0				
A-C	318	80			318				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.24	0.03	0.29	0.76	1.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	363	100.000
B - B1121 South East		ONE HOUR	✓	104	100.000
C - A12 South		ONE HOUR	✓	441	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	363
	B - B1121 South East	95	0	9
	C - A12 South	435	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	5	0	0
	C - A12 South	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.75	0.0	0.5	A	8	12
B-A	0.22	9.96	0.3	1.3	A	87	131
C-AB	0.01	5.50	0.0	0.5	A	6	8
C-A						399	599
A-B						0	0
A-C						333	500

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	690	0.010	7	0.0	0.0	5.266	A
B-A	72	18	538	0.133	71	0.0	0.2	7.704	A
C-AB	5	1	700	0.006	4	0.0	0.0	5.176	A
C-A	327	82			327				
A-B	0	0			0				
A-C	273	68			273				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	8	2	668	0.012	8	0.0	0.0	5.455	A
B-A	85	21	508	0.168	85	0.2	0.2	8.521	A
C-AB	5	1	684	0.008	5	0.0	0.0	5.307	A
C-A	391	98			391				
A-B	0	0			0				
A-C	326	82			326				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	636	0.016	10	0.0	0.0	5.748	A
B-A	105	26	466	0.224	104	0.2	0.3	9.944	A
C-AB	7	2	661	0.010	7	0.0	0.0	5.499	A
C-A	479	120			479				
A-B	0	0			0				
A-C	400	100			400				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	636	0.016	10	0.0	0.0	5.749	A
B-A	105	26	466	0.224	105	0.3	0.3	9.962	A
C-AB	7	2	661	0.010	7	0.0	0.0	5.499	A
C-A	479	120			479				
A-B	0	0			0				
A-C	400	100			400				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	668	0.012	8	0.0	0.0	5.457	A
B-A	85	21	507	0.168	86	0.3	0.2	8.543	A
C-AB	5	1	684	0.008	5	0.0	0.0	5.309	A
C-A	391	98			391				
A-B	0	0			0				
A-C	326	82			326				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	690	0.010	7	0.0	0.0	5.268	A
B-A	72	18	538	0.133	72	0.2	0.2	7.732	A
C-AB	5	1	700	0.006	5	0.0	0.0	5.179	A
C-A	327	82			327				
A-B	0	0			0				
A-C	273	68			273				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.29	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.29	0.03	0.31	1.02	1.32			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	303	100.000
B - B1121 South East		ONE HOUR	✓	90	100.000
C - A12 South		ONE HOUR	✓	420	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	303
	B - B1121 South East	87	0	3
	C - A12 South	414	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	2
	B - B1121 South East	3	0	33
	C - A12 South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.24	0.0	0.5	A	3	4
B-A	0.19	8.69	0.2	1.0	A	80	120
C-AB	0.01	5.29	0.0	0.5	A	6	8
C-A						380	570
A-B						0	0
A-C						278	417

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	533	0.004	2	0.0	0.0	6.776	A
B-A	65	16	572	0.115	65	0.0	0.1	7.098	A
C-AB	5	1	718	0.006	4	0.0	0.0	5.047	A
C-A	312	78			312				
A-B	0	0			0				
A-C	228	57			228				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.67	520	0.005	3	0.0	0.0	6.960	A
B-A	78	20	546	0.143	78	0.1	0.2	7.694	A
C-AB	5	1	705	0.008	5	0.0	0.0	5.146	A
C-A	372	93			372				
A-B	0	0			0				
A-C	272	68			272				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	501	0.007	3	0.0	0.0	7.237	A
B-A	96	24	510	0.188	96	0.2	0.2	8.678	A
C-AB	7	2	687	0.010	7	0.0	0.0	5.288	A
C-A	456	114			456				
A-B	0	0			0				
A-C	334	83			334				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	501	0.007	3	0.0	0.0	7.238	A
B-A	96	24	510	0.188	96	0.2	0.2	8.688	A
C-AB	7	2	687	0.010	7	0.0	0.0	5.288	A
C-A	456	114			456				
A-B	0	0			0				
A-C	334	83			334				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	520	0.005	3	0.0	0.0	6.962	A
B-A	78	20	546	0.143	78	0.2	0.2	7.708	A
C-AB	5	1	705	0.008	5	0.0	0.0	5.146	A
C-A	372	93			372				
A-B	0	0			0				
A-C	272	68			272				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	533	0.004	2	0.0	0.0	6.779	A
B-A	65	16	572	0.115	66	0.2	0.1	7.119	A
C-AB	5	1	718	0.006	5	0.0	0.0	5.047	A
C-A	312	78			312				
A-B	0	0			0				
A-C	228	57			228				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.03	0.28	0.57	1.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	229	100.000
B - B1121 South East		ONE HOUR	✓	24	100.000
C - A12 South		ONE HOUR	✓	142	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	229
	B - B1121 South East	22	0	2
	C - A12 South	140	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	10	0	0
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.08	0.0	0.5	A	2	3
B-A	0.04	6.77	0.0	0.5	A	20	30
C-AB	0.00	5.13	0.0	0.5	A	2	3
C-A						129	193
A-B						0	0
A-C						210	315

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	738	0.002	2	0.0	0.0	4.888	A
B-A	16	4	590	0.028	16	0.0	0.0	6.268	A
C-AB	2	0.39	729	0.002	2	0.0	0.0	4.951	A
C-A	106	26			106				
A-B	0	0			0				
A-C	172	43			172				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.46	726	0.003	2	0.0	0.0	4.967	A
B-A	20	5	576	0.034	20	0.0	0.0	6.471	A
C-AB	2	0.46	718	0.003	2	0.0	0.0	5.023	A
C-A	126	32			126				
A-B	0	0			0				
A-C	206	51			206				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	710	0.003	2	0.0	0.0	5.082	A
B-A	24	6	556	0.043	24	0.0	0.0	6.770	A
C-AB	2	0.56	704	0.003	2	0.0	0.0	5.127	A
C-A	155	39			155				
A-B	0	0			0				
A-C	252	63			252				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	710	0.003	2	0.0	0.0	5.082	A
B-A	24	6	556	0.043	24	0.0	0.0	6.770	A
C-AB	2	0.56	704	0.003	2	0.0	0.0	5.127	A
C-A	155	39			155				
A-B	0	0			0				
A-C	252	63			252				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	726	0.003	2	0.0	0.0	4.967	A
B-A	20	5	576	0.034	20	0.0	0.0	6.472	A
C-AB	2	0.46	718	0.003	2	0.0	0.0	5.023	A
C-A	126	32			126				
A-B	0	0			0				
A-C	206	51			206				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	738	0.002	2	0.0	0.0	4.890	A
B-A	16	4	590	0.028	16	0.0	0.0	6.271	A
C-AB	2	0.39	729	0.002	2	0.0	0.0	4.951	A
C-A	106	26			106				
A-B	0	0			0				
A-C	172	43			172				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	403	100.000
B - B1121 South East		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	405	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	403
	B - B1121 South East	49	0	11
	C - A12 South	402	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	10
	B - B1121 South East	11	0	0
	C - A12 South	10	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.72	0.0	0.5	A	10	15
B-A	0.12	9.52	0.1	0.5	A	45	67
C-AB	0.01	7.48	0.0	0.5	A	3	4
C-A						369	553
A-B						0	0
A-C						370	555

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	694	0.012	8	0.0	0.0	5.252	A
B-A	37	9	503	0.073	36	0.0	0.1	7.717	A
C-AB	2	0.57	517	0.004	2	0.0	0.0	6.992	A
C-A	303	76			303				
A-B	0	0			0				
A-C	304	76			304				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	2	672	0.015	10	0.0	0.0	5.438	A
B-A	44	11	473	0.093	44	0.1	0.1	8.386	A
C-AB	3	0.68	503	0.005	3	0.0	0.0	7.189	A
C-A	361	90			361				
A-B	0	0			0				
A-C	363	91			363				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	641	0.019	12	0.0	0.0	5.722	A
B-A	54	13	432	0.124	54	0.1	0.1	9.513	A
C-AB	3	1	484	0.007	3	0.0	0.0	7.481	A
C-A	443	111			443				
A-B	0	0			0				
A-C	444	111			444				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	641	0.019	12	0.0	0.0	5.722	A
B-A	54	13	432	0.124	54	0.1	0.1	9.520	A
C-AB	3	1	484	0.007	3	0.0	0.0	7.481	A
C-A	443	111			443				
A-B	0	0			0				
A-C	444	111			444				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	672	0.015	10	0.0	0.0	5.442	A
B-A	44	11	473	0.093	44	0.1	0.1	8.397	A
C-AB	3	0.68	503	0.005	3	0.0	0.0	7.190	A
C-A	361	90			361				
A-B	0	0			0				
A-C	363	91			363				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	693	0.012	8	0.0	0.0	5.254	A
B-A	37	9	503	0.073	37	0.1	0.1	7.729	A
C-AB	2	0.57	517	0.004	2	0.0	0.0	6.995	A
C-A	303	76			303				
A-B	0	0			0				
A-C	304	76			304				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.14	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	438	100.000
B - B1121 South East		ONE HOUR	✓	85	100.000
C - A12 South		ONE HOUR	✓	368	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	438
	B - B1121 South East	75	0	10
	C - A12 South	363	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 South East	18	0	20
	C - A12 South	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.12	0.0	0.5	A	9	14
B-A	0.20	11.05	0.3	1.2	B	69	103
C-AB	0.01	5.69	0.0	0.5	A	5	7
C-A						333	499
A-B						0	0
A-C						402	604

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	567	0.014	8	0.0	0.0	6.436	A
B-A	56	14	475	0.119	56	0.0	0.1	8.575	A
C-AB	4	0.99	684	0.006	4	0.0	0.0	5.295	A
C-A	273	68			273				
A-B	0	0			0				
A-C	330	83			330				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	546	0.017	9	0.0	0.0	6.702	A
B-A	67	17	447	0.151	67	0.1	0.2	9.472	A
C-AB	5	1	665	0.007	5	0.0	0.0	5.455	A
C-A	326	82			326				
A-B	0	0			0				
A-C	394	99			394				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	517	0.022	11	0.0	0.0	7.116	A
B-A	83	21	408	0.202	82	0.2	0.2	11.031	B
C-AB	6	1	638	0.009	6	0.0	0.0	5.693	A
C-A	399	100			399				
A-B	0	0			0				
A-C	483	121			483				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	517	0.022	11	0.0	0.0	7.117	A
B-A	83	21	408	0.202	83	0.2	0.3	11.051	B
C-AB	6	1	638	0.009	6	0.0	0.0	5.693	A
C-A	399	100			399				
A-B	0	0			0				
A-C	483	121			483				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	546	0.017	9	0.0	0.0	6.707	A
B-A	67	17	447	0.151	68	0.3	0.2	9.494	A
C-AB	5	1	665	0.007	5	0.0	0.0	5.457	A
C-A	326	82			326				
A-B	0	0			0				
A-C	394	99			394				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	567	0.014	8	0.0	0.0	6.441	A
B-A	56	14	475	0.119	57	0.2	0.1	8.605	A
C-AB	4	0.99	684	0.006	4	0.0	0.0	5.297	A
C-A	273	68			273				
A-B	0	0			0				
A-C	330	83			330				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.25	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.25	0.03	0.29	0.85	1.19			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	381	100.000
B - B1121 South East		ONE HOUR	✓	107	100.000
C - A12 South		ONE HOUR	✓	458	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	381
	B - B1121 South East	98	0	10
	C - A12 South	452	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	5	0	0
	C - A12 South	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.83	0.0	0.5	A	9	13
B-A	0.24	10.34	0.3	1.4	B	90	134
C-AB	0.01	5.56	0.0	0.5	A	6	9
C-A						415	622
A-B						0	0
A-C						349	524

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	685	0.011	7	0.0	0.0	5.313	A
B-A	74	18	531	0.139	73	0.0	0.2	7.853	A
C-AB	5	1	695	0.007	5	0.0	0.0	5.214	A
C-A	340	85			340				
A-B	0	0			0				
A-C	287	72			287				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	661	0.013	9	0.0	0.0	5.516	A
B-A	88	22	499	0.176	88	0.2	0.2	8.742	A
C-AB	6	1	678	0.008	6	0.0	0.0	5.353	A
C-A	406	102			406				
A-B	0	0			0				
A-C	342	86			342				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	628	0.017	11	0.0	0.0	5.832	A
B-A	108	27	456	0.236	107	0.2	0.3	10.315	B
C-AB	7	2	655	0.011	7	0.0	0.0	5.558	A
C-A	498	124			498				
A-B	0	0			0				
A-C	419	105			419				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	628	0.017	11	0.0	0.0	5.833	A
B-A	108	27	456	0.236	108	0.3	0.3	10.338	B
C-AB	7	2	655	0.011	7	0.0	0.0	5.558	A
C-A	498	124			498				
A-B	0	0			0				
A-C	419	105			419				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	661	0.013	9	0.0	0.0	5.518	A
B-A	88	22	499	0.176	88	0.3	0.2	8.766	A
C-AB	6	1	678	0.008	6	0.0	0.0	5.353	A
C-A	406	102			406				
A-B	0	0			0				
A-C	342	86			342				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	684	0.011	7	0.0	0.0	5.315	A
B-A	74	18	531	0.139	74	0.2	0.2	7.883	A
C-AB	5	1	695	0.007	5	0.0	0.0	5.214	A
C-A	340	85			340				
A-B	0	0			0				
A-C	287	72			287				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.30	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.31	0.03	0.31	1.08	1.38			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	319	100.000
B - B1121 South East		ONE HOUR	✓	98	100.000
C - A12 South		ONE HOUR	✓	441	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	319
	B - B1121 South East	95	0	3
	C - A12 South	435	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	2
	B - B1121 South East	3	0	33
	C - A12 South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.34	0.0	0.5	A	3	4
B-A	0.21	9.10	0.3	1.2	A	87	130
C-AB	0.01	5.33	0.0	0.5	A	6	8
C-A						400	599
A-B						0	0
A-C						293	439

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	529	0.004	2	0.0	0.0	6.831	A
B-A	71	18	565	0.126	71	0.0	0.1	7.281	A
C-AB	5	1	714	0.006	5	0.0	0.0	5.074	A
C-A	328	82			328				
A-B	0	0			0				
A-C	240	60			240				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.69	515	0.005	3	0.0	0.0	7.031	A
B-A	85	21	538	0.158	85	0.1	0.2	7.955	A
C-AB	5	1	700	0.008	5	0.0	0.0	5.179	A
C-A	391	98			391				
A-B	0	0			0				
A-C	287	72			287				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	494	0.007	3	0.0	0.0	7.337	A
B-A	104	26	500	0.209	104	0.2	0.3	9.084	A
C-AB	7	2	682	0.010	7	0.0	0.0	5.331	A
C-A	479	120			479				
A-B	0	0			0				
A-C	351	88			351				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	494	0.007	3	0.0	0.0	7.338	A
B-A	104	26	500	0.209	104	0.3	0.3	9.097	A
C-AB	7	2	682	0.010	7	0.0	0.0	5.331	A
C-A	479	120			479				
A-B	0	0			0				
A-C	351	88			351				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	515	0.005	3	0.0	0.0	7.036	A
B-A	85	21	538	0.158	85	0.3	0.2	7.967	A
C-AB	5	1	700	0.008	5	0.0	0.0	5.181	A
C-A	391	98			391				
A-B	0	0			0				
A-C	287	72			287				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	529	0.004	2	0.0	0.0	6.837	A
B-A	71	18	565	0.126	72	0.2	0.1	7.301	A
C-AB	5	1	714	0.006	5	0.0	0.0	5.077	A
C-A	328	82			328				
A-B	0	0			0				
A-C	240	60			240				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.26	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.26	0.03	0.30	0.90	1.22			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	241	100.000
B - B1121 South East		ONE HOUR	✓	26	100.000
C - A12 South		ONE HOUR	✓	184	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	241
	B - B1121 South East	24	0	2
	C - A12 South	182	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	10	0	0
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.12	0.0	0.5	A	2	3
B-A	0.05	6.97	0.1	0.5	A	22	33
C-AB	0.00	5.16	0.0	0.5	A	2	3
C-A						167	251
A-B						0	0
A-C						221	332

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	735	0.002	2	0.0	0.0	4.910	A
B-A	18	5	581	0.031	18	0.0	0.0	6.387	A
C-AB	2	0.39	726	0.002	2	0.0	0.0	4.969	A
C-A	137	34			137				
A-B	0	0			0				
A-C	181	45			181				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.46	722	0.003	2	0.0	0.0	4.995	A
B-A	22	5	565	0.038	22	0.0	0.0	6.623	A
C-AB	2	0.46	715	0.003	2	0.0	0.0	5.046	A
C-A	164	41			164				
A-B	0	0			0				
A-C	217	54			217				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	706	0.003	2	0.0	0.0	5.118	A
B-A	26	7	542	0.049	26	0.0	0.1	6.975	A
C-AB	2	0.56	700	0.003	2	0.0	0.0	5.157	A
C-A	201	50			201				
A-B	0	0			0				
A-C	265	66			265				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	706	0.003	2	0.0	0.0	5.118	A
B-A	26	7	542	0.049	26	0.1	0.1	6.975	A
C-AB	2	0.56	700	0.003	2	0.0	0.0	5.157	A
C-A	201	50			201				
A-B	0	0			0				
A-C	265	66			265				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	722	0.003	2	0.0	0.0	4.997	A
B-A	22	5	565	0.038	22	0.1	0.0	6.626	A
C-AB	2	0.46	715	0.003	2	0.0	0.0	5.046	A
C-A	164	41			164				
A-B	0	0			0				
A-C	217	54			217				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	735	0.002	2	0.0	0.0	4.910	A
B-A	18	5	581	0.031	18	0.0	0.0	6.393	A
C-AB	2	0.39	726	0.002	2	0.0	0.0	4.969	A
C-A	137	34			137				
A-B	0	0			0				
A-C	181	45			181				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	447	100.000
B - B1121 South East		ONE HOUR	✓	83	100.000
C - A12 South		ONE HOUR	✓	571	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	447
	B - B1121 South East	72	0	11
	C - A12 South	568	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	10
	B - B1121 South East	11	0	0
	C - A12 South	10	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.02	0.0	0.5	A	10	15
B-A	0.21	11.83	0.3	1.2	B	66	99
C-AB	0.01	7.66	0.0	0.5	A	3	4
C-A						521	781
A-B						0	0
A-C						410	615

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	673	0.012	8	0.0	0.0	5.418	A
B-A	54	14	471	0.115	54	0.0	0.1	8.625	A
C-AB	2	0.60	509	0.005	2	0.0	0.0	7.098	A
C-A	427	107			427				
A-B	0	0			0				
A-C	336	84			336				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	2	647	0.015	10	0.0	0.0	5.652	A
B-A	65	16	434	0.149	65	0.1	0.2	9.737	A
C-AB	3	0.72	494	0.006	3	0.0	0.0	7.324	A
C-A	510	128			510				
A-B	0	0			0				
A-C	401	100			401				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	610	0.020	12	0.0	0.0	6.022	A
B-A	79	20	384	0.207	79	0.2	0.3	11.804	B
C-AB	4	1	473	0.007	4	0.0	0.0	7.660	A
C-A	625	156			625				
A-B	0	0			0				
A-C	492	123			492				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	610	0.020	12	0.0	0.0	6.024	A
B-A	79	20	384	0.207	79	0.3	0.3	11.830	B
C-AB	4	1	473	0.007	4	0.0	0.0	7.660	A
C-A	625	156			625				
A-B	0	0			0				
A-C	492	123			492				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	647	0.015	10	0.0	0.0	5.656	A
B-A	65	16	434	0.149	65	0.3	0.2	9.765	A
C-AB	3	0.72	494	0.006	3	0.0	0.0	7.324	A
C-A	510	128			510				
A-B	0	0			0				
A-C	401	100			401				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	672	0.012	8	0.0	0.0	5.420	A
B-A	54	14	471	0.115	54	0.2	0.1	8.653	A
C-AB	2	0.60	509	0.005	2	0.0	0.0	7.098	A
C-A	427	107			427				
A-B	0	0			0				
A-C	336	84			336				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.26	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.26	0.03	0.30	0.88	1.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	452	100.000
B - B1121 South East		ONE HOUR	✓	93	100.000
C - A12 South		ONE HOUR	✓	446	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	452
	B - B1121 South East	83	0	10
	C - A12 South	440	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 South East	18	0	20
	C - A12 South	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.24	0.0	0.5	A	9	14
B-A	0.23	12.11	0.3	1.4	B	76	114
C-AB	0.01	5.74	0.0	0.5	A	5	8
C-A						404	606
A-B						0	0
A-C						415	623

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	562	0.014	8	0.0	0.0	6.494	A
B-A	62	16	462	0.135	62	0.0	0.2	8.990	A
C-AB	4	1	681	0.006	4	0.0	0.0	5.320	A
C-A	332	83			332				
A-B	0	0			0				
A-C	341	85			341				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	540	0.017	9	0.0	0.0	6.781	A
B-A	74	19	431	0.173	74	0.2	0.2	10.089	B
C-AB	5	1	661	0.007	5	0.0	0.0	5.487	A
C-A	396	99			396				
A-B	0	0			0				
A-C	407	102			407				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	509	0.022	11	0.0	0.0	7.237	A
B-A	91	23	388	0.235	91	0.2	0.3	12.084	B
C-AB	6	2	634	0.010	6	0.0	0.0	5.736	A
C-A	485	121			485				
A-B	0	0			0				
A-C	498	125			498				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	509	0.022	11	0.0	0.0	7.239	A
B-A	91	23	388	0.235	91	0.3	0.3	12.115	B
C-AB	6	2	634	0.010	6	0.0	0.0	5.736	A
C-A	485	121			485				
A-B	0	0			0				
A-C	498	125			498				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	540	0.017	9	0.0	0.0	6.784	A
B-A	74	19	431	0.173	75	0.3	0.2	10.124	B
C-AB	5	1	661	0.007	5	0.0	0.0	5.487	A
C-A	396	99			396				
A-B	0	0			0				
A-C	407	102			407				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	562	0.014	8	0.0	0.0	6.500	A
B-A	62	16	462	0.135	63	0.2	0.2	9.029	A
C-AB	4	1	681	0.006	4	0.0	0.0	5.320	A
C-A	332	83			332				
A-B	0	0			0				
A-C	341	85			341				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.30	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.30	0.03	0.31	1.08	1.38			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	399	100.000
B - B1121 South East		ONE HOUR	✓	107	100.000
C - A12 South		ONE HOUR	✓	480	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	399
	B - B1121 South East	98	0	10
	C - A12 South	473	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	5	0	0
	C - A12 South	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.90	0.0	0.5	A	9	13
B-A	0.24	10.68	0.3	1.4	B	90	134
C-AB	0.01	5.61	0.0	0.5	A	6	9
C-A						434	652
A-B						0	0
A-C						367	550

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	680	0.011	7	0.0	0.0	5.349	A
B-A	74	18	523	0.141	73	0.0	0.2	7.989	A
C-AB	5	1	691	0.007	5	0.0	0.0	5.246	A
C-A	356	89			356				
A-B	0	0			0				
A-C	301	75			301				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	656	0.013	9	0.0	0.0	5.563	A
B-A	88	22	490	0.179	88	0.2	0.2	8.942	A
C-AB	6	1	673	0.009	6	0.0	0.0	5.394	A
C-A	426	106			426				
A-B	0	0			0				
A-C	359	90			359				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	621	0.017	11	0.0	0.0	5.899	A
B-A	108	27	444	0.242	107	0.2	0.3	10.659	B
C-AB	7	2	648	0.011	7	0.0	0.0	5.612	A
C-A	521	130			521				
A-B	0	0			0				
A-C	440	110			440				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	621	0.017	11	0.0	0.0	5.901	A
B-A	108	27	444	0.242	108	0.3	0.3	10.684	B
C-AB	7	2	648	0.011	7	0.0	0.0	5.612	A
C-A	521	130			521				
A-B	0	0			0				
A-C	440	110			440				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	655	0.013	9	0.0	0.0	5.565	A
B-A	88	22	490	0.179	88	0.3	0.2	8.968	A
C-AB	6	1	673	0.009	6	0.0	0.0	5.394	A
C-A	426	106			426				
A-B	0	0			0				
A-C	359	90			359				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	680	0.011	7	0.0	0.0	5.352	A
B-A	74	18	523	0.141	74	0.2	0.2	8.021	A
C-AB	5	1	691	0.007	5	0.0	0.0	5.246	A
C-A	356	89			356				
A-B	0	0			0				
A-C	301	75			301				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.31	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.32	0.03	0.31	1.11	1.41			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	441	100.000
B - B1121 South East		ONE HOUR	✓	98	100.000
C - A12 South		ONE HOUR	✓	482	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	441
	B - B1121 South East	95	0	3
	C - A12 South	475	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	2
	B - B1121 South East	3	0	33
	C - A12 South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.84	0.0	0.5	A	3	4
B-A	0.23	10.42	0.3	1.4	B	87	131
C-AB	0.01	5.66	0.0	0.5	A	6	9
C-A						436	654
A-B						0	0
A-C						405	607

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	508	0.005	2	0.0	0.0	7.111	A
B-A	71	18	530	0.135	71	0.0	0.2	7.823	A
C-AB	5	1	687	0.007	5	0.0	0.0	5.274	A
C-A	358	89			358				
A-B	0	0			0				
A-C	332	83			332				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.69	490	0.006	3	0.0	0.0	7.392	A
B-A	85	21	497	0.172	85	0.2	0.2	8.743	A
C-AB	6	1	669	0.009	6	0.0	0.0	5.430	A
C-A	427	107			427				
A-B	0	0			0				
A-C	396	99			396				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	463	0.007	3	0.0	0.0	7.837	A
B-A	104	26	450	0.232	104	0.2	0.3	10.399	B
C-AB	7	2	643	0.011	7	0.0	0.0	5.660	A
C-A	524	131			524				
A-B	0	0			0				
A-C	485	121			485				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	463	0.007	3	0.0	0.0	7.839	A
B-A	104	26	450	0.232	104	0.3	0.3	10.422	B
C-AB	7	2	643	0.011	7	0.0	0.0	5.660	A
C-A	524	131			524				
A-B	0	0			0				
A-C	485	121			485				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.69	490	0.006	3	0.0	0.0	7.395	A
B-A	85	21	497	0.172	86	0.3	0.2	8.769	A
C-AB	6	1	669	0.009	6	0.0	0.0	5.430	A
C-A	427	107			427				
A-B	0	0			0				
A-C	396	99			396				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	508	0.005	2	0.0	0.0	7.114	A
B-A	71	18	530	0.135	72	0.2	0.2	7.850	A
C-AB	5	1	687	0.007	5	0.0	0.0	5.274	A
C-A	358	89			358				
A-B	0	0			0				
A-C	332	83			332				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.30	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.30	0.03	0.31	1.06	1.36			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	237	100.000
B - B1121 South East		ONE HOUR	✓	25	100.000
C - A12 South		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	237
	B - B1121 South East	23	0	2
	C - A12 South	146	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	10	0	0
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.11	0.0	0.5	A	2	3
B-A	0.05	6.84	0.0	0.5	A	21	32
C-AB	0.00	5.15	0.0	0.5	A	2	3
C-A						134	201
A-B						0	0
A-C						218	327

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	735	0.002	2	0.0	0.0	4.904	A
B-A	17	4	588	0.030	17	0.0	0.0	6.310	A
C-AB	2	0.39	726	0.002	2	0.0	0.0	4.966	A
C-A	110	27			110				
A-B	0	0			0				
A-C	179	45			179				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.46	723	0.003	2	0.0	0.0	4.988	A
B-A	21	5	573	0.036	21	0.0	0.0	6.524	A
C-AB	2	0.47	716	0.003	2	0.0	0.0	5.042	A
C-A	131	33			131				
A-B	0	0			0				
A-C	213	53			213				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.57	707	0.003	2	0.0	0.0	5.108	A
B-A	26	6	552	0.046	26	0.0	0.0	6.841	A
C-AB	2	0.58	701	0.003	2	0.0	0.0	5.150	A
C-A	160	40			160				
A-B	0	0			0				
A-C	261	65			261				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.57	707	0.003	2	0.0	0.0	5.108	A
B-A	26	6	552	0.046	26	0.0	0.0	6.841	A
C-AB	2	0.58	701	0.003	2	0.0	0.0	5.150	A
C-A	160	40			160				
A-B	0	0			0				
A-C	261	65			261				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	723	0.003	2	0.0	0.0	4.988	A
B-A	21	5	573	0.036	21	0.0	0.0	6.525	A
C-AB	2	0.47	716	0.003	2	0.0	0.0	5.042	A
C-A	131	33			131				
A-B	0	0			0				
A-C	213	53			213				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	735	0.002	2	0.0	0.0	4.905	A
B-A	17	4	588	0.030	17	0.0	0.0	6.315	A
C-AB	2	0.39	726	0.002	2	0.0	0.0	4.968	A
C-A	110	27			110				
A-B	0	0			0				
A-C	179	45			179				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	403	100.000
B - B1121 South East		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	403
	B - B1121 South East	51	0	11
	C - A12 South	429	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	10
	B - B1121 South East	11	0	0
	C - A12 South	10	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.74	0.0	0.5	A	10	15
B-A	0.13	9.73	0.2	0.5	A	47	70
C-AB	0.01	7.48	0.0	0.5	A	3	4
C-A						394	590
A-B						0	0
A-C						370	555

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	692	0.012	8	0.0	0.0	5.262	A
B-A	39	10	499	0.077	38	0.0	0.1	7.807	A
C-AB	2	0.57	517	0.004	2	0.0	0.0	6.992	A
C-A	323	81			323				
A-B	0	0			0				
A-C	304	76			304				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	2	670	0.015	10	0.0	0.0	5.451	A
B-A	46	12	468	0.098	46	0.1	0.1	8.517	A
C-AB	3	0.68	503	0.005	3	0.0	0.0	7.190	A
C-A	386	96			386				
A-B	0	0			0				
A-C	363	91			363				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	639	0.019	12	0.0	0.0	5.739	A
B-A	56	14	426	0.132	56	0.1	0.2	9.722	A
C-AB	3	1	484	0.007	3	0.0	0.0	7.482	A
C-A	472	118			472				
A-B	0	0			0				
A-C	444	111			444				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	639	0.019	12	0.0	0.0	5.740	A
B-A	56	14	426	0.132	56	0.2	0.2	9.730	A
C-AB	3	1	484	0.007	3	0.0	0.0	7.482	A
C-A	472	118			472				
A-B	0	0			0				
A-C	444	111			444				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	670	0.015	10	0.0	0.0	5.452	A
B-A	46	12	469	0.098	46	0.2	0.1	8.527	A
C-AB	3	0.68	503	0.005	3	0.0	0.0	7.190	A
C-A	386	96			386				
A-B	0	0			0				
A-C	363	91			363				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	692	0.012	8	0.0	0.0	5.266	A
B-A	39	10	499	0.077	39	0.1	0.1	7.822	A
C-AB	2	0.57	517	0.004	2	0.0	0.0	6.995	A
C-A	323	81			323				
A-B	0	0			0				
A-C	304	76			304				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.15	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	433	100.000
B - B1121 South East		ONE HOUR	✓	90	100.000
C - A12 South		ONE HOUR	✓	411	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	433
	B - B1121 South East	79	0	11
	C - A12 South	405	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 South East	18	0	20
	C - A12 South	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.16	0.0	0.5	A	10	15
B-A	0.22	11.45	0.3	1.3	B	72	109
C-AB	0.01	5.68	0.0	0.5	A	5	8
C-A						372	557
A-B						0	0
A-C						397	596

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	565	0.014	8	0.0	0.0	6.466	A
B-A	59	15	471	0.126	59	0.0	0.1	8.732	A
C-AB	4	1	685	0.006	4	0.0	0.0	5.289	A
C-A	305	76			305				
A-B	0	0			0				
A-C	326	81			326				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	2	544	0.018	10	0.0	0.0	6.736	A
B-A	71	18	442	0.161	71	0.1	0.2	9.706	A
C-AB	5	1	666	0.008	5	0.0	0.0	5.447	A
C-A	364	91			364				
A-B	0	0			0				
A-C	389	97			389				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	514	0.023	12	0.0	0.0	7.159	A
B-A	87	22	401	0.217	87	0.2	0.3	11.426	B
C-AB	6	2	640	0.010	6	0.0	0.0	5.682	A
C-A	446	111			446				
A-B	0	0			0				
A-C	476	119			476				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	514	0.023	12	0.0	0.0	7.161	A
B-A	87	22	401	0.217	87	0.3	0.3	11.448	B
C-AB	6	2	640	0.010	6	0.0	0.0	5.682	A
C-A	446	111			446				
A-B	0	0			0				
A-C	476	119			476				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	544	0.018	10	0.0	0.0	6.739	A
B-A	71	18	442	0.161	71	0.3	0.2	9.733	A
C-AB	5	1	666	0.008	5	0.0	0.0	5.449	A
C-A	364	91			364				
A-B	0	0			0				
A-C	389	97			389				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	564	0.014	8	0.0	0.0	6.472	A
B-A	59	15	471	0.126	60	0.2	0.1	8.767	A
C-AB	4	1	685	0.006	4	0.0	0.0	5.289	A
C-A	305	76			305				
A-B	0	0			0				
A-C	326	81			326				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.27	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.27	0.03	0.30	0.97	1.28			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	406	100.000
B - B1121 South East		ONE HOUR	✓	111	100.000
C - A12 South		ONE HOUR	✓	450	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	406
	B - B1121 South East	100	0	10
	C - A12 South	443	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	5	0	0
	C - A12 South	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.93	0.0	0.5	A	9	14
B-A	0.25	10.64	0.3	1.4	B	92	138
C-AB	0.01	5.64	0.0	0.5	A	6	9
C-A						406	609
A-B						0	0
A-C						372	559

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	678	0.011	8	0.0	0.0	5.369	A
B-A	76	19	526	0.144	75	0.0	0.2	7.974	A
C-AB	5	1	689	0.007	5	0.0	0.0	5.260	A
C-A	333	83			333				
A-B	0	0			0				
A-C	306	76			306				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	653	0.014	9	0.0	0.0	5.588	A
B-A	90	23	493	0.183	90	0.2	0.2	8.919	A
C-AB	6	2	671	0.009	6	0.0	0.0	5.411	A
C-A	398	100			398				
A-B	0	0			0				
A-C	365	91			365				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	618	0.018	11	0.0	0.0	5.933	A
B-A	111	28	449	0.246	110	0.2	0.3	10.619	B
C-AB	7	2	646	0.012	7	0.0	0.0	5.635	A
C-A	487	122			487				
A-B	0	0			0				
A-C	447	112			447				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	618	0.018	11	0.0	0.0	5.935	A
B-A	111	28	449	0.246	111	0.3	0.3	10.644	B
C-AB	7	2	646	0.012	7	0.0	0.0	5.635	A
C-A	487	122			487				
A-B	0	0			0				
A-C	447	112			447				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	653	0.014	9	0.0	0.0	5.593	A
B-A	90	23	493	0.183	91	0.3	0.2	8.947	A
C-AB	6	2	671	0.009	6	0.0	0.0	5.411	A
C-A	398	100			398				
A-B	0	0			0				
A-C	365	91			365				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	678	0.011	8	0.0	0.0	5.374	A
B-A	76	19	526	0.144	76	0.2	0.2	8.004	A
C-AB	5	1	689	0.007	5	0.0	0.0	5.262	A
C-A	333	83			333				
A-B	0	0			0				
A-C	306	76			306				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.32	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.32	0.03	0.31	1.13	1.44			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	349	100.000
B - B1121 South East		ONE HOUR	✓	97	100.000
C - A12 South		ONE HOUR	✓	466	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	349
	B - B1121 South East	94	0	3
	C - A12 South	459	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	2
	B - B1121 South East	3	0	33
	C - A12 South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.46	0.0	0.5	A	3	4
B-A	0.21	9.44	0.3	1.2	A	86	129
C-AB	0.01	5.41	0.0	0.5	A	6	9
C-A						421	632
A-B						0	0
A-C						321	481

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.60	524	0.005	2	0.0	0.0	6.898	A
B-A	71	18	554	0.127	70	0.0	0.1	7.428	A
C-AB	5	1	707	0.007	5	0.0	0.0	5.126	A
C-A	346	86			346				
A-B	0	0			0				
A-C	263	66			263				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.71	509	0.006	3	0.0	0.0	7.117	A
B-A	84	21	525	0.161	84	0.1	0.2	8.165	A
C-AB	6	2	692	0.009	6	0.0	0.0	5.243	A
C-A	413	103			413				
A-B	0	0			0				
A-C	314	79			314				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	486	0.007	3	0.0	0.0	7.454	A
B-A	103	26	484	0.213	103	0.2	0.3	9.429	A
C-AB	7	2	672	0.011	7	0.0	0.0	5.414	A
C-A	505	126			505				
A-B	0	0			0				
A-C	385	96			385				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	486	0.007	3	0.0	0.0	7.455	A
B-A	103	26	484	0.213	103	0.3	0.3	9.444	A
C-AB	7	2	672	0.011	7	0.0	0.0	5.414	A
C-A	505	126			505				
A-B	0	0			0				
A-C	385	96			385				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.71	508	0.006	3	0.0	0.0	7.122	A
B-A	84	21	525	0.161	85	0.3	0.2	8.184	A
C-AB	6	2	692	0.009	6	0.0	0.0	5.245	A
C-A	413	103			413				
A-B	0	0			0				
A-C	314	79			314				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.60	524	0.005	2	0.0	0.0	6.901	A
B-A	71	18	554	0.127	71	0.2	0.1	7.451	A
C-AB	5	1	707	0.007	5	0.0	0.0	5.126	A
C-A	346	86			346				
A-B	0	0			0				
A-C	263	66			263				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.27	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.27	0.03	0.30	0.93	1.25			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	258	100.000
B - B1121 South East		ONE HOUR	✓	29	100.000
C - A12 South		ONE HOUR	✓	232	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	258
	B - B1121 South East	27	0	2
	C - A12 South	229	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	10	0	0
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.17	0.0	0.5	A	2	3
B-A	0.06	7.25	0.1	0.5	A	25	37
C-AB	0.00	5.19	0.0	0.5	A	2	3
C-A						211	316
A-B						0	0
A-C						237	355

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	730	0.002	2	0.0	0.0	4.943	A
B-A	20	5	570	0.035	20	0.0	0.0	6.540	A
C-AB	2	0.40	723	0.002	2	0.0	0.0	4.987	A
C-A	173	43			173				
A-B	0	0			0				
A-C	194	49			194				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.47	717	0.003	2	0.0	0.0	5.036	A
B-A	24	6	552	0.044	24	0.0	0.0	6.820	A
C-AB	2	0.47	712	0.003	2	0.0	0.0	5.070	A
C-A	206	52			206				
A-B	0	0			0				
A-C	232	58			232				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.57	698	0.003	2	0.0	0.0	5.172	A
B-A	29	7	526	0.056	29	0.0	0.1	7.245	A
C-AB	2	0.58	696	0.003	2	0.0	0.0	5.189	A
C-A	253	63			253				
A-B	0	0			0				
A-C	284	71			284				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.57	698	0.003	2	0.0	0.0	5.172	A
B-A	29	7	526	0.056	29	0.1	0.1	7.245	A
C-AB	2	0.58	696	0.003	2	0.0	0.0	5.189	A
C-A	253	63			253				
A-B	0	0			0				
A-C	284	71			284				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	717	0.003	2	0.0	0.0	5.039	A
B-A	24	6	552	0.044	24	0.1	0.0	6.822	A
C-AB	2	0.47	712	0.003	2	0.0	0.0	5.072	A
C-A	206	52			206				
A-B	0	0			0				
A-C	232	58			232				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	730	0.002	2	0.0	0.0	4.944	A
B-A	20	5	570	0.035	20	0.0	0.0	6.546	A
C-AB	2	0.40	723	0.002	2	0.0	0.0	4.989	A
C-A	173	43			173				
A-B	0	0			0				
A-C	194	49			194				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	434	100.000
B - B1121 South East		ONE HOUR	✓	64	100.000
C - A12 South		ONE HOUR	✓	520	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	434
	B - B1121 South East	53	0	11
	C - A12 South	517	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	10
	B - B1121 South East	11	0	0
	C - A12 South	10	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.86	0.0	0.5	A	10	15
B-A	0.15	10.63	0.2	0.5	B	49	73
C-AB	0.01	7.61	0.0	0.5	A	3	4
C-A						474	712
A-B						0	0
A-C						398	597

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	684	0.012	8	0.0	0.0	5.329	A
B-A	40	10	479	0.084	40	0.0	0.1	8.183	A
C-AB	2	0.58	512	0.005	2	0.0	0.0	7.066	A
C-A	389	97			389				
A-B	0	0			0				
A-C	327	82			327				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	660	0.015	10	0.0	0.0	5.539	A
B-A	48	12	445	0.108	48	0.1	0.1	9.060	A
C-AB	3	0.69	497	0.006	3	0.0	0.0	7.283	A
C-A	465	116			465				
A-B	0	0			0				
A-C	390	97			390				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	626	0.020	12	0.0	0.0	5.862	A
B-A	59	15	397	0.148	58	0.1	0.2	10.614	B
C-AB	3	1	477	0.007	3	0.0	0.0	7.605	A
C-A	569	142			569				
A-B	0	0			0				
A-C	478	119			478				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	626	0.020	12	0.0	0.0	5.863	A
B-A	59	15	397	0.148	59	0.2	0.2	10.626	B
C-AB	3	1	477	0.007	3	0.0	0.0	7.605	A
C-A	569	142			569				
A-B	0	0			0				
A-C	478	119			478				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	660	0.015	10	0.0	0.0	5.542	A
B-A	48	12	445	0.108	48	0.2	0.1	9.074	A
C-AB	3	0.69	497	0.006	3	0.0	0.0	7.283	A
C-A	465	116			465				
A-B	0	0			0				
A-C	390	97			390				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	684	0.012	8	0.0	0.0	5.333	A
B-A	40	10	479	0.084	40	0.1	0.1	8.200	A
C-AB	2	0.58	512	0.005	2	0.0	0.0	7.069	A
C-A	389	97			389				
A-B	0	0			0				
A-C	327	82			327				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.17	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	465	100.000
B - B1121 South East		ONE HOUR	✓	85	100.000
C - A12 South		ONE HOUR	✓	465	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	465
	B - B1121 South East	75	0	11
	C - A12 South	459	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 South East	18	0	20
	C - A12 South	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.28	0.0	0.5	A	10	15
B-A	0.22	12.08	0.3	1.3	B	69	103
C-AB	0.01	5.78	0.0	0.5	A	5	8
C-A						421	632
A-B						0	0
A-C						427	640

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	559	0.014	8	0.0	0.0	6.529	A
B-A	56	14	456	0.123	56	0.0	0.1	8.981	A
C-AB	4	1	678	0.006	4	0.0	0.0	5.344	A
C-A	346	86			346				
A-B	0	0			0				
A-C	350	88			350				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	2	537	0.018	10	0.0	0.0	6.820	A
B-A	67	17	424	0.158	67	0.1	0.2	10.074	B
C-AB	5	1	658	0.008	5	0.0	0.0	5.517	A
C-A	413	103			413				
A-B	0	0			0				
A-C	418	105			418				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	506	0.023	12	0.0	0.0	7.281	A
B-A	82	21	380	0.216	82	0.2	0.3	12.061	B
C-AB	6	2	629	0.010	6	0.0	0.0	5.777	A
C-A	506	126			506				
A-B	0	0			0				
A-C	512	128			512				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	506	0.023	12	0.0	0.0	7.283	A
B-A	82	21	380	0.216	82	0.3	0.3	12.083	B
C-AB	6	2	629	0.010	6	0.0	0.0	5.777	A
C-A	506	126			506				
A-B	0	0			0				
A-C	512	128			512				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	537	0.018	10	0.0	0.0	6.826	A
B-A	67	17	424	0.158	67	0.3	0.2	10.105	B
C-AB	5	1	658	0.008	5	0.0	0.0	5.520	A
C-A	413	103			413				
A-B	0	0			0				
A-C	418	105			418				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	559	0.014	8	0.0	0.0	6.535	A
B-A	56	14	456	0.123	56	0.2	0.1	9.017	A
C-AB	4	1	678	0.006	4	0.0	0.0	5.344	A
C-A	346	86			346				
A-B	0	0			0				
A-C	350	88			350				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.27	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.27	0.03	0.30	0.96	1.28			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	468	100.000
B - B1121 South East		ONE HOUR	✓	106	100.000
C - A12 South		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	468
	B - B1121 South East	96	0	10
	C - A12 South	506	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	5	0	0
	C - A12 South	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.16	0.0	0.5	A	9	14
B-A	0.26	11.73	0.3	1.5	B	88	132
C-AB	0.01	5.82	0.0	0.5	A	6	9
C-A						465	697
A-B						0	0
A-C						430	645

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	664	0.012	8	0.0	0.0	5.486	A
B-A	72	18	501	0.144	72	0.0	0.2	8.371	A
C-AB	5	1	675	0.008	5	0.0	0.0	5.370	A
C-A	381	95			381				
A-B	0	0			0				
A-C	353	88			353				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	9	2	636	0.015	9	0.0	0.0	5.743	A
B-A	86	22	464	0.186	86	0.2	0.2	9.522	A
C-AB	6	2	654	0.009	6	0.0	0.0	5.552	A
C-A	455	114			455				
A-B	0	0			0				
A-C	421	105			421				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	596	0.019	11	0.0	0.0	6.155	A
B-A	106	26	413	0.257	105	0.2	0.3	11.698	B
C-AB	8	2	626	0.012	8	0.0	0.0	5.824	A
C-A	558	139			558				
A-B	0	0			0				
A-C	516	129			516				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	596	0.019	11	0.0	0.0	6.157	A
B-A	106	26	413	0.257	106	0.3	0.3	11.732	B
C-AB	8	2	626	0.012	8	0.0	0.0	5.824	A
C-A	558	139			558				
A-B	0	0			0				
A-C	516	129			516				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	636	0.015	9	0.0	0.0	5.748	A
B-A	86	22	464	0.186	87	0.3	0.2	9.556	A
C-AB	6	2	654	0.009	6	0.0	0.0	5.554	A
C-A	455	114			455				
A-B	0	0			0				
A-C	421	105			421				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	664	0.012	8	0.0	0.0	5.491	A
B-A	72	18	501	0.144	73	0.2	0.2	8.407	A
C-AB	5	1	675	0.008	5	0.0	0.0	5.370	A
C-A	381	95			381				
A-B	0	0			0				
A-C	353	88			353				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.34	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.34	0.03	0.32	1.18	1.50			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	427	100.000
B - B1121 South East		ONE HOUR	✓	93	100.000
C - A12 South		ONE HOUR	✓	488	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	427
	B - B1121 South East	90	0	3
	C - A12 South	481	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	2
	B - B1121 South East	3	0	33
	C - A12 South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.75	0.0	0.5	A	3	5
B-A	0.22	10.15	0.3	1.3	B	82	123
C-AB	0.01	5.62	0.0	0.5	A	6	9
C-A						441	662
A-B						0	0
A-C						391	587

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.62	512	0.005	2	0.0	0.0	7.066	A
B-A	67	17	533	0.127	67	0.0	0.1	7.716	A
C-AB	5	1	691	0.007	5	0.0	0.0	5.250	A
C-A	362	90			362				
A-B	0	0			0				
A-C	321	80			321				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	0.74	494	0.006	3	0.0	0.0	7.333	A
B-A	81	20	500	0.161	80	0.1	0.2	8.585	A
C-AB	6	2	673	0.009	6	0.0	0.0	5.399	A
C-A	432	108			432				
A-B	0	0			0				
A-C	383	96			383				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	468	0.008	4	0.0	0.0	7.751	A
B-A	99	25	453	0.218	98	0.2	0.3	10.128	B
C-AB	7	2	648	0.012	7	0.0	0.0	5.620	A
C-A	529	132			529				
A-B	0	0			0				
A-C	470	117			470				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	468	0.008	4	0.0	0.0	7.753	A
B-A	99	25	453	0.218	99	0.3	0.3	10.146	B
C-AB	7	2	648	0.012	7	0.0	0.0	5.620	A
C-A	529	132			529				
A-B	0	0			0				
A-C	470	117			470				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.74	494	0.006	3	0.0	0.0	7.338	A
B-A	81	20	500	0.161	81	0.3	0.2	8.605	A
C-AB	6	2	673	0.009	6	0.0	0.0	5.399	A
C-A	432	108			432				
A-B	0	0			0				
A-C	383	96			383				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.62	512	0.005	2	0.0	0.0	7.072	A
B-A	67	17	533	0.127	68	0.2	0.1	7.743	A
C-AB	5	1	691	0.007	5	0.0	0.0	5.252	A
C-A	362	90			362				
A-B	0	0			0				
A-C	321	80			321				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.27	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.28	0.03	0.30	0.97	1.27			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	247	100.000
B - B1121 South East		ONE HOUR	✓	26	100.000
C - A12 South		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	247
	B - B1121 South East	24	0	2
	C - A12 South	154	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	10	0	0
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.12	0.0	0.5	A	2	3
B-A	0.05	6.93	0.1	0.5	A	22	34
C-AB	0.00	5.17	0.0	0.5	A	2	3
C-A						142	213
A-B						0	0
A-C						226	339

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	735	0.002	2	0.0	0.0	4.910	A
B-A	18	5	584	0.031	18	0.0	0.0	6.359	A
C-AB	2	0.41	724	0.002	2	0.0	0.0	4.982	A
C-A	116	29			116				
A-B	0	0			0				
A-C	186	46			186				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.47	722	0.003	2	0.0	0.0	4.997	A
B-A	22	5	568	0.039	22	0.0	0.0	6.586	A
C-AB	2	0.48	713	0.003	2	0.0	0.0	5.061	A
C-A	139	35			139				
A-B	0	0			0				
A-C	222	55			222				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	705	0.003	2	0.0	0.0	5.123	A
B-A	27	7	547	0.049	27	0.0	0.1	6.925	A
C-AB	2	0.59	698	0.003	2	0.0	0.0	5.175	A
C-A	170	43			170				
A-B	0	0			0				
A-C	272	68			272				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	705	0.003	2	0.0	0.0	5.123	A
B-A	27	7	547	0.049	27	0.1	0.1	6.925	A
C-AB	2	0.59	698	0.003	2	0.0	0.0	5.175	A
C-A	170	43			170				
A-B	0	0			0				
A-C	272	68			272				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	722	0.003	2	0.0	0.0	4.997	A
B-A	22	5	568	0.039	22	0.1	0.0	6.587	A
C-AB	2	0.48	713	0.003	2	0.0	0.0	5.061	A
C-A	139	35			139				
A-B	0	0			0				
A-C	222	55			222				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	735	0.002	2	0.0	0.0	4.912	A
B-A	18	5	584	0.031	18	0.0	0.0	6.364	A
C-AB	2	0.41	724	0.002	2	0.0	0.0	4.982	A
C-A	116	29			116				
A-B	0	0			0				
A-C	186	46			186				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	411	100.000
B - B1121 South East		ONE HOUR	✓	65	100.000
C - A12 South		ONE HOUR	✓	465	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	411
	B - B1121 South East	54	0	11
	C - A12 South	461	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	10
	B - B1121 South East	11	0	0
	C - A12 South	10	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.78	0.0	0.5	A	10	15
B-A	0.14	10.07	0.2	0.5	B	50	75
C-AB	0.01	7.51	0.0	0.5	A	3	4
C-A						423	635
A-B						0	0
A-C						377	566

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	689	0.012	8	0.0	0.0	5.286	A
B-A	41	10	493	0.083	40	0.0	0.1	7.946	A
C-AB	2	0.58	516	0.005	2	0.0	0.0	7.011	A
C-A	347	87			347				
A-B	0	0			0				
A-C	309	77			309				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	667	0.015	10	0.0	0.0	5.482	A
B-A	49	12	461	0.106	49	0.1	0.1	8.728	A
C-AB	3	0.69	502	0.006	3	0.0	0.0	7.213	A
C-A	415	104			415				
A-B	0	0			0				
A-C	370	92			370				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	635	0.019	12	0.0	0.0	5.782	A
B-A	60	15	417	0.143	59	0.1	0.2	10.063	B
C-AB	3	1	482	0.007	3	0.0	0.0	7.513	A
C-A	508	127			508				
A-B	0	0			0				
A-C	453	113			453				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	635	0.019	12	0.0	0.0	5.783	A
B-A	60	15	417	0.143	60	0.2	0.2	10.073	B
C-AB	3	1	482	0.007	3	0.0	0.0	7.513	A
C-A	508	127			508				
A-B	0	0			0				
A-C	453	113			453				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	666	0.015	10	0.0	0.0	5.483	A
B-A	49	12	461	0.106	49	0.2	0.1	8.739	A
C-AB	3	0.69	502	0.006	3	0.0	0.0	7.214	A
C-A	415	104			415				
A-B	0	0			0				
A-C	370	92			370				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	689	0.012	8	0.0	0.0	5.288	A
B-A	41	10	493	0.083	41	0.1	0.1	7.969	A
C-AB	2	0.58	516	0.005	2	0.0	0.0	7.011	A
C-A	347	87			347				
A-B	0	0			0				
A-C	309	77			309				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.16	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	456	100.000
B - B1121 South East		ONE HOUR	✓	98	100.000
C - A12 South		ONE HOUR	✓	433	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	456
	B - B1121 South East	87	0	11
	C - A12 South	426	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 South East	18	0	20
	C - A12 South	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.32	0.0	0.5	A	10	16
B-A	0.24	12.23	0.3	1.4	B	79	119
C-AB	0.01	5.76	0.0	0.5	A	6	9
C-A						391	587
A-B						0	0
A-C						418	628

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	558	0.015	8	0.0	0.0	6.548	A
B-A	65	16	462	0.141	64	0.0	0.2	9.032	A
C-AB	5	1	679	0.007	5	0.0	0.0	5.337	A
C-A	321	80			321				
A-B	0	0			0				
A-C	343	86			343				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	536	0.019	10	0.0	0.0	6.845	A
B-A	78	19	432	0.180	78	0.2	0.2	10.155	B
C-AB	6	1	659	0.009	6	0.0	0.0	5.508	A
C-A	383	96			383				
A-B	0	0			0				
A-C	410	102			410				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	504	0.025	12	0.0	0.0	7.319	A
B-A	95	24	390	0.245	95	0.2	0.3	12.198	B
C-AB	7	2	632	0.011	7	0.0	0.0	5.763	A
C-A	469	117			469				
A-B	0	0			0				
A-C	502	125			502				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	504	0.025	12	0.0	0.0	7.322	A
B-A	95	24	390	0.245	95	0.3	0.3	12.232	B
C-AB	7	2	632	0.011	7	0.0	0.0	5.763	A
C-A	469	117			469				
A-B	0	0			0				
A-C	502	125			502				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	536	0.019	10	0.0	0.0	6.851	A
B-A	78	19	432	0.180	78	0.3	0.2	10.190	B
C-AB	6	1	659	0.009	6	0.0	0.0	5.508	A
C-A	383	96			383				
A-B	0	0			0				
A-C	410	102			410				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	558	0.015	8	0.0	0.0	6.554	A
B-A	65	16	462	0.141	65	0.2	0.2	9.072	A
C-AB	5	1	679	0.007	5	0.0	0.0	5.338	A
C-A	321	80			321				
A-B	0	0			0				
A-C	343	86			343				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.32	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.32	0.03	0.31	1.12	1.44			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	448	100.000
B - B1121 South East		ONE HOUR	✓	112	100.000
C - A12 South		ONE HOUR	✓	490	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	448
	B - B1121 South East	101	0	11
	C - A12 South	483	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	5	0	0
	C - A12 South	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.11	0.0	0.5	A	10	15
B-A	0.26	11.47	0.4	1.1	B	93	139
C-AB	0.01	5.77	0.0	0.5	A	7	11
C-A						443	664
A-B						0	0
A-C						411	616

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	668	0.013	8	0.0	0.0	5.458	A
B-A	76	19	509	0.149	75	0.0	0.2	8.278	A
C-AB	6	1	680	0.009	6	0.0	0.0	5.341	A
C-A	363	91			363				
A-B	0	0			0				
A-C	337	84			337				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	641	0.016	10	0.0	0.0	5.706	A
B-A	91	23	474	0.191	90	0.2	0.2	9.383	A
C-AB	7	2	660	0.011	7	0.0	0.0	5.513	A
C-A	434	108			434				
A-B	0	0			0				
A-C	402	101			402				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	602	0.020	12	0.0	0.0	6.104	A
B-A	111	28	425	0.261	111	0.2	0.3	11.441	B
C-AB	8	2	632	0.013	8	0.0	0.0	5.771	A
C-A	531	133			531				
A-B	0	0			0				
A-C	493	123			493				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	602	0.020	12	0.0	0.0	6.106	A
B-A	111	28	425	0.261	111	0.3	0.4	11.475	B
C-AB	8	2	632	0.013	8	0.0	0.0	5.771	A
C-A	531	133			531				
A-B	0	0			0				
A-C	493	123			493				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	641	0.016	10	0.0	0.0	5.709	A
B-A	91	23	474	0.191	91	0.4	0.2	9.416	A
C-AB	7	2	660	0.011	7	0.0	0.0	5.514	A
C-A	434	108			434				
A-B	0	0			0				
A-C	402	101			402				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	668	0.013	8	0.0	0.0	5.463	A
B-A	76	19	509	0.149	76	0.2	0.2	8.316	A
C-AB	6	1	680	0.009	6	0.0	0.0	5.343	A
C-A	363	91			363				
A-B	0	0			0				
A-C	337	84			337				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.35	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.35	0.03	0.32	1.11	1.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	400	100.000
B - B1121 South East		ONE HOUR	✓	87	100.000
C - A12 South		ONE HOUR	✓	478	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	400
	B - B1121 South East	84	0	4
	C - A12 South	471	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	2
	B - B1121 South East	3	0	33
	C - A12 South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.61	0.0	0.5	A	3	5
B-A	0.20	9.67	0.2	1.2	A	77	116
C-AB	0.01	5.55	0.0	0.5	A	6	9
C-A						432	648
A-B						0	0
A-C						367	550

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	517	0.005	3	0.0	0.0	6.991	A
B-A	63	16	541	0.117	63	0.0	0.1	7.526	A
C-AB	5	1	696	0.007	5	0.0	0.0	5.208	A
C-A	354	89			354				
A-B	0	0			0				
A-C	301	75			301				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	1	501	0.006	3	0.0	0.0	7.235	A
B-A	75	19	509	0.148	75	0.1	0.2	8.307	A
C-AB	6	2	679	0.009	6	0.0	0.0	5.346	A
C-A	423	106			423				
A-B	0	0			0				
A-C	359	90			359				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	477	0.008	4	0.0	0.0	7.612	A
B-A	92	23	465	0.199	92	0.2	0.2	9.656	A
C-AB	8	2	656	0.012	8	0.0	0.0	5.549	A
C-A	518	130			518				
A-B	0	0			0				
A-C	440	110			440				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	477	0.008	4	0.0	0.0	7.613	A
B-A	92	23	465	0.199	92	0.2	0.2	9.671	A
C-AB	8	2	656	0.012	8	0.0	0.0	5.549	A
C-A	518	130			518				
A-B	0	0			0				
A-C	440	110			440				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	501	0.006	3	0.0	0.0	7.237	A
B-A	75	19	509	0.148	76	0.2	0.2	8.320	A
C-AB	6	2	679	0.009	6	0.0	0.0	5.348	A
C-A	423	106			423				
A-B	0	0			0				
A-C	359	90			359				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	517	0.005	3	0.0	0.0	6.997	A
B-A	63	16	541	0.117	63	0.2	0.1	7.546	A
C-AB	5	1	696	0.007	5	0.0	0.0	5.210	A
C-A	354	89			354				
A-B	0	0			0				
A-C	301	75			301				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.25	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.25	0.03	0.29	0.78	1.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	254	100.000
B - B1121 South East		ONE HOUR	✓	24	100.000
C - A12 South		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	254
	B - B1121 South East	22	0	2
	C - A12 South	177	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	10	0	0
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	5.15	0.0	0.5	A	2	3
B-A	0.04	6.99	0.0	0.5	A	20	30
C-AB	0.00	5.18	0.0	0.5	A	2	3
C-A						162	243
A-B						0	0
A-C						234	350

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	731	0.002	2	0.0	0.0	4.931	A
B-A	16	4	579	0.028	16	0.0	0.0	6.394	A
C-AB	2	0.40	724	0.002	2	0.0	0.0	4.984	A
C-A	133	33			133				
A-B	0	0			0				
A-C	192	48			192				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.47	719	0.003	2	0.0	0.0	5.021	A
B-A	19	5	562	0.035	19	0.0	0.0	6.631	A
C-AB	2	0.48	712	0.003	2	0.0	0.0	5.066	A
C-A	159	40			159				
A-B	0	0			0				
A-C	229	57			229				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	701	0.003	2	0.0	0.0	5.150	A
B-A	24	6	539	0.044	24	0.0	0.0	6.986	A
C-AB	2	0.59	697	0.003	2	0.0	0.0	5.184	A
C-A	195	49			195				
A-B	0	0			0				
A-C	280	70			280				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.58	701	0.003	2	0.0	0.0	5.150	A
B-A	24	6	539	0.044	24	0.0	0.0	6.986	A
C-AB	2	0.59	697	0.003	2	0.0	0.0	5.184	A
C-A	195	49			195				
A-B	0	0			0				
A-C	280	70			280				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.47	719	0.003	2	0.0	0.0	5.021	A
B-A	19	5	562	0.035	20	0.0	0.0	6.635	A
C-AB	2	0.48	712	0.003	2	0.0	0.0	5.066	A
C-A	159	40			159				
A-B	0	0			0				
A-C	229	57			229				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.39	731	0.002	2	0.0	0.0	4.934	A
B-A	16	4	579	0.028	16	0.0	0.0	6.397	A
C-AB	2	0.40	724	0.002	2	0.0	0.0	4.986	A
C-A	133	33			133				
A-B	0	0			0				
A-C	192	48			192				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	420	100.000
B - B1121 South East		ONE HOUR	✓	61	100.000
C - A12 South		ONE HOUR	✓	477	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	420
	B - B1121 South East	49	0	11
	C - A12 South	474	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	10
	B - B1121 South East	11	0	0
	C - A12 South	10	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	5.79	0.0	0.5	A	10	15
B-A	0.13	10.09	0.2	0.5	B	45	68
C-AB	0.01	7.55	0.0	0.5	A	3	4
C-A						435	652
A-B						0	0
A-C						385	578

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	689	0.012	8	0.0	0.0	5.288	A
B-A	37	9	488	0.076	37	0.0	0.1	7.966	A
C-AB	2	0.58	514	0.004	2	0.0	0.0	7.031	A
C-A	357	89			357				
A-B	0	0			0				
A-C	316	79			316				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	666	0.015	10	0.0	0.0	5.485	A
B-A	44	11	456	0.097	44	0.1	0.1	8.743	A
C-AB	3	0.69	500	0.006	3	0.0	0.0	7.239	A
C-A	426	106			426				
A-B	0	0			0				
A-C	377	94			377				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	634	0.019	12	0.0	0.0	5.788	A
B-A	54	14	411	0.132	54	0.1	0.2	10.082	B
C-AB	3	1	480	0.007	3	0.0	0.0	7.547	A
C-A	521	130			521				
A-B	0	0			0				
A-C	462	116			462				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	634	0.019	12	0.0	0.0	5.788	A
B-A	54	14	411	0.132	54	0.2	0.2	10.092	B
C-AB	3	1	480	0.007	3	0.0	0.0	7.547	A
C-A	521	130			521				
A-B	0	0			0				
A-C	462	116			462				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	666	0.015	10	0.0	0.0	5.487	A
B-A	44	11	456	0.097	45	0.2	0.1	8.755	A
C-AB	3	0.69	500	0.006	3	0.0	0.0	7.242	A
C-A	426	106			426				
A-B	0	0			0				
A-C	377	94			377				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	689	0.012	8	0.0	0.0	5.292	A
B-A	37	9	488	0.076	37	0.1	0.1	7.980	A
C-AB	2	0.58	514	0.004	2	0.0	0.0	7.034	A
C-A	357	89			357				
A-B	0	0			0				
A-C	316	79			316				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.15	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	453	100.000
B - B1121 South East		ONE HOUR	✓	114	100.000
C - A12 South		ONE HOUR	✓	475	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	453
	B - B1121 South East	103	0	11
	C - A12 South	469	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	6
	B - B1121 South East	18	0	20
	C - A12 South	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	7.44	0.0	0.5	A	10	16
B-A	0.30	13.42	0.4	1.7	B	95	142
C-AB	0.01	5.75	0.0	0.5	A	6	9
C-A						430	645
A-B						0	0
A-C						416	624

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	554	0.015	8	0.0	0.0	6.593	A
B-A	78	19	457	0.170	77	0.0	0.2	9.447	A
C-AB	5	1	680	0.007	5	0.0	0.0	5.330	A
C-A	353	88			353				
A-B	0	0			0				
A-C	341	85			341				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	531	0.019	10	0.0	0.0	6.912	A
B-A	93	23	425	0.218	92	0.2	0.3	10.798	B
C-AB	6	1	660	0.009	6	0.0	0.0	5.499	A
C-A	422	105			422				
A-B	0	0			0				
A-C	407	102			407				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	496	0.025	12	0.0	0.0	7.436	A
B-A	114	28	382	0.297	113	0.3	0.4	13.364	B
C-AB	7	2	633	0.011	7	0.0	0.0	5.752	A
C-A	516	129			516				
A-B	0	0			0				
A-C	499	125			499				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	496	0.025	12	0.0	0.0	7.439	A
B-A	114	28	382	0.297	113	0.4	0.4	13.417	B
C-AB	7	2	633	0.011	7	0.0	0.0	5.752	A
C-A	516	129			516				
A-B	0	0			0				
A-C	499	125			499				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	531	0.019	10	0.0	0.0	6.917	A
B-A	93	23	425	0.218	93	0.4	0.3	10.852	B
C-AB	6	1	660	0.009	6	0.0	0.0	5.499	A
C-A	422	105			422				
A-B	0	0			0				
A-C	407	102			407				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	554	0.015	9	0.0	0.0	6.598	A
B-A	78	19	457	0.170	78	0.3	0.2	9.503	A
C-AB	5	1	680	0.007	5	0.0	0.0	5.330	A
C-A	353	88			353				
A-B	0	0			0				
A-C	341	85			341				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.41	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.42	0.03	0.31	1.33	1.71			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	1.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	460	100.000
B - B1121 South East		ONE HOUR	✓	107	100.000
C - A12 South		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	460
	B - B1121 South East	96	0	11
	C - A12 South	496	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	9
	B - B1121 South East	5	0	0
	C - A12 South	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	6.14	0.0	0.5	A	10	15
B-A	0.25	11.56	0.3	1.5	B	88	133
C-AB	0.01	5.81	0.0	0.5	A	7	11
C-A						455	682
A-B						0	0
A-C						422	634

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	666	0.013	8	0.0	0.0	5.476	A
B-A	72	18	504	0.144	72	0.0	0.2	8.310	A
C-AB	6	1	677	0.009	6	0.0	0.0	5.362	A
C-A	373	93			373				
A-B	0	0			0				
A-C	347	87			347				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	10	3	638	0.016	10	0.0	0.0	5.729	A
B-A	87	22	468	0.185	86	0.2	0.2	9.428	A
C-AB	7	2	657	0.011	7	0.0	0.0	5.541	A
C-A	446	111			446				
A-B	0	0			0				
A-C	414	103			414				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	599	0.021	12	0.0	0.0	6.135	A
B-A	106	27	417	0.254	106	0.2	0.3	11.526	B
C-AB	8	2	628	0.014	8	0.0	0.0	5.809	A
C-A	546	136			546				
A-B	0	0			0				
A-C	507	127			507				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	12	3	599	0.021	12	0.0	0.0	6.137	A
B-A	106	27	417	0.254	106	0.3	0.3	11.558	B
C-AB	8	2	628	0.014	8	0.0	0.0	5.809	A
C-A	546	136			546				
A-B	0	0			0				
A-C	507	127			507				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	3	638	0.016	10	0.0	0.0	5.732	A
B-A	87	22	468	0.185	87	0.3	0.2	9.463	A
C-AB	7	2	657	0.011	7	0.0	0.0	5.541	A
C-A	446	111			446				
A-B	0	0			0				
A-C	414	103			414				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	665	0.013	8	0.0	0.0	5.481	A
B-A	72	18	504	0.144	73	0.2	0.2	8.345	A
C-AB	6	1	677	0.009	6	0.0	0.0	5.362	A
C-A	373	93			373				
A-B	0	0			0				
A-C	347	87			347				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.33	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.34	0.03	0.32	1.17	1.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J36a	A12 / Main Road	T-Junction	Two-way	0.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	415	100.000
B - B1121 South East		ONE HOUR	✓	75	100.000
C - A12 South		ONE HOUR	✓	491	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	415
	B - B1121 South East	71	0	4
	C - A12 South	484	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1121 South East	C - A12 South
From	A - A12 North	0	0	2
	B - B1121 South East	3	0	33
	C - A12 South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.61	0.0	0.5	A	3	5
B-A	0.17	9.52	0.2	0.7	A	65	98
C-AB	0.01	5.59	0.0	0.5	A	6	9
C-A						444	666
A-B						0	0
A-C						381	571

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	517	0.005	3	0.0	0.0	6.994	A
B-A	54	13	535	0.100	53	0.0	0.1	7.464	A
C-AB	5	1	693	0.007	5	0.0	0.0	5.232	A
C-A	364	91			364				
A-B	0	0			0				
A-C	312	78			312				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	3	1	501	0.006	3	0.0	0.0	7.236	A
B-A	64	16	502	0.128	64	0.1	0.1	8.211	A
C-AB	6	2	676	0.009	6	0.0	0.0	5.376	A
C-A	435	109			435				
A-B	0	0			0				
A-C	373	93			373				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	477	0.008	4	0.0	0.0	7.609	A
B-A	78	20	457	0.172	78	0.1	0.2	9.505	A
C-AB	8	2	651	0.012	8	0.0	0.0	5.590	A
C-A	533	133			533				
A-B	0	0			0				
A-C	457	114			457				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	477	0.008	4	0.0	0.0	7.610	A
B-A	78	20	457	0.172	78	0.2	0.2	9.516	A
C-AB	8	2	651	0.012	8	0.0	0.0	5.590	A
C-A	533	133			533				
A-B	0	0			0				
A-C	457	114			457				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	500	0.006	3	0.0	0.0	7.241	A
B-A	64	16	502	0.128	64	0.2	0.1	8.226	A
C-AB	6	2	676	0.009	6	0.0	0.0	5.377	A
C-A	435	109			435				
A-B	0	0			0				
A-C	373	93			373				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.66	517	0.005	3	0.0	0.0	6.999	A
B-A	54	13	535	0.100	54	0.1	0.1	7.480	A
C-AB	5	1	693	0.007	5	0.0	0.0	5.234	A
C-A	364	91			364				
A-B	0	0			0				
A-C	312	78			312				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.20	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.21	0.03	0.27	0.48	0.66			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200923 J37_Model_CV.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J37\Model
Report generation date: 18/12/2020 11:51:46

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C	0.0	0.5	7.75	0.02	A	0.0	0.5	7.13	0.05	A	0.0	0.5	5.92	0.04	A	0.1	0.5	6.84	0.06	A	0.0	0.5	5.42	0.03	A
Stream B-A	0.0	0.5	12.10	0.01	B	0.0	0.5	16.05	0.01	C	0.0	0.5	17.40	0.02	C	0.1	0.5	11.47	0.07	B	0.0	0.5	9.79	0.02	A
Stream C-AB	0.0	0.5	6.86	0.03	A	0.1	0.5	5.79	0.05	A	0.1	0.5	5.13	0.05	A	0.1	0.7	4.65	0.07	A	0.1	0.8	4.74	0.07	A
2023 Reference Case																									
Stream B-C	0.0	0.5	7.60	0.02	A	0.0	0.5	7.11	0.05	A	0.0	0.5	5.96	0.04	A	0.1	0.5	6.89	0.07	A	0.0	0.5	5.44	0.04	A
Stream B-A	0.0	0.5	12.25	0.01	B	0.0	0.5	16.33	0.01	C	0.0	0.5	17.75	0.02	C	0.1	0.5	11.82	0.08	B	0.0	0.5	9.95	0.02	A
Stream C-AB	0.0	0.5	6.70	0.03	A	0.1	0.5	5.62	0.06	A	0.1	0.5	5.10	0.06	A	0.1	0.9	4.65	0.07	A	0.1	0.9	4.72	0.07	A
2023 Early Years																									
Stream B-C	0.0	0.5	7.69	0.02	A	0.1	0.5	7.50	0.05	A	0.0	0.5	6.07	0.04	A	0.1	0.5	6.91	0.07	A	0.0	0.5	5.47	0.04	A
Stream B-A	0.0	0.5	12.46	0.02	B	0.0	0.5	17.85	0.01	C	0.0	0.5	18.24	0.02	C	0.1	0.5	11.90	0.08	B	0.0	0.5	10.33	0.02	B
Stream C-AB	0.0	0.5	6.69	0.03	A	0.1	0.7	5.77	0.07	A	0.1	0.5	5.15	0.06	A	0.1	0.9	4.67	0.07	A	0.1	1.0	4.54	0.08	A
2028 Reference Case																									
Stream B-C	0.0	0.5	7.65	0.02	A	0.0	0.5	7.12	0.05	A	0.0	0.5	6.08	0.04	A	0.1	0.5	6.88	0.07	A	0.0	0.5	5.51	0.04	A
Stream B-A	0.0	0.5	12.39	0.01	B	0.0	0.5	16.55	0.01	C	0.0	0.5	18.02	0.02	C	0.1	0.5	12.21	0.08	B	0.0	0.5	10.22	0.02	B
Stream C-AB	0.0	0.5	6.68	0.03	A	0.1	0.6	5.53	0.06	A	0.1	0.6	5.00	0.06	A	0.1	1.0	4.64	0.08	A	0.2	1.0	4.72	0.08	A
2028 Peak Construction																									
Stream B-C	0.0	0.5	8.90	0.02	A	0.0	0.5	7.83	0.05	A	0.0	0.5	6.11	0.03	A	0.1	0.5	6.95	0.07	A	0.0	0.5	5.57	0.04	A
Stream B-A	0.0	0.5	14.03	0.02	B	0.0	0.5	18.95	0.01	C	0.0	0.5	18.60	0.02	C	0.1	0.5	13.00	0.09	B	0.0	0.5	10.60	0.03	B
Stream C-AB	0.0	0.5	7.40	0.03	A	0.1	0.6	5.69	0.06	A	0.1	0.5	5.03	0.06	A	0.2	1.0	4.43	0.08	A	0.2	1.1	4.55	0.08	A
2034 Reference Case																									
Stream B-C	0.0	0.5	7.38	0.02	A	0.1	0.5	6.98	0.05	A	0.0	0.5	6.10	0.04	A	0.1	0.5	6.94	0.08	A	0.0	0.5	5.62	0.04	A
Stream B-A	0.0	0.5	12.63	0.02	B	0.0	0.5	16.82	0.01	C	0.0	0.5	18.44	0.02	C	0.1	0.5	12.90	0.08	B	0.0	0.5	10.58	0.02	B
Stream C-AB	0.0	0.5	6.57	0.03	A	0.1	0.7	5.38	0.06	A	0.1	0.8	4.90	0.07	A	0.2	1.1	4.58	0.09	A	0.2	1.2	4.77	0.09	A
2034 Operational Led																									
Stream B-C	0.0	0.5	7.69	0.02	A	0.0	0.5	7.12	0.05	A	0.0	0.5	6.08	0.04	A	0.1	0.5	6.96	0.07	A	0.0	0.5	5.61	0.03	A
Stream B-A	0.0	0.5	12.49	0.02	B	0.0	0.5	16.75	0.01	C	0.0	0.5	15.47	0.02	C	0.1	0.5	12.77	0.08	B	0.0	0.5	10.50	0.02	B
Stream C-AB	0.0	0.5	6.85	0.02	A	0.1	0.5	5.42	0.06	A	0.1	0.6	4.93	0.06	A	0.2	1.1	4.57	0.09	A	0.2	1.1	4.75	0.09	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

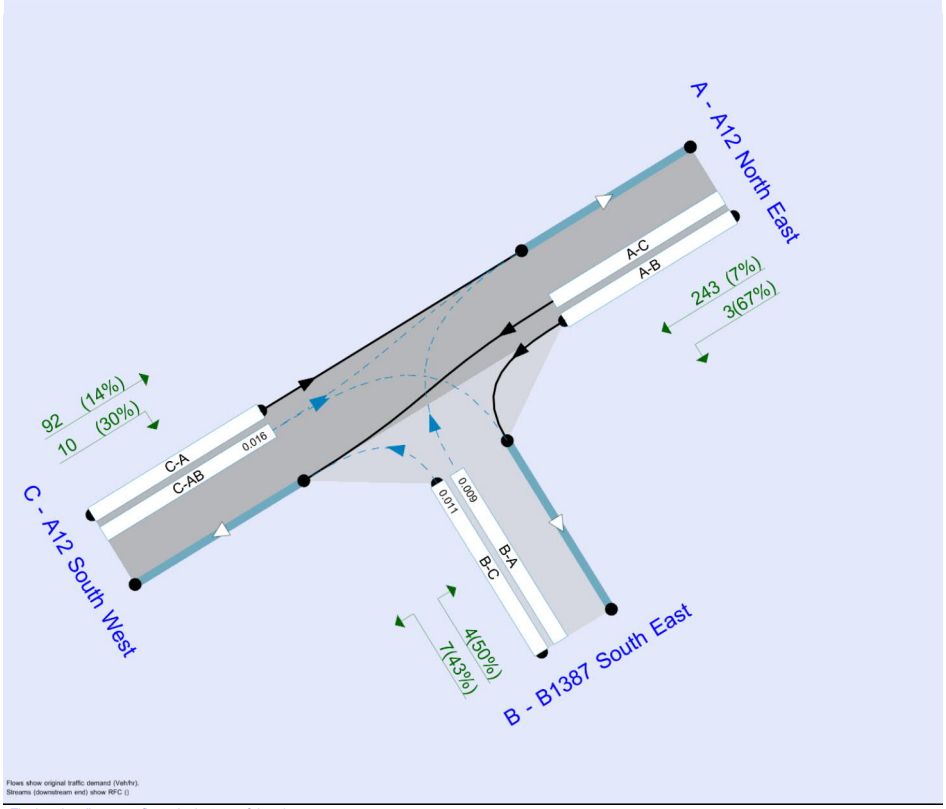
File summary

File Description

Title	A12 / B1387
Location	52.321370, 1.598029
Site number	37
Date	01/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	The Give way widths on minor arm has been modelled as 10m as Junctions 9 restricts the give way width to less than 10m.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 North East		Major
B	B1387 South East		Minor
C	A12 South West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 South West	6.00			194.2	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B1387 South East	One lane plus flare	10.00	7.30	5.00	4.10	4.10	✓	2.00	53	88

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J37	B-A	550	0.100	0.253	0.159	0.361
J37	B-C	763	0.117	0.296	-	-
J37	C-B	686	0.266	0.266	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	246	100.000
B - B1387 South East		ONE HOUR	✓	11	100.000
C - A12 South West		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	3	243
	B - B1387 South East	4	0	7
	C - A12 South West	92	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	67	7
	B - B1387 South East	50	0	43
	C - A12 South West	14	30	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.75	0.0	0.5	A	6	10
B-A	0.01	12.10	0.0	0.5	B	4	6
C-AB	0.03	6.86	0.0	0.5	A	11	16
C-A						83	124
A-B						3	4
A-C						223	334

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	492	0.011	5	0.0	0.0	7.397	A
B-A	3	1	322	0.009	3	0.0	0.0	11.275	B
C-AB	9	2	535	0.016	9	0.0	0.0	6.839	A
C-A	68	17			68				
A-B	2	0.56			2				
A-C	183	46			183				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	484	0.013	6	0.0	0.0	7.542	A
B-A	4	1	314	0.011	4	0.0	0.0	11.607	B
C-AB	11	3	537	0.020	11	0.0	0.0	6.851	A
C-A	81	20			81				
A-B	3	1			3				
A-C	218	55			218				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	472	0.016	8	0.0	0.0	7.750	A
B-A	4	1	302	0.015	4	0.0	0.0	12.101	B
C-AB	14	3	539	0.025	14	0.0	0.0	6.858	A
C-A	99	25			99				
A-B	3	1			3				
A-C	268	67			268				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	472	0.016	8	0.0	0.0	7.750	A
B-A	4	1	302	0.015	4	0.0	0.0	12.100	B
C-AB	14	3	539	0.025	14	0.0	0.0	6.848	A
C-A	99	25			99				
A-B	3	1			3				
A-C	268	67			268				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	483	0.013	6	0.0	0.0	7.544	A
B-A	4	1	314	0.011	4	0.0	0.0	11.608	B
C-AB	11	3	537	0.020	11	0.0	0.0	6.826	A
C-A	81	20			81				
A-B	3	1			3				
A-C	218	55			218				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	492	0.011	5	0.0	0.0	7.403	A
B-A	3	1	322	0.009	3	0.0	0.0	11.273	B
C-AB	9	2	535	0.016	9	0.0	0.0	6.830	A
C-A	68	17			68				
A-B	2	0.56			2				
A-C	183	46			183				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A

C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	434	100.000
B - B1387 South East		ONE HOUR	✓	24	100.000
C - A12 South West		ONE HOUR	✓	271	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	3	431
	B - B1387 South East	2	0	22
	C - A12 South West	252	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	9
	B - B1387 South East	50	0	18
	C - A12 South West	11	16	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	7.13	0.0	0.5	A	20	30
B-A	0.01	16.05	0.0	0.5	C	2	3
C-AB	0.05	5.79	0.1	0.5	A	27	41
C-A						221	332
A-B						3	4
A-C						395	593

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	571	0.029	16	0.0	0.0	6.484	A
B-A	2	0.38	264	0.006	1	0.0	0.0	13.718	B
C-AB	20	5	641	0.032	20	0.0	0.0	5.794	A
C-A	184	46			184				
A-B	2	0.56			2				
A-C	324	81			324				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	20	5	554	0.036	20	0.0	0.0	6.743	A
B-A	2	0.45	248	0.007	2	0.0	0.0	14.610	B
C-AB	26	7	653	0.040	26	0.0	0.1	5.749	A
C-A	217	54			217				
A-B	3	0.67			3				
A-C	387	97			387				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	529	0.046	24	0.0	0.0	7.133	A
B-A	2	0.55	226	0.010	2	0.0	0.0	16.052	C
C-AB	36	9	670	0.053	36	0.1	0.1	5.681	A
C-A	263	66			263				
A-B	3	0.83			3				
A-C	475	119			475				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	529	0.046	24	0.0	0.0	7.133	A
B-A	2	0.55	226	0.010	2	0.0	0.0	16.053	C
C-AB	36	9	670	0.053	36	0.1	0.1	5.675	A
C-A	263	66			263				
A-B	3	0.83			3				
A-C	475	119			475				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	553	0.036	20	0.0	0.0	6.747	A
B-A	2	0.45	248	0.007	2	0.0	0.0	14.611	B
C-AB	26	7	653	0.040	26	0.1	0.1	5.735	A
C-A	217	54			217				
A-B	3	0.67			3				
A-C	387	97			387				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	571	0.029	17	0.0	0.0	6.488	A
B-A	2	0.38	264	0.006	2	0.0	0.0	13.722	B
C-AB	20	5	641	0.032	20	0.1	0.0	5.792	A
C-A	184	46			184				
A-B	2	0.56			2				
A-C	324	81			324				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	356	100.000
B - B1387 South East		ONE HOUR	✓	24	100.000
C - A12 South West		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	6	350
	B - B1387 South East	3	0	21
	C - A12 South West	347	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	33	9
	B - B1387 South East	67	0	5
	C - A12 South West	10	11	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.92	0.0	0.5	A	19	29
B-A	0.02	17.40	0.0	0.5	C	3	4
C-AB	0.05	5.13	0.1	0.5	A	31	47
C-A						305	457
A-B						6	8
A-C						321	482

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	671	0.024	16	0.0	0.0	5.490	A
B-A	2	0.56	243	0.009	2	0.0	0.0	14.934	B
C-AB	22	6	724	0.031	22	0.0	0.0	5.132	A
C-A	253	63			253				
A-B	5	1			5				
A-C	263	66			263				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	19	5	654	0.029	19	0.0	0.0	5.664	A
B-A	3	1	229	0.012	3	0.0	0.0	15.880	C
C-AB	29	7	746	0.039	29	0.0	0.1	5.021	A
C-A	300	75			300				
A-B	5	1			5				
A-C	315	79			315				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	631	0.037	23	0.0	0.0	5.921	A
B-A	3	1	210	0.016	3	0.0	0.0	17.398	C
C-AB	41	10	779	0.053	41	0.1	0.1	4.880	A
C-A	362	90			362				
A-B	7	2			7				
A-C	385	96			385				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	631	0.037	23	0.0	0.0	5.922	A
B-A	3	1	210	0.016	3	0.0	0.0	17.400	C
C-AB	41	10	779	0.053	41	0.1	0.1	4.880	A
C-A	362	90			362				
A-B	7	2			7				
A-C	385	96			385				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	654	0.029	19	0.0	0.0	5.667	A
B-A	3	1	229	0.012	3	0.0	0.0	15.882	C
C-AB	29	7	746	0.039	30	0.1	0.1	5.022	A
C-A	300	75			300				
A-B	5	1			5				
A-C	315	79			315				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	671	0.024	16	0.0	0.0	5.494	A
B-A	2	0.56	243	0.009	2	0.0	0.0	14.935	B
C-AB	22	6	724	0.031	23	0.1	0.0	5.135	A
C-A	253	63			253				
A-B	5	1			5				
A-C	263	66			263				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	324	100.000
B - B1387 South East		ONE HOUR	✓	55	100.000
C - A12 South West		ONE HOUR	✓	461	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	13	311
	B - B1387 South East	23	0	32
	C - A12 South West	437	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	8	7
	B - B1387 South East	9	0	13
	C - A12 South West	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.06	6.84	0.1	0.5	A	29	44
B-A	0.07	11.47	0.1	0.5	B	21	32
C-AB	0.07	4.65	0.1	0.7	A	43	65
C-A						380	570
A-B						12	18
A-C						285	428

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	597	0.040	24	0.0	0.0	6.285	A
B-A	17	4	394	0.044	17	0.0	0.0	9.549	A
C-AB	31	8	806	0.038	30	0.0	0.1	4.640	A
C-A	317	79			317				
A-B	10	2			10				
A-C	234	59			234				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	29	7	582	0.049	29	0.0	0.1	6.508	A
B-A	21	5	371	0.056	21	0.0	0.1	10.273	B
C-AB	41	10	838	0.049	41	0.1	0.1	4.517	A
C-A	374	93			374				
A-B	12	3			12				
A-C	280	70			280				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	35	9	562	0.063	35	0.1	0.1	6.839	A
B-A	25	6	339	0.075	25	0.1	0.1	11.466	B
C-AB	58	15	883	0.066	58	0.1	0.1	4.364	A
C-A	449	112			449				
A-B	14	4			14				
A-C	342	86			342				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	35	9	561	0.063	35	0.1	0.1	6.841	A
B-A	25	6	339	0.075	25	0.1	0.1	11.470	B
C-AB	58	15	883	0.066	58	0.1	0.1	4.367	A
C-A	449	112			449				
A-B	14	4			14				
A-C	342	86			342				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	582	0.049	29	0.1	0.1	6.512	A
B-A	21	5	371	0.056	21	0.1	0.1	10.280	B
C-AB	41	10	838	0.049	41	0.1	0.1	4.525	A
C-A	374	93			374				
A-B	12	3			12				
A-C	280	70			280				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	596	0.040	24	0.1	0.0	6.292	A
B-A	17	4	394	0.044	17	0.1	0.0	9.556	A
C-AB	31	8	806	0.038	31	0.1	0.1	4.647	A
C-A	316	79			316				
A-B	10	2			10				
A-C	234	59			234				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.11	0.03	0.27	0.48	0.72			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	285	100.000
B - B1387 South East		ONE HOUR	✓	28	100.000
C - A12 South West		ONE HOUR	✓	408	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	281
	B - B1387 South East	7	0	21
	C - A12 South West	381	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	1
	B - B1387 South East	0	0	0
	C - A12 South West	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	5.42	0.0	0.5	A	19	29
B-A	0.02	9.79	0.0	0.5	A	6	10
C-AB	0.07	4.74	0.1	0.8	A	44	66
C-A						330	496
A-B						4	6
A-C						258	387

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	719	0.022	16	0.0	0.0	5.117	A
B-A	5	1	424	0.012	5	0.0	0.0	8.586	A
C-AB	32	8	792	0.040	32	0.0	0.1	4.734	A
C-A	275	69			275				
A-B	3	0.75			3				
A-C	212	53			212				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	19	5	706	0.027	19	0.0	0.0	5.240	A
B-A	6	2	404	0.016	6	0.0	0.0	9.055	A
C-AB	42	10	819	0.051	42	0.1	0.1	4.630	A
C-A	325	81			325				
A-B	4	0.90			4				
A-C	253	63			253				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	687	0.034	23	0.0	0.0	5.418	A
B-A	8	2	375	0.021	8	0.0	0.0	9.791	A
C-AB	58	15	858	0.068	58	0.1	0.1	4.499	A
C-A	391	98			391				
A-B	4	1			4				
A-C	309	77			309				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	687	0.034	23	0.0	0.0	5.418	A
B-A	8	2	375	0.021	8	0.0	0.0	9.792	A
C-AB	58	15	859	0.068	58	0.1	0.1	4.502	A
C-A	391	98			391				
A-B	4	1			4				
A-C	309	77			309				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	706	0.027	19	0.0	0.0	5.240	A
B-A	6	2	404	0.016	6	0.0	0.0	9.056	A
C-AB	42	10	819	0.051	42	0.1	0.1	4.634	A
C-A	325	81			325				
A-B	4	0.90			4				
A-C	253	63			253				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	719	0.022	16	0.0	0.0	5.119	A
B-A	5	1	424	0.012	5	0.0	0.0	8.591	A
C-AB	32	8	792	0.040	32	0.1	0.1	4.739	A
C-A	275	69			275				
A-B	3	0.75			3				
A-C	212	53			212				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.08	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.12	0.03	0.27	0.48	0.76			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	255	100.000
B - B1387 South East		ONE HOUR	✓	12	100.000
C - A12 South West		ONE HOUR	✓	107	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	251
	B - B1387 South East	4	0	8
	C - A12 South West	95	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	57	7
	B - B1387 South East	50	0	40
	C - A12 South West	13	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.60	0.0	0.5	A	7	10
B-A	0.01	12.25	0.0	0.5	B	4	6
C-AB	0.03	6.70	0.0	0.5	A	13	19
C-A						85	128
A-B						3	5
A-C						231	346

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	503	0.011	6	0.0	0.0	7.237	A
B-A	3	1	319	0.009	3	0.0	0.0	11.383	B
C-AB	10	2	550	0.018	10	0.0	0.0	6.662	A
C-A	70	18			70				
A-B	3	1			3				
A-C	189	47			189				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	494	0.014	7	0.0	0.0	7.385	A
B-A	4	1	310	0.012	4	0.0	0.0	11.731	B
C-AB	12	3	552	0.022	12	0.0	0.0	6.680	A
C-A	84	21			84				
A-B	3	1			3				
A-C	226	56			226				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	482	0.017	8	0.0	0.0	7.595	A
B-A	4	1	298	0.015	4	0.0	0.0	12.250	B
C-AB	16	4	554	0.028	16	0.0	0.0	6.695	A
C-A	102	25			102				
A-B	4	1			4				
A-C	277	69			277				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	482	0.017	8	0.0	0.0	7.596	A
B-A	4	1	298	0.015	4	0.0	0.0	12.249	B
C-AB	16	4	554	0.028	16	0.0	0.0	6.685	A
C-A	102	25			102				
A-B	4	1			4				
A-C	277	69			277				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	494	0.014	7	0.0	0.0	7.387	A
B-A	4	1	311	0.012	4	0.0	0.0	11.732	B
C-AB	12	3	552	0.022	12	0.0	0.0	6.659	A
C-A	84	21			84				
A-B	3	1			3				
A-C	226	56			226				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	503	0.011	6	0.0	0.0	7.242	A
B-A	3	1	319	0.009	3	0.0	0.0	11.383	B
C-AB	10	3	550	0.018	10	0.0	0.0	6.653	A
C-A	70	18			70				
A-B	3	1			3				
A-C	189	47			189				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	428	100.000
B - B1387 South East		ONE HOUR	✓	25	100.000
C - A12 South West		ONE HOUR	✓	303	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	3	425
	B - B1387 South East	2	0	23
	C - A12 South West	282	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	10
	B - B1387 South East	50	0	18
	C - A12 South West	10	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	7.11	0.0	0.5	A	21	31
B-A	0.01	16.33	0.0	0.5	C	2	3
C-AB	0.06	5.62	0.1	0.5	A	32	48
C-A						246	370
A-B						3	4
A-C						390	585

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	574	0.030	17	0.0	0.0	6.461	A
B-A	2	0.38	261	0.006	1	0.0	0.0	13.856	B
C-AB	23	6	664	0.035	23	0.0	0.0	5.620	A
C-A	205	51			205				
A-B	2	0.56			2				
A-C	320	80			320				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	20	5	556	0.036	20	0.0	0.0	6.719	A
B-A	2	0.45	245	0.007	2	0.0	0.0	14.796	B
C-AB	30	8	678	0.045	30	0.0	0.1	5.562	A
C-A	242	61			242				
A-B	3	0.67			3				
A-C	382	95			382				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	531	0.047	25	0.0	0.0	7.107	A
B-A	2	0.55	223	0.010	2	0.0	0.0	16.328	C
C-AB	42	10	700	0.060	42	0.1	0.1	5.476	A
C-A	292	73			292				
A-B	3	0.83			3				
A-C	468	117			468				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	531	0.047	25	0.0	0.0	7.108	A
B-A	2	0.55	223	0.010	2	0.0	0.0	16.329	C
C-AB	42	10	700	0.060	42	0.1	0.1	5.472	A
C-A	292	73			292				
A-B	3	0.83			3				
A-C	468	117			468				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	556	0.036	20	0.0	0.0	6.721	A
B-A	2	0.45	245	0.007	2	0.0	0.0	14.798	B
C-AB	30	8	678	0.045	30	0.1	0.1	5.549	A
C-A	242	61			242				
A-B	3	0.67			3				
A-C	382	95			382				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	574	0.030	17	0.0	0.0	6.468	A
B-A	2	0.38	261	0.006	2	0.0	0.0	13.860	B
C-AB	23	6	664	0.035	23	0.1	0.0	5.619	A
C-A	205	51			205				
A-B	2	0.56			2				
A-C	320	80			320				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.03	0.26	0.47	0.53			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	370	100.000
B - B1387 South East		ONE HOUR	✓	25	100.000
C - A12 South West		ONE HOUR	✓	378	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	6	364
	B - B1387 South East	3	0	22
	C - A12 South West	357	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	33	9
	B - B1387 South East	67	0	5
	C - A12 South West	10	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.96	0.0	0.5	A	20	30
B-A	0.02	17.75	0.0	0.5	C	3	4
C-AB	0.06	5.10	0.1	0.5	A	35	52
C-A						312	468
A-B						6	8
A-C						334	502

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	670	0.024	16	0.0	0.0	5.508	A
B-A	2	0.56	240	0.009	2	0.0	0.0	15.114	C
C-AB	25	6	731	0.034	25	0.0	0.0	5.097	A
C-A	260	65			260				
A-B	5	1			5				
A-C	274	69			274				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	19	5	652	0.030	19	0.0	0.0	5.690	A
B-A	3	1	226	0.012	3	0.0	0.0	16.121	C
C-AB	33	8	754	0.044	33	0.0	0.1	4.992	A
C-A	307	77			307				
A-B	5	1			5				
A-C	328	82			328				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	627	0.038	24	0.0	0.0	5.961	A
B-A	3	1	206	0.016	3	0.0	0.0	17.752	C
C-AB	46	12	787	0.059	46	0.1	0.1	4.859	A
C-A	370	93			370				
A-B	7	2			7				
A-C	401	100			401				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	627	0.038	24	0.0	0.0	5.962	A
B-A	3	1	206	0.016	3	0.0	0.0	17.754	C
C-AB	47	12	787	0.059	47	0.1	0.1	4.859	A
C-A	370	93			370				
A-B	7	2			7				
A-C	401	100			401				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	652	0.030	19	0.0	0.0	5.694	A
B-A	3	1	226	0.012	3	0.0	0.0	16.123	C
C-AB	33	8	754	0.044	33	0.1	0.1	4.997	A
C-A	307	77			307				
A-B	5	1			5				
A-C	328	82			328				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	669	0.024	16	0.0	0.0	5.513	A
B-A	2	0.56	240	0.009	2	0.0	0.0	15.116	C
C-AB	25	6	731	0.034	25	0.1	0.0	5.103	A
C-A	260	65			260				
A-B	5	1			5				
A-C	274	69			274				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	342	100.000
B - B1387 South East		ONE HOUR	✓	56	100.000
C - A12 South West		ONE HOUR	✓	474	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	14	328
	B - B1387 South East	23	0	33
	C - A12 South West	448	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	7	8
	B - B1387 South East	9	0	12
	C - A12 South West	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	6.89	0.1	0.5	A	30	45
B-A	0.08	11.82	0.1	0.5	B	21	32
C-AB	0.07	4.65	0.1	0.9	A	49	73
C-A						386	580
A-B						12	19
A-C						301	452

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	596	0.042	25	0.0	0.0	6.298	A
B-A	17	4	387	0.045	17	0.0	0.0	9.722	A
C-AB	34	9	809	0.042	34	0.0	0.1	4.642	A
C-A	323	81			323				
A-B	10	3			10				
A-C	247	62			247				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	30	7	581	0.051	30	0.0	0.1	6.534	A
B-A	21	5	363	0.057	21	0.0	0.1	10.508	B
C-AB	46	11	841	0.055	46	0.1	0.1	4.521	A
C-A	380	95			380				
A-B	12	3			12				
A-C	295	74			295				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	559	0.065	36	0.1	0.1	6.888	A
B-A	25	6	330	0.077	25	0.1	0.1	11.814	B
C-AB	66	17	887	0.074	66	0.1	0.1	4.380	A
C-A	456	114			456				
A-B	15	4			15				
A-C	362	90			362				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	559	0.065	36	0.1	0.1	6.889	A
B-A	25	6	330	0.077	25	0.1	0.1	11.820	B
C-AB	66	17	887	0.075	66	0.1	0.1	4.386	A
C-A	456	114			456				
A-B	15	4			15				
A-C	362	90			362				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	30	7	580	0.051	30	0.1	0.1	6.539	A
B-A	21	5	363	0.057	21	0.1	0.1	10.516	B
C-AB	46	12	841	0.055	46	0.1	0.1	4.537	A
C-A	380	95			380				
A-B	12	3			12				
A-C	295	74			295				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	596	0.042	25	0.1	0.0	6.306	A
B-A	17	4	387	0.045	17	0.1	0.0	9.732	A
C-AB	34	9	809	0.043	35	0.1	0.1	4.653	A
C-A	323	81			323				
A-B	10	3			10				
A-C	247	62			247				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.13	0.03	0.27	0.48	0.89			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	292	100.000
B - B1387 South East		ONE HOUR	✓	29	100.000
C - A12 South West		ONE HOUR	✓	424	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	288
	B - B1387 South East	7	0	22
	C - A12 South West	395	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	2
	B - B1387 South East	0	0	0
	C - A12 South West	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.44	0.0	0.5	A	20	30
B-A	0.02	9.95	0.0	0.5	A	6	10
C-AB	0.07	4.72	0.1	0.9	A	48	71
C-A						341	512
A-B						4	6
A-C						264	396

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	718	0.023	16	0.0	0.0	5.130	A
B-A	5	1	420	0.013	5	0.0	0.0	8.676	A
C-AB	34	9	799	0.043	34	0.0	0.1	4.708	A
C-A	285	71			285				
A-B	3	0.75			3				
A-C	217	54			217				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	20	5	704	0.028	20	0.0	0.0	5.257	A
B-A	6	2	399	0.016	6	0.0	0.0	9.171	A
C-AB	45	11	827	0.055	45	0.1	0.1	4.601	A
C-A	336	84			336				
A-B	4	0.90			4				
A-C	259	65			259				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	685	0.035	24	0.0	0.0	5.443	A
B-A	8	2	369	0.021	8	0.0	0.0	9.953	A
C-AB	63	16	868	0.073	63	0.1	0.1	4.473	A
C-A	403	101			403				
A-B	4	1			4				
A-C	317	79			317				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	685	0.035	24	0.0	0.0	5.444	A
B-A	8	2	369	0.021	8	0.0	0.0	9.953	A
C-AB	63	16	868	0.073	63	0.1	0.1	4.475	A
C-A	403	101			403				
A-B	4	1			4				
A-C	317	79			317				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	704	0.028	20	0.0	0.0	5.260	A
B-A	6	2	399	0.016	6	0.0	0.0	9.173	A
C-AB	45	11	827	0.055	45	0.1	0.1	4.610	A
C-A	336	84			336				
A-B	4	0.90			4				
A-C	259	65			259				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	718	0.023	17	0.0	0.0	5.132	A
B-A	5	1	420	0.013	5	0.0	0.0	8.679	A
C-AB	34	9	799	0.043	34	0.1	0.1	4.716	A
C-A	285	71			285				
A-B	3	0.75			3				
A-C	217	54			217				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.13	0.03	0.27	0.48	0.86			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	278	100.000
B - B1387 South East		ONE HOUR	✓	12	100.000
C - A12 South West		ONE HOUR	✓	108	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	274
	B - B1387 South East	4	0	8
	C - A12 South West	95	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	57	7
	B - B1387 South East	50	0	40
	C - A12 South West	13	24	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.69	0.0	0.5	A	7	10
B-A	0.02	12.46	0.0	0.5	B	4	6
C-AB	0.03	6.69	0.0	0.5	A	14	21
C-A						85	128
A-B						3	5
A-C						252	377

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	499	0.011	6	0.0	0.0	7.296	A
B-A	3	1	316	0.010	3	0.0	0.0	11.505	B
C-AB	11	3	554	0.020	11	0.0	0.0	6.622	A
C-A	70	18			70				
A-B	3	1			3				
A-C	206	52			206				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	489	0.014	7	0.0	0.0	7.458	A
B-A	4	1	306	0.012	4	0.0	0.0	11.886	B
C-AB	13	3	555	0.024	13	0.0	0.0	6.652	A
C-A	83	21			83				
A-B	3	1			3				
A-C	247	62			247				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	476	0.017	8	0.0	0.0	7.691	A
B-A	4	1	293	0.015	4	0.0	0.0	12.459	B
C-AB	17	4	556	0.031	17	0.0	0.0	6.686	A
C-A	101	25			101				
A-B	4	1			4				
A-C	302	75			302				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	476	0.017	8	0.0	0.0	7.692	A
B-A	4	1	293	0.015	4	0.0	0.0	12.458	B
C-AB	17	4	556	0.031	17	0.0	0.0	6.680	A
C-A	101	25			101				
A-B	4	1			4				
A-C	302	75			302				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	489	0.014	7	0.0	0.0	7.463	A
B-A	4	1	306	0.012	4	0.0	0.0	11.888	B
C-AB	13	3	555	0.024	13	0.0	0.0	6.634	A
C-A	83	21			83				
A-B	3	1			3				
A-C	247	62			247				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	499	0.011	6	0.0	0.0	7.304	A
B-A	3	1	316	0.010	3	0.0	0.0	11.505	B
C-AB	11	3	554	0.020	11	0.0	0.0	6.614	A
C-A	70	18			70				
A-B	3	1			3				
A-C	206	52			206				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	523	100.000
B - B1387 South East		ONE HOUR	✓	26	100.000
C - A12 South West		ONE HOUR	✓	301	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	519
	B - B1387 South East	2	0	24
	C - A12 South West	279	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	11
	B - B1387 South East	50	0	17
	C - A12 South West	10	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	7.50	0.1	0.5	A	22	32
B-A	0.01	17.85	0.0	0.5	C	2	3
C-AB	0.07	5.77	0.1	0.7	A	34	51
C-A						243	364
A-B						4	6
A-C						476	714

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	4	558	0.032	18	0.0	0.0	6.655	A
B-A	2	0.38	248	0.006	1	0.0	0.0	14.581	B
C-AB	25	6	648	0.038	24	0.0	0.1	5.772	A
C-A	202	51			202				
A-B	3	0.75			3				
A-C	391	98			391				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	21	5	536	0.039	21	0.0	0.0	6.989	A
B-A	2	0.45	230	0.008	2	0.0	0.0	15.796	C
C-AB	32	8	660	0.049	32	0.1	0.1	5.742	A
C-A	239	60			239				
A-B	4	0.90			4				
A-C	466	117			466				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	26	6	506	0.051	26	0.0	0.1	7.504	A
B-A	2	0.55	204	0.011	2	0.0	0.0	17.849	C
C-AB	45	11	677	0.066	44	0.1	0.1	5.699	A
C-A	287	72			287				
A-B	4	1			4				
A-C	571	143			571				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	26	6	505	0.051	26	0.1	0.1	7.505	A
B-A	2	0.55	204	0.011	2	0.0	0.0	17.852	C
C-AB	45	11	677	0.066	45	0.1	0.1	5.696	A
C-A	287	72			287				
A-B	4	1			4				
A-C	571	143			571				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	21	5	536	0.039	21	0.1	0.0	6.993	A
B-A	2	0.45	230	0.008	2	0.0	0.0	15.799	C
C-AB	32	8	660	0.049	32	0.1	0.1	5.735	A
C-A	239	60			239				
A-B	4	0.90			4				
A-C	466	117			466				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	4	558	0.032	18	0.0	0.0	6.660	A
B-A	2	0.38	248	0.006	2	0.0	0.0	14.585	B
C-AB	25	6	648	0.038	25	0.1	0.1	5.771	A
C-A	202	51			202				
A-B	3	0.75			3				
A-C	391	98			391				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.11	0.03	0.27	0.48	0.71			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	392	100.000
B - B1387 South East		ONE HOUR	✓	25	100.000
C - A12 South West		ONE HOUR	✓	376	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	6	386
	B - B1387 South East	3	0	22
	C - A12 South West	355	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	33	11
	B - B1387 South East	67	0	5
	C - A12 South West	11	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	6.07	0.0	0.5	A	20	30
B-A	0.02	18.24	0.0	0.5	C	3	4
C-AB	0.06	5.15	0.1	0.5	A	35	53
C-A						310	465
A-B						6	8
A-C						355	532

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	662	0.024	16	0.0	0.0	5.570	A
B-A	2	0.56	237	0.010	2	0.0	0.0	15.352	C
C-AB	25	6	724	0.035	25	0.0	0.0	5.148	A
C-A	258	65			258				
A-B	5	1			5				
A-C	291	73			291				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	19	5	643	0.030	19	0.0	0.0	5.769	A
B-A	3	1	222	0.012	3	0.0	0.0	16.445	C
C-AB	33	8	746	0.044	33	0.0	0.1	5.050	A
C-A	305	76			305				
A-B	5	1			5				
A-C	347	87			347				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	617	0.038	24	0.0	0.0	6.068	A
B-A	3	1	201	0.016	3	0.0	0.0	18.240	C
C-AB	47	12	778	0.060	47	0.1	0.1	4.923	A
C-A	368	92			368				
A-B	7	2			7				
A-C	425	106			425				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	617	0.038	24	0.0	0.0	6.069	A
B-A	3	1	201	0.016	3	0.0	0.0	18.241	C
C-AB	47	12	778	0.060	47	0.1	0.1	4.926	A
C-A	368	92			368				
A-B	7	2			7				
A-C	425	106			425				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	643	0.030	19	0.0	0.0	5.773	A
B-A	3	1	222	0.012	3	0.0	0.0	16.450	C
C-AB	33	8	746	0.045	33	0.1	0.1	5.058	A
C-A	305	76			305				
A-B	5	1			5				
A-C	347	87			347				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	662	0.024	16	0.0	0.0	5.574	A
B-A	2	0.56	237	0.010	2	0.0	0.0	15.357	C
C-AB	25	6	724	0.035	25	0.1	0.0	5.155	A
C-A	258	65			258				
A-B	5	1			5				
A-C	291	73			291				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.03	0.26	0.47	0.54			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	341	100.000
B - B1387 South East		ONE HOUR	✓	56	100.000
C - A12 South West		ONE HOUR	✓	472	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	14	327
	B - B1387 South East	23	0	33
	C - A12 South West	446	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	7	10
	B - B1387 South East	9	0	12
	C - A12 South West	8	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	6.91	0.1	0.5	A	30	45
B-A	0.08	11.90	0.1	0.5	B	21	32
C-AB	0.07	4.67	0.1	0.9	A	49	73
C-A						385	577
A-B						12	19
A-C						300	451

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	595	0.042	25	0.0	0.0	6.312	A
B-A	17	4	386	0.045	17	0.0	0.0	9.759	A
C-AB	34	9	806	0.043	34	0.0	0.1	4.661	A
C-A	321	80			321				
A-B	10	3			10				
A-C	247	62			247				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	30	7	579	0.051	30	0.0	0.1	6.552	A
B-A	21	5	362	0.057	21	0.0	0.1	10.559	B
C-AB	46	11	838	0.055	46	0.1	0.1	4.542	A
C-A	379	95			379				
A-B	12	3			12				
A-C	294	74			294				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	557	0.065	36	0.1	0.1	6.911	A
B-A	25	6	328	0.077	25	0.1	0.1	11.892	B
C-AB	66	17	883	0.075	66	0.1	0.1	4.400	A
C-A	454	113			454				
A-B	15	4			15				
A-C	361	90			361				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	557	0.065	36	0.1	0.1	6.913	A
B-A	25	6	328	0.077	25	0.1	0.1	11.899	B
C-AB	66	17	883	0.075	66	0.1	0.1	4.408	A
C-A	454	113			454				
A-B	15	4			15				
A-C	361	90			361				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	30	7	579	0.051	30	0.1	0.1	6.559	A
B-A	21	5	362	0.057	21	0.1	0.1	10.565	B
C-AB	46	12	838	0.055	46	0.1	0.1	4.558	A
C-A	379	95			379				
A-B	12	3			12				
A-C	294	74			294				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	595	0.042	25	0.1	0.0	6.322	A
B-A	17	4	386	0.045	17	0.1	0.0	9.768	A
C-AB	34	9	806	0.043	34	0.1	0.1	4.674	A
C-A	321	80			321				
A-B	10	3			10				
A-C	247	62			247				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.13	0.03	0.27	0.48	0.90			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	289	100.000
B - B1387 South East		ONE HOUR	✓	31	100.000
C - A12 South West		ONE HOUR	✓	494	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	285
	B - B1387 South East	8	0	23
	C - A12 South West	464	30	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	2
	B - B1387 South East	0	0	0
	C - A12 South West	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.47	0.0	0.5	A	21	32
B-A	0.02	10.33	0.0	0.5	B	7	11
C-AB	0.08	4.54	0.1	1.0	A	54	82
C-A						399	598
A-B						4	6
A-C						261	392

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	716	0.024	17	0.0	0.0	5.150	A
B-A	6	2	412	0.015	6	0.0	0.0	8.859	A
C-AB	38	10	833	0.046	38	0.0	0.1	4.529	A
C-A	334	83			334				
A-B	3	0.75			3				
A-C	214	54			214				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	21	5	702	0.029	21	0.0	0.0	5.279	A
B-A	7	2	389	0.018	7	0.0	0.0	9.424	A
C-AB	51	13	868	0.059	51	0.1	0.1	4.404	A
C-A	393	98			393				
A-B	4	0.90			4				
A-C	256	64			256				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	683	0.037	25	0.0	0.0	5.469	A
B-A	9	2	357	0.025	9	0.0	0.0	10.332	B
C-AB	74	18	918	0.080	73	0.1	0.1	4.258	A
C-A	470	118			470				
A-B	4	1			4				
A-C	313	78			313				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	683	0.037	25	0.0	0.0	5.469	A
B-A	9	2	357	0.025	9	0.0	0.0	10.333	B
C-AB	74	18	918	0.080	74	0.1	0.1	4.266	A
C-A	470	118			470				
A-B	4	1			4				
A-C	313	78			313				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	21	5	702	0.029	21	0.0	0.0	5.280	A
B-A	7	2	389	0.018	7	0.0	0.0	9.428	A
C-AB	51	13	868	0.059	52	0.1	0.1	4.416	A
C-A	393	98			393				
A-B	4	0.90			4				
A-C	256	64			256				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	716	0.024	17	0.0	0.0	5.151	A
B-A	6	2	412	0.015	6	0.0	0.0	8.864	A
C-AB	38	10	833	0.046	39	0.1	0.1	4.539	A
C-A	333	83			333				
A-B	3	0.75			3				
A-C	214	54			214				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.10	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.15	0.03	0.27	0.49	0.99			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	267	100.000
B - B1387 South East		ONE HOUR	✓	12	100.000
C - A12 South West		ONE HOUR	✓	113	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	263
	B - B1387 South East	4	0	8
	C - A12 South West	101	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	57	7
	B - B1387 South East	50	0	40
	C - A12 South West	13	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.65	0.0	0.5	A	7	10
B-A	0.01	12.39	0.0	0.5	B	4	6
C-AB	0.03	6.68	0.0	0.5	A	13	19
C-A						91	136
A-B						3	5
A-C						242	362

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	501	0.011	6	0.0	0.0	7.268	A
B-A	3	1	317	0.010	3	0.0	0.0	11.463	B
C-AB	10	3	551	0.018	10	0.0	0.0	6.651	A
C-A	75	19			75				
A-B	3	1			3				
A-C	198	50			198				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	492	0.014	7	0.0	0.0	7.423	A
B-A	4	1	308	0.012	4	0.0	0.0	11.833	B
C-AB	12	3	553	0.022	12	0.0	0.0	6.665	A
C-A	89	22			89				
A-B	3	1			3				
A-C	237	59			237				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	479	0.017	8	0.0	0.0	7.644	A
B-A	4	1	295	0.015	4	0.0	0.0	12.387	B
C-AB	16	4	556	0.029	16	0.0	0.0	6.677	A
C-A	108	27			108				
A-B	4	1			4				
A-C	290	72			290				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	479	0.017	8	0.0	0.0	7.645	A
B-A	4	1	295	0.015	4	0.0	0.0	12.386	B
C-AB	16	4	556	0.029	16	0.0	0.0	6.667	A
C-A	108	27			108				
A-B	4	1			4				
A-C	290	72			290				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	492	0.014	7	0.0	0.0	7.425	A
B-A	4	1	308	0.012	4	0.0	0.0	11.834	B
C-AB	12	3	553	0.022	12	0.0	0.0	6.644	A
C-A	89	22			89				
A-B	3	1			3				
A-C	237	59			237				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	501	0.011	6	0.0	0.0	7.272	A
B-A	3	1	317	0.010	3	0.0	0.0	11.463	B
C-AB	10	3	551	0.018	10	0.0	0.0	6.640	A
C-A	75	19			75				
A-B	3	1			3				
A-C	198	50			198				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	431	100.000
B - B1387 South East		ONE HOUR	✓	25	100.000
C - A12 South West		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	3	428
	B - B1387 South East	2	0	23
	C - A12 South West	303	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	10
	B - B1387 South East	50	0	18
	C - A12 South West	9	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	7.12	0.0	0.5	A	21	31
B-A	0.01	16.55	0.0	0.5	C	2	3
C-AB	0.06	5.53	0.1	0.6	A	33	49
C-A						265	397
A-B						3	4
A-C						393	589

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	573	0.030	17	0.0	0.0	6.470	A
B-A	2	0.38	259	0.006	1	0.0	0.0	13.967	B
C-AB	24	6	674	0.036	24	0.0	0.0	5.533	A
C-A	220	55			220				
A-B	2	0.56			2				
A-C	322	81			322				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	20	5	555	0.036	20	0.0	0.0	6.731	A
B-A	2	0.45	243	0.007	2	0.0	0.0	14.947	B
C-AB	31	8	691	0.045	31	0.0	0.1	5.461	A
C-A	260	65			260				
A-B	3	0.67			3				
A-C	385	96			385				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	530	0.047	25	0.0	0.0	7.124	A
B-A	2	0.55	220	0.010	2	0.0	0.0	16.552	C
C-AB	44	11	716	0.061	43	0.1	0.1	5.362	A
C-A	314	78			314				
A-B	3	0.83			3				
A-C	471	118			471				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	530	0.047	25	0.0	0.0	7.124	A
B-A	2	0.55	220	0.010	2	0.0	0.0	16.555	C
C-AB	44	11	716	0.061	44	0.1	0.1	5.356	A
C-A	313	78			313				
A-B	3	0.83			3				
A-C	471	118			471				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	555	0.036	20	0.0	0.0	6.735	A
B-A	2	0.45	243	0.007	2	0.0	0.0	14.952	B
C-AB	31	8	691	0.045	32	0.1	0.1	5.449	A
C-A	260	65			260				
A-B	3	0.67			3				
A-C	385	96			385				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	573	0.030	17	0.0	0.0	6.477	A
B-A	2	0.38	259	0.006	2	0.0	0.0	13.971	B
C-AB	24	6	674	0.036	24	0.1	0.0	5.531	A
C-A	220	55			220				
A-B	2	0.56			2				
A-C	322	81			322				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.03	0.26	0.48	0.57			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	366	100.000
B - B1387 South East		ONE HOUR	✓	26	100.000
C - A12 South West		ONE HOUR	✓	407	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	6	360
	B - B1387 South East	3	0	23
	C - A12 South West	385	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	33	10
	B - B1387 South East	67	0	4
	C - A12 South West	10	9	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	6.08	0.0	0.5	A	21	31
B-A	0.02	18.02	0.0	0.5	C	3	4
C-AB	0.06	5.00	0.1	0.6	A	38	57
C-A						336	503
A-B						6	8
A-C						331	496

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	658	0.026	17	0.0	0.0	5.613	A
B-A	2	0.56	238	0.009	2	0.0	0.0	15.252	C
C-AB	27	7	747	0.036	27	0.0	0.0	4.996	A
C-A	280	70			280				
A-B	5	1			5				
A-C	271	68			271				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	20	5	641	0.032	20	0.0	0.0	5.799	A
B-A	3	1	223	0.012	3	0.0	0.0	16.303	C
C-AB	36	9	773	0.047	36	0.0	0.1	4.883	A
C-A	330	83			330				
A-B	5	1			5				
A-C	324	81			324				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	617	0.040	25	0.0	0.0	6.077	A
B-A	3	1	203	0.016	3	0.0	0.0	18.019	C
C-AB	51	13	811	0.063	51	0.1	0.1	4.737	A
C-A	397	99			397				
A-B	7	2			7				
A-C	397	99			397				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	617	0.040	25	0.0	0.0	6.077	A
B-A	3	1	203	0.016	3	0.0	0.0	18.020	C
C-AB	51	13	811	0.063	51	0.1	0.1	4.741	A
C-A	397	99			397				
A-B	7	2			7				
A-C	397	99			397				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	641	0.032	20	0.0	0.0	5.800	A
B-A	3	1	223	0.012	3	0.0	0.0	16.308	C
C-AB	36	9	773	0.047	36	0.1	0.1	4.885	A
C-A	330	83			330				
A-B	5	1			5				
A-C	324	81			324				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	658	0.026	17	0.0	0.0	5.617	A
B-A	2	0.56	238	0.009	2	0.0	0.0	15.257	C
C-AB	27	7	747	0.036	27	0.1	0.1	5.000	A
C-A	279	70			279				
A-B	5	1			5				
A-C	271	68			271				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.46	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.03	0.27	0.48	0.63			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	359	100.000
B - B1387 South East		ONE HOUR	✓	60	100.000
C - A12 South West		ONE HOUR	✓	485	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	14	345
	B - B1387 South East	23	0	37
	C - A12 South West	458	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	7	8
	B - B1387 South East	9	0	11
	C - A12 South West	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	6.88	0.1	0.5	A	34	51
B-A	0.08	12.21	0.1	0.5	B	21	32
C-AB	0.08	4.64	0.1	1.0	A	52	77
C-A						394	591
A-B						12	19
A-C						317	475

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	603	0.046	28	0.0	0.0	6.252	A
B-A	17	4	379	0.046	17	0.0	0.0	9.944	A
C-AB	36	9	812	0.044	36	0.0	0.1	4.634	A
C-A	329	82			329				
A-B	10	3			10				
A-C	260	65			260				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	33	8	587	0.057	33	0.0	0.1	6.503	A
B-A	21	5	354	0.058	21	0.0	0.1	10.787	B
C-AB	48	12	845	0.057	48	0.1	0.1	4.516	A
C-A	388	97			388				
A-B	12	3			12				
A-C	311	78			311				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	564	0.072	41	0.1	0.1	6.883	A
B-A	25	6	320	0.079	25	0.1	0.1	12.203	B
C-AB	70	18	892	0.078	70	0.1	0.1	4.375	A
C-A	464	116			464				
A-B	15	4			15				
A-C	380	95			380				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	564	0.072	41	0.1	0.1	6.884	A
B-A	25	6	320	0.079	25	0.1	0.1	12.209	B
C-AB	70	18	892	0.079	70	0.1	0.1	4.381	A
C-A	464	116			464				
A-B	15	4			15				
A-C	380	95			380				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	33	8	586	0.057	33	0.1	0.1	6.508	A
B-A	21	5	354	0.058	21	0.1	0.1	10.793	B
C-AB	49	12	845	0.057	49	0.1	0.1	4.529	A
C-A	388	97			388				
A-B	12	3			12				
A-C	311	78			311				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	603	0.046	28	0.1	0.0	6.262	A
B-A	17	4	379	0.046	17	0.1	0.0	9.954	A
C-AB	36	9	813	0.045	36	0.1	0.1	4.645	A
C-A	329	82			329				
A-B	10	3			10				
A-C	260	65			260				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.09	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.14	0.03	0.27	0.49	0.96			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	314	100.000
B - B1387 South East		ONE HOUR	✓	30	100.000
C - A12 South West		ONE HOUR	✓	438	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	310
	B - B1387 South East	7	0	23
	C - A12 South West	405	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	1
	B - B1387 South East	0	0	0
	C - A12 South West	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.51	0.0	0.5	A	21	32
B-A	0.02	10.22	0.0	0.5	B	6	10
C-AB	0.08	4.72	0.2	1.0	A	55	83
C-A						347	520
A-B						4	6
A-C						284	426

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	714	0.024	17	0.0	0.0	5.167	A
B-A	5	1	413	0.013	5	0.0	0.0	8.820	A
C-AB	40	10	803	0.049	39	0.0	0.1	4.711	A
C-A	290	73			290				
A-B	3	0.75			3				
A-C	233	58			233				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	21	5	699	0.030	21	0.0	0.0	5.305	A
B-A	6	2	391	0.016	6	0.0	0.0	9.361	A
C-AB	52	13	832	0.063	52	0.1	0.1	4.615	A
C-A	341	85			341				
A-B	4	0.90			4				
A-C	278	70			278				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	679	0.037	25	0.0	0.0	5.508	A
B-A	8	2	360	0.021	8	0.0	0.0	10.224	B
C-AB	74	18	874	0.084	73	0.1	0.2	4.497	A
C-A	409	102			409				
A-B	4	1			4				
A-C	341	85			341				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	679	0.037	25	0.0	0.0	5.508	A
B-A	8	2	360	0.021	8	0.0	0.0	10.225	B
C-AB	74	18	874	0.084	74	0.2	0.2	4.504	A
C-A	409	102			409				
A-B	4	1			4				
A-C	341	85			341				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	21	5	699	0.030	21	0.0	0.0	5.306	A
B-A	6	2	391	0.016	6	0.0	0.0	9.363	A
C-AB	52	13	832	0.063	53	0.2	0.1	4.623	A
C-A	341	85			341				
A-B	4	0.90			4				
A-C	278	70			278				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	714	0.024	17	0.0	0.0	5.171	A
B-A	5	1	413	0.013	5	0.0	0.0	8.825	A
C-AB	40	10	803	0.049	40	0.1	0.1	4.721	A
C-A	290	73			290				
A-B	3	0.75			3				
A-C	233	58			233				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.10	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.16	0.03	0.27	0.49	1.05			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	459	100.000
B - B1387 South East		ONE HOUR	✓	11	100.000
C - A12 South West		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	6	453
	B - B1387 South East	4	0	7
	C - A12 South West	107	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	36	5
	B - B1387 South East	50	0	46
	C - A12 South West	15	31	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	8.90	0.0	0.5	A	6	9
B-A	0.02	14.03	0.0	0.5	B	4	6
C-AB	0.03	7.40	0.0	0.5	A	11	16
C-A						96	144
A-B						5	8
A-C						416	624

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	446	0.011	5	0.0	0.0	8.157	A
B-A	3	1	295	0.010	3	0.0	0.0	12.337	B
C-AB	9	2	506	0.017	8	0.0	0.0	7.235	A
C-A	79	20			79				
A-B	4	1			4				
A-C	341	85			341				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	6	1	432	0.014	6	0.0	0.0	8.455	A
B-A	4	1	281	0.013	4	0.0	0.0	12.996	B
C-AB	11	3	504	0.021	11	0.0	0.0	7.312	A
C-A	94	24			94				
A-B	5	1			5				
A-C	407	102			407				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	412	0.017	7	0.0	0.0	8.899	A
B-A	4	1	261	0.017	4	0.0	0.0	14.034	B
C-AB	14	3	501	0.027	14	0.0	0.0	7.403	A
C-A	115	29			115				
A-B	6	2			6				
A-C	499	125			499				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	412	0.017	7	0.0	0.0	8.900	A
B-A	4	1	261	0.017	4	0.0	0.0	14.033	B
C-AB	14	3	501	0.027	14	0.0	0.0	7.384	A
C-A	115	29			115				
A-B	6	2			6				
A-C	499	125			499				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	431	0.014	6	0.0	0.0	8.458	A
B-A	4	1	281	0.013	4	0.0	0.0	12.994	B
C-AB	11	3	504	0.021	11	0.0	0.0	7.276	A
C-A	94	24			94				
A-B	5	1			5				
A-C	407	102			407				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	446	0.011	5	0.0	0.0	8.165	A
B-A	3	1	295	0.010	3	0.0	0.0	12.336	B
C-AB	9	2	506	0.017	9	0.0	0.0	7.217	A
C-A	79	20			79				
A-B	4	1			4				
A-C	341	85			341				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	572	100.000
B - B1387 South East		ONE HOUR	✓	23	100.000
C - A12 South West		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	5	567
	B - B1387 South East	2	0	21
	C - A12 South West	321	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	9
	B - B1387 South East	50	0	19
	C - A12 South West	9	16	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	7.83	0.0	0.5	A	19	28
B-A	0.01	18.95	0.0	0.5	C	2	3
C-AB	0.06	5.69	0.1	0.6	A	32	48
C-A						280	421
A-B						5	7
A-C						520	780

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	15	4	538	0.029	15	0.0	0.0	6.886	A
B-A	2	0.38	241	0.006	1	0.0	0.0	15.051	C
C-AB	23	6	656	0.035	23	0.0	0.0	5.685	A
C-A	233	58			233				
A-B	4	0.94			4				
A-C	427	107			427				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	18	5	514	0.036	18	0.0	0.0	7.256	A
B-A	2	0.45	220	0.008	2	0.0	0.0	16.474	C
C-AB	30	8	671	0.045	30	0.0	0.1	5.621	A
C-A	276	69			276				
A-B	4	1			4				
A-C	510	127			510				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	482	0.047	23	0.0	0.0	7.831	A
B-A	2	0.55	192	0.011	2	0.0	0.0	18.942	C
C-AB	43	11	695	0.062	43	0.1	0.1	5.527	A
C-A	332	83			332				
A-B	6	1			6				
A-C	624	156			624				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	482	0.047	23	0.0	0.0	7.833	A
B-A	2	0.55	192	0.011	2	0.0	0.0	18.945	C
C-AB	43	11	695	0.062	43	0.1	0.1	5.520	A
C-A	332	83			332				
A-B	6	1			6				
A-C	624	156			624				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	5	514	0.036	18	0.0	0.0	7.261	A
B-A	2	0.45	220	0.008	2	0.0	0.0	16.479	C
C-AB	30	8	672	0.045	30	0.1	0.1	5.602	A
C-A	276	69			276				
A-B	4	1			4				
A-C	510	127			510				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	15	4	538	0.029	15	0.0	0.0	6.891	A
B-A	2	0.38	241	0.006	2	0.0	0.0	15.058	C
C-AB	23	6	656	0.035	23	0.1	0.0	5.677	A
C-A	233	58			233				
A-B	4	0.94			4				
A-C	427	107			427				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.03	0.26	0.48	0.59			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	394	100.000
B - B1387 South East		ONE HOUR	✓	22	100.000
C - A12 South West		ONE HOUR	✓	415	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	7	387
	B - B1387 South East	3	0	19
	C - A12 South West	396	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	29	12
	B - B1387 South East	67	0	5
	C - A12 South West	11	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	6.11	0.0	0.5	A	17	25
B-A	0.02	18.60	0.0	0.5	C	3	4
C-AB	0.06	5.03	0.1	0.5	A	34	51
C-A						347	521
A-B						6	10
A-C						355	533

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	14	3	655	0.021	14	0.0	0.0	5.615	A
B-A	2	0.56	234	0.010	2	0.0	0.0	15.499	C
C-AB	24	6	740	0.032	24	0.0	0.0	5.026	A
C-A	289	72			289				
A-B	5	1			5				
A-C	292	73			292				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	17	4	636	0.026	17	0.0	0.0	5.813	A
B-A	3	1	219	0.012	3	0.0	0.0	16.665	C
C-AB	32	8	767	0.042	32	0.0	0.1	4.900	A
C-A	341	85			341				
A-B	6	2			6				
A-C	348	87			348				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	609	0.033	20	0.0	0.0	6.110	A
B-A	3	1	197	0.017	3	0.0	0.0	18.598	C
C-AB	46	11	805	0.057	46	0.1	0.1	4.741	A
C-A	411	103			411				
A-B	8	2			8				
A-C	426	107			426				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	609	0.033	20	0.0	0.0	6.111	A
B-A	3	1	197	0.017	3	0.0	0.0	18.599	C
C-AB	46	11	805	0.057	46	0.1	0.1	4.744	A
C-A	411	103			411				
A-B	8	2			8				
A-C	426	107			426				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	636	0.026	17	0.0	0.0	5.815	A
B-A	3	1	219	0.012	3	0.0	0.0	16.668	C
C-AB	32	8	767	0.042	32	0.1	0.1	4.904	A
C-A	341	85			341				
A-B	6	2			6				
A-C	348	87			348				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	14	3	655	0.021	14	0.0	0.0	5.617	A
B-A	2	0.56	235	0.010	2	0.0	0.0	15.503	C
C-AB	24	6	740	0.033	24	0.1	0.0	5.030	A
C-A	289	72			289				
A-B	5	1			5				
A-C	292	73			292				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	363	100.000
B - B1387 South East		ONE HOUR	✓	61	100.000
C - A12 South West		ONE HOUR	✓	575	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	14	349
	B - B1387 South East	24	0	37
	C - A12 South West	549	27	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	7	10
	B - B1387 South East	8	0	11
	C - A12 South West	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	6.95	0.1	0.5	A	34	51
B-A	0.09	13.00	0.1	0.5	B	22	33
C-AB	0.08	4.43	0.2	1.0	A	57	86
C-A						471	706
A-B						12	19
A-C						321	481

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	600	0.046	28	0.0	0.0	6.290	A
B-A	18	5	369	0.049	18	0.0	0.1	10.260	B
C-AB	39	10	854	0.045	38	0.0	0.1	4.415	A
C-A	394	99			394				
A-B	10	3			10				
A-C	263	66			263				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	33	8	583	0.057	33	0.0	0.1	6.552	A
B-A	22	5	341	0.063	22	0.1	0.1	11.258	B
C-AB	53	13	895	0.060	53	0.1	0.1	4.270	A
C-A	464	116			464				
A-B	12	3			12				
A-C	314	79			314				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	559	0.073	41	0.1	0.1	6.952	A
B-A	26	7	303	0.087	26	0.1	0.1	12.995	B
C-AB	80	20	956	0.084	80	0.1	0.2	4.107	A
C-A	554	138			554				
A-B	15	4			15				
A-C	385	96			385				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	558	0.073	41	0.1	0.1	6.954	A
B-A	26	7	303	0.087	26	0.1	0.1	13.004	B
C-AB	80	20	956	0.084	80	0.2	0.2	4.113	A
C-A	553	138			553				
A-B	15	4			15				
A-C	385	96			385				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	33	8	582	0.057	33	0.1	0.1	6.558	A
B-A	22	5	341	0.063	22	0.1	0.1	11.270	B
C-AB	53	13	896	0.060	54	0.2	0.1	4.285	A
C-A	464	116			464				
A-B	12	3			12				
A-C	314	79			314				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	599	0.047	28	0.1	0.0	6.298	A
B-A	18	5	369	0.049	18	0.1	0.1	10.273	B
C-AB	39	10	854	0.046	39	0.1	0.1	4.425	A
C-A	394	99			394				
A-B	10	3			10				
A-C	263	66			263				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.10	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.16	0.03	0.27	0.49	1.05			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	313	100.000
B - B1387 South East		ONE HOUR	✓	32	100.000
C - A12 South West		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	309
	B - B1387 South East	9	0	23
	C - A12 South West	472	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	3
	B - B1387 South East	0	0	0
	C - A12 South West	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.57	0.0	0.5	A	21	32
B-A	0.03	10.60	0.0	0.5	B	8	12
C-AB	0.08	4.55	0.2	1.1	A	57	86
C-A						404	606
A-B						4	6
A-C						283	425

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	707	0.025	17	0.0	0.0	5.216	A
B-A	7	2	408	0.017	7	0.0	0.0	8.980	A
C-AB	40	10	833	0.048	40	0.0	0.1	4.539	A
C-A	338	85			338				
A-B	3	0.75			3				
A-C	232	58			232				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	21	5	692	0.030	21	0.0	0.0	5.359	A
B-A	8	2	383	0.021	8	0.0	0.0	9.598	A
C-AB	54	13	868	0.062	54	0.1	0.1	4.417	A
C-A	398	100			398				
A-B	4	0.90			4				
A-C	277	69			277				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	672	0.038	25	0.0	0.0	5.569	A
B-A	10	2	349	0.028	10	0.0	0.0	10.604	B
C-AB	78	19	919	0.085	78	0.1	0.2	4.278	A
C-A	476	119			476				
A-B	4	1			4				
A-C	340	85			340				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	672	0.038	25	0.0	0.0	5.570	A
B-A	10	2	349	0.028	10	0.0	0.0	10.605	B
C-AB	78	19	919	0.085	78	0.2	0.2	4.284	A
C-A	476	119			476				
A-B	4	1			4				
A-C	340	85			340				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	21	5	692	0.030	21	0.0	0.0	5.362	A
B-A	8	2	383	0.021	8	0.0	0.0	9.601	A
C-AB	54	14	868	0.062	54	0.2	0.1	4.430	A
C-A	398	100			398				
A-B	4	0.90			4				
A-C	277	69			277				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	707	0.025	17	0.0	0.0	5.218	A
B-A	7	2	408	0.017	7	0.0	0.0	8.985	A
C-AB	40	10	833	0.048	40	0.1	0.1	4.549	A
C-A	338	85			338				
A-B	3	0.75			3				
A-C	232	58			232				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.10	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.16	0.03	0.27	0.49	1.06			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	277	100.000
B - B1387 South East		ONE HOUR	✓	13	100.000
C - A12 South West		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	273
	B - B1387 South East	4	0	9
	C - A12 South West	108	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	57	7
	B - B1387 South East	50	0	35
	C - A12 South West	13	24	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.38	0.0	0.5	A	8	12
B-A	0.02	12.63	0.0	0.5	B	4	6
C-AB	0.03	6.57	0.0	0.5	A	14	21
C-A						97	145
A-B						3	5
A-C						251	376

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	520	0.012	6	0.0	0.0	7.003	A
B-A	3	1	312	0.010	3	0.0	0.0	11.639	B
C-AB	11	3	561	0.020	11	0.0	0.0	6.541	A
C-A	80	20			80				
A-B	3	1			3				
A-C	206	51			206				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	8	2	510	0.015	8	0.0	0.0	7.159	A
B-A	4	1	303	0.012	4	0.0	0.0	12.033	B
C-AB	14	3	563	0.024	14	0.0	0.0	6.555	A
C-A	95	24			95				
A-B	3	1			3				
A-C	246	61			246				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	497	0.019	9	0.0	0.0	7.384	A
B-A	4	1	289	0.015	4	0.0	0.0	12.627	B
C-AB	18	4	566	0.031	17	0.0	0.0	6.567	A
C-A	115	29			115				
A-B	4	1			4				
A-C	301	75			301				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	497	0.019	9	0.0	0.0	7.384	A
B-A	4	1	290	0.015	4	0.0	0.0	12.626	B
C-AB	18	4	566	0.031	18	0.0	0.0	6.560	A
C-A	115	29			115				
A-B	4	1			4				
A-C	301	75			301				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	510	0.015	8	0.0	0.0	7.161	A
B-A	4	1	303	0.012	4	0.0	0.0	12.034	B
C-AB	14	3	563	0.024	14	0.0	0.0	6.538	A
C-A	95	24			95				
A-B	3	1			3				
A-C	246	61			246				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	520	0.012	6	0.0	0.0	7.010	A
B-A	3	1	312	0.010	3	0.0	0.0	11.639	B
C-AB	11	3	561	0.020	11	0.0	0.0	6.532	A
C-A	80	20			80				
A-B	3	1			3				
A-C	206	51			206				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	430	100.000
B - B1387 South East		ONE HOUR	✓	29	100.000
C - A12 South West		ONE HOUR	✓	357	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	3	427
	B - B1387 South East	2	0	27
	C - A12 South West	335	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	10
	B - B1387 South East	50	0	15
	C - A12 South West	8	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	6.98	0.1	0.5	A	24	36
B-A	0.01	16.82	0.0	0.5	C	2	3
C-AB	0.06	5.38	0.1	0.7	A	36	54
C-A						292	437
A-B						3	4
A-C						392	588

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	589	0.034	20	0.0	0.0	6.323	A
B-A	2	0.38	257	0.006	1	0.0	0.0	14.109	B
C-AB	26	7	695	0.038	26	0.0	0.1	5.381	A
C-A	243	61			243				
A-B	2	0.56			2				
A-C	321	80			321				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	24	6	571	0.042	24	0.0	0.0	6.584	A
B-A	2	0.45	240	0.008	2	0.0	0.0	15.134	C
C-AB	34	9	715	0.048	34	0.1	0.1	5.293	A
C-A	287	72			287				
A-B	3	0.67			3				
A-C	384	96			384				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	545	0.054	29	0.0	0.1	6.977	A
B-A	2	0.55	216	0.010	2	0.0	0.0	16.821	C
C-AB	48	12	745	0.065	48	0.1	0.1	5.175	A
C-A	345	86			345				
A-B	3	0.83			3				
A-C	470	117			470				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	545	0.054	29	0.1	0.1	6.977	A
B-A	2	0.55	216	0.010	2	0.0	0.0	16.824	C
C-AB	48	12	745	0.065	48	0.1	0.1	5.166	A
C-A	345	86			345				
A-B	3	0.83			3				
A-C	470	117			470				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	24	6	571	0.042	24	0.1	0.0	6.585	A
B-A	2	0.45	240	0.008	2	0.0	0.0	15.136	C
C-AB	34	9	715	0.048	35	0.1	0.1	5.278	A
C-A	287	72			287				
A-B	3	0.67			3				
A-C	384	96			384				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	589	0.034	20	0.0	0.0	6.330	A
B-A	2	0.38	257	0.006	2	0.0	0.0	14.111	B
C-AB	26	7	695	0.038	26	0.1	0.1	5.377	A
C-A	243	61			243				
A-B	2	0.56			2				
A-C	321	80			321				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.11	0.03	0.27	0.48	0.69			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	373	100.000
B - B1387 South East		ONE HOUR	✓	28	100.000
C - A12 South West		ONE HOUR	✓	440	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	6	367
	B - B1387 South East	3	0	25
	C - A12 South West	417	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	33	9
	B - B1387 South East	67	0	4
	C - A12 South West	9	9	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	6.10	0.0	0.5	A	22	34
B-A	0.02	18.44	0.0	0.5	C	3	4
C-AB	0.07	4.90	0.1	0.8	A	42	63
C-A						362	543
A-B						6	8
A-C						337	506

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	5	659	0.028	18	0.0	0.0	5.618	A
B-A	2	0.56	235	0.010	2	0.0	0.0	15.467	C
C-AB	29	7	765	0.039	29	0.0	0.1	4.892	A
C-A	302	76			302				
A-B	5	1			5				
A-C	277	69			277				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	22	6	642	0.034	22	0.0	0.0	5.809	A
B-A	3	1	220	0.012	3	0.0	0.0	16.589	C
C-AB	39	10	794	0.050	39	0.1	0.1	4.768	A
C-A	356	89			356				
A-B	5	1			5				
A-C	330	83			330				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	27	7	617	0.044	27	0.0	0.0	6.096	A
B-A	3	1	199	0.017	3	0.0	0.0	18.437	C
C-AB	57	14	836	0.068	56	0.1	0.1	4.617	A
C-A	428	107			428				
A-B	7	2			7				
A-C	404	101			404				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	27	7	617	0.044	27	0.0	0.0	6.096	A
B-A	3	1	199	0.017	3	0.0	0.0	18.438	C
C-AB	57	14	836	0.068	57	0.1	0.1	4.619	A
C-A	428	107			428				
A-B	7	2			7				
A-C	404	101			404				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	22	6	642	0.034	22	0.0	0.0	5.813	A
B-A	3	1	220	0.012	3	0.0	0.0	16.593	C
C-AB	39	10	794	0.050	40	0.1	0.1	4.772	A
C-A	356	89			356				
A-B	5	1			5				
A-C	330	83			330				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	5	659	0.028	18	0.0	0.0	5.620	A
B-A	2	0.56	235	0.010	2	0.0	0.0	15.473	C
C-AB	30	7	765	0.039	30	0.1	0.1	4.898	A
C-A	302	75			302				
A-B	5	1			5				
A-C	277	69			277				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.25	0.46	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.12	0.03	0.27	0.48	0.75			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	392	100.000
B - B1387 South East		ONE HOUR	✓	62	100.000
C - A12 South West		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	14	378
	B - B1387 South East	23	0	39
	C - A12 South West	494	31	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	7	6
	B - B1387 South East	9	0	10
	C - A12 South West	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	6.94	0.1	0.5	A	36	54
B-A	0.08	12.90	0.1	0.5	B	21	32
C-AB	0.09	4.58	0.2	1.1	A	61	91
C-A						421	631
A-B						12	19
A-C						347	521

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	605	0.049	29	0.0	0.1	6.249	A
B-A	17	4	367	0.047	17	0.0	0.0	10.269	B
C-AB	42	10	829	0.050	41	0.0	0.1	4.569	A
C-A	353	88			353				
A-B	10	3			10				
A-C	285	71			285				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	35	9	587	0.060	35	0.1	0.1	6.522	A
B-A	21	5	341	0.061	21	0.0	0.1	11.236	B
C-AB	57	14	865	0.065	56	0.1	0.1	4.450	A
C-A	415	104			415				
A-B	12	3			12				
A-C	340	85			340				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	43	11	562	0.076	43	0.1	0.1	6.938	A
B-A	25	6	304	0.083	25	0.1	0.1	12.895	B
C-AB	83	21	917	0.091	83	0.1	0.2	4.316	A
C-A	494	124			494				
A-B	15	4			15				
A-C	417	104			417				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	43	11	562	0.077	43	0.1	0.1	6.940	A
B-A	25	6	304	0.083	25	0.1	0.1	12.903	B
C-AB	83	21	917	0.091	83	0.2	0.2	4.321	A
C-A	494	124			494				
A-B	15	4			15				
A-C	417	104			417				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	35	9	587	0.060	35	0.1	0.1	6.527	A
B-A	21	5	341	0.061	21	0.1	0.1	11.245	B
C-AB	57	14	865	0.066	57	0.2	0.1	4.463	A
C-A	415	104			415				
A-B	12	3			12				
A-C	340	85			340				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	605	0.049	29	0.1	0.1	6.257	A
B-A	17	4	368	0.047	17	0.1	0.1	10.280	B
C-AB	42	10	829	0.051	42	0.1	0.1	4.581	A
C-A	353	88			353				
A-B	10	3			10				
A-C	285	71			285				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.11	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.18	0.03	0.27	0.49	1.14			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	352	100.000
B - B1387 South East		ONE HOUR	✓	31	100.000
C - A12 South West		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	348
	B - B1387 South East	7	0	24
	C - A12 South West	407	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	1
	B - B1387 South East	0	0	0
	C - A12 South West	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.62	0.0	0.5	A	22	33
B-A	0.02	10.58	0.0	0.5	B	6	10
C-AB	0.09	4.77	0.2	1.2	A	61	91
C-A						346	518
A-B						4	6
A-C						319	479

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	5	706	0.026	18	0.0	0.0	5.232	A
B-A	5	1	405	0.013	5	0.0	0.0	9.005	A
C-AB	43	11	799	0.054	43	0.0	0.1	4.762	A
C-A	290	73			290				
A-B	3	0.75			3				
A-C	262	65			262				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	22	5	690	0.031	22	0.0	0.0	5.388	A
B-A	6	2	381	0.017	6	0.0	0.0	9.608	A
C-AB	57	14	827	0.070	57	0.1	0.1	4.676	A
C-A	341	85			341				
A-B	4	0.90			4				
A-C	313	78			313				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	26	7	667	0.040	26	0.0	0.0	5.620	A
B-A	8	2	348	0.022	8	0.0	0.0	10.583	B
C-AB	81	20	868	0.094	81	0.1	0.2	4.574	A
C-A	406	102			406				
A-B	4	1			4				
A-C	383	96			383				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	26	7	667	0.040	26	0.0	0.0	5.621	A
B-A	8	2	348	0.022	8	0.0	0.0	10.585	B
C-AB	81	20	868	0.094	81	0.2	0.2	4.580	A
C-A	406	102			406				
A-B	4	1			4				
A-C	383	96			383				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	22	5	690	0.031	22	0.0	0.0	5.392	A
B-A	6	2	381	0.017	6	0.0	0.0	9.611	A
C-AB	58	14	827	0.070	58	0.2	0.1	4.685	A
C-A	341	85			341				
A-B	4	0.90			4				
A-C	313	78			313				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	5	706	0.026	18	0.0	0.0	5.236	A
B-A	5	1	405	0.013	5	0.0	0.0	9.010	A
C-AB	44	11	799	0.055	44	0.1	0.1	4.772	A
C-A	290	72			290				
A-B	3	0.75			3				
A-C	262	65			262				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.12	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.46	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.19	0.03	0.27	0.49	1.17			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	277	100.000
B - B1387 South East		ONE HOUR	✓	12	100.000
C - A12 South West		ONE HOUR	✓	118	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	273
	B - B1387 South East	4	0	8
	C - A12 South West	108	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	57	7
	B - B1387 South East	50	0	40
	C - A12 South West	13	31	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.69	0.0	0.5	A	7	10
B-A	0.02	12.49	0.0	0.5	B	4	6
C-AB	0.02	6.85	0.0	0.5	A	11	16
C-A						97	146
A-B						3	5
A-C						251	376

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	499	0.011	6	0.0	0.0	7.293	A
B-A	3	1	315	0.010	3	0.0	0.0	11.521	B
C-AB	8	2	534	0.016	8	0.0	0.0	6.851	A
C-A	80	20			80				
A-B	3	1			3				
A-C	206	51			206				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	490	0.014	7	0.0	0.0	7.454	A
B-A	4	1	306	0.012	4	0.0	0.0	11.906	B
C-AB	10	3	537	0.020	10	0.0	0.0	6.853	A
C-A	95	24			95				
A-B	3	1			3				
A-C	246	61			246				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	477	0.017	8	0.0	0.0	7.686	A
B-A	4	1	293	0.015	4	0.0	0.0	12.485	B
C-AB	13	3	541	0.025	13	0.0	0.0	6.842	A
C-A	116	29			116				
A-B	4	1			4				
A-C	301	75			301				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	477	0.017	8	0.0	0.0	7.687	A
B-A	4	1	293	0.015	4	0.0	0.0	12.484	B
C-AB	13	3	541	0.025	13	0.0	0.0	6.828	A
C-A	116	29			116				
A-B	4	1			4				
A-C	301	75			301				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	490	0.014	7	0.0	0.0	7.459	A
B-A	4	1	306	0.012	4	0.0	0.0	11.907	B
C-AB	10	3	537	0.020	11	0.0	0.0	6.821	A
C-A	95	24			95				
A-B	3	1			3				
A-C	246	61			246				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	499	0.011	6	0.0	0.0	7.300	A
B-A	3	1	316	0.010	3	0.0	0.0	11.520	B
C-AB	8	2	534	0.016	9	0.0	0.0	6.837	A
C-A	80	20			80				
A-B	3	1			3				
A-C	206	51			206				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	432	100.000
B - B1387 South East		ONE HOUR	✓	25	100.000
C - A12 South West		ONE HOUR	✓	354	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	5	427
	B - B1387 South East	2	0	23
	C - A12 South West	335	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	10
	B - B1387 South East	50	0	18
	C - A12 South West	8	16	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	7.12	0.0	0.5	A	21	31
B-A	0.01	16.75	0.0	0.5	C	2	3
C-AB	0.06	5.42	0.1	0.5	A	32	47
C-A						294	440
A-B						5	7
A-C						392	588

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	573	0.030	17	0.0	0.0	6.467	A
B-A	2	0.38	257	0.006	1	0.0	0.0	14.063	B
C-AB	23	6	686	0.033	23	0.0	0.0	5.423	A
C-A	244	61			244				
A-B	4	0.94			4				
A-C	321	80			321				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	20	5	555	0.036	20	0.0	0.0	6.728	A
B-A	2	0.45	241	0.007	2	0.0	0.0	15.079	C
C-AB	30	7	707	0.042	30	0.0	0.1	5.325	A
C-A	289	72			289				
A-B	4	1			4				
A-C	384	96			384				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	530	0.047	25	0.0	0.0	7.119	A
B-A	2	0.55	217	0.010	2	0.0	0.0	16.751	C
C-AB	42	11	738	0.057	42	0.1	0.1	5.187	A
C-A	348	87			348				
A-B	6	1			6				
A-C	470	117			470				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	25	6	530	0.047	25	0.0	0.0	7.119	A
B-A	2	0.55	217	0.010	2	0.0	0.0	16.753	C
C-AB	42	11	738	0.057	42	0.1	0.1	5.178	A
C-A	348	87			348				
A-B	6	1			6				
A-C	470	117			470				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	20	5	555	0.036	20	0.0	0.0	6.732	A
B-A	2	0.45	241	0.007	2	0.0	0.0	15.084	C
C-AB	30	7	707	0.042	30	0.1	0.1	5.302	A
C-A	289	72			289				
A-B	4	1			4				
A-C	384	96			384				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	17	4	573	0.030	17	0.0	0.0	6.474	A
B-A	2	0.38	257	0.006	2	0.0	0.0	14.067	B
C-AB	23	6	686	0.033	23	0.1	0.0	5.415	A
C-A	244	61			244				
A-B	4	0.94			4				
A-C	321	80			321				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	399	100.000
B - B1387 South East		ONE HOUR	✓	26	100.000
C - A12 South West		ONE HOUR	✓	439	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	33	366
	B - B1387 South East	5	0	21
	C - A12 South West	418	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	6	9
	B - B1387 South East	40	0	5
	C - A12 South West	9	10	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	6.08	0.0	0.5	A	19	28
B-A	0.02	15.47	0.0	0.5	C	5	7
C-AB	0.06	4.93	0.1	0.6	A	39	58
C-A						364	547
A-B						30	45
A-C						336	504

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	15	4	658	0.023	15	0.0	0.0	5.604	A
B-A	4	1	283	0.013	4	0.0	0.0	12.911	B
C-AB	27	7	758	0.036	27	0.0	0.0	4.923	A
C-A	304	76			304				
A-B	25	6			25				
A-C	276	69			276				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	18	5	640	0.029	18	0.0	0.0	5.794	A
B-A	4	1	264	0.017	4	0.0	0.0	13.875	B
C-AB	36	9	787	0.046	36	0.0	0.1	4.797	A
C-A	359	90			359				
A-B	30	7			30				
A-C	329	82			329				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	615	0.037	23	0.0	0.0	6.080	A
B-A	6	1	238	0.023	5	0.0	0.0	15.471	C
C-AB	52	13	829	0.063	52	0.1	0.1	4.637	A
C-A	431	108			431				
A-B	36	9			36				
A-C	403	101			403				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	615	0.037	23	0.0	0.0	6.080	A
B-A	6	1	238	0.023	6	0.0	0.0	15.475	C
C-AB	52	13	829	0.063	52	0.1	0.1	4.638	A
C-A	431	108			431				
A-B	36	9			36				
A-C	403	101			403				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	18	5	639	0.029	18	0.0	0.0	5.796	A
B-A	4	1	264	0.017	5	0.0	0.0	13.880	B
C-AB	36	9	787	0.046	37	0.1	0.1	4.797	A
C-A	359	90			359				
A-B	30	7			30				
A-C	329	82			329				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	15	4	658	0.023	15	0.0	0.0	5.606	A
B-A	4	1	283	0.013	4	0.0	0.0	12.914	B
C-AB	27	7	758	0.036	27	0.1	0.0	4.926	A
C-A	304	76			304				
A-B	25	6			25				
A-C	276	69			276				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.10	0.03	0.27	0.48	0.64			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	390	100.000
B - B1387 South East		ONE HOUR	✓	60	100.000
C - A12 South West		ONE HOUR	✓	522	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	14	376
	B - B1387 South East	23	0	37
	C - A12 South West	494	29	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	7	6
	B - B1387 South East	9	0	11
	C - A12 South West	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	6.96	0.1	0.5	A	34	51
B-A	0.08	12.77	0.1	0.5	B	21	32
C-AB	0.09	4.57	0.2	1.1	A	57	85
C-A						423	634
A-B						12	19
A-C						345	518

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	600	0.046	28	0.0	0.0	6.283	A
B-A	17	4	370	0.047	17	0.0	0.0	10.192	B
C-AB	39	10	827	0.047	39	0.0	0.1	4.563	A
C-A	354	89			354				
A-B	10	3			10				
A-C	283	71			283				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	33	8	583	0.057	33	0.0	0.1	6.552	A
B-A	21	5	344	0.060	21	0.0	0.1	11.141	B
C-AB	53	13	863	0.061	53	0.1	0.1	4.438	A
C-A	417	104			417				
A-B	12	3			12				
A-C	338	85			338				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	558	0.073	41	0.1	0.1	6.961	A
B-A	25	6	307	0.082	25	0.1	0.1	12.765	B
C-AB	78	19	915	0.085	78	0.1	0.2	4.296	A
C-A	497	124			497				
A-B	15	4			15				
A-C	414	104			414				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	558	0.073	41	0.1	0.1	6.963	A
B-A	25	6	307	0.082	25	0.1	0.1	12.772	B
C-AB	78	19	916	0.085	78	0.2	0.2	4.301	A
C-A	497	124			497				
A-B	15	4			15				
A-C	414	104			414				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	33	8	582	0.057	33	0.1	0.1	6.557	A
B-A	21	5	344	0.060	21	0.1	0.1	11.146	B
C-AB	53	13	864	0.062	53	0.2	0.1	4.452	A
C-A	416	104			416				
A-B	12	3			12				
A-C	338	85			338				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	28	7	600	0.046	28	0.1	0.0	6.294	A
B-A	17	4	370	0.047	17	0.1	0.0	10.202	B
C-AB	39	10	828	0.047	39	0.1	0.1	4.572	A
C-A	354	89			354				
A-B	10	3			10				
A-C	283	71			283				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.10	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.16	0.03	0.27	0.49	1.06			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J37	A12 / B1387	T-Junction	Two-way	0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North East		ONE HOUR	✓	351	100.000
B - B1387 South East		ONE HOUR	✓	28	100.000
C - A12 South West		ONE HOUR	✓	440	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	4	347
	B - B1387 South East	7	0	21
	C - A12 South West	407	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North East	B - B1387 South East	C - A12 South West
From	A - A12 North East	0	0	1
	B - B1387 South East	0	0	0
	C - A12 South West	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	5.61	0.0	0.5	A	19	29
B-A	0.02	10.50	0.0	0.5	B	6	10
C-AB	0.09	4.75	0.2	1.1	A	56	84
C-A						348	522
A-B						4	6
A-C						318	477

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	704	0.022	16	0.0	0.0	5.232	A
B-A	5	1	408	0.013	5	0.0	0.0	8.946	A
C-AB	40	10	798	0.050	39	0.0	0.1	4.745	A
C-A	291	73			291				
A-B	3	0.75			3				
A-C	261	65			261				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	19	5	687	0.027	19	0.0	0.0	5.384	A
B-A	6	2	384	0.016	6	0.0	0.0	9.538	A
C-AB	53	13	826	0.064	53	0.1	0.1	4.650	A
C-A	343	86			343				
A-B	4	0.90			4				
A-C	312	78			312				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	665	0.035	23	0.0	0.0	5.608	A
B-A	8	2	351	0.022	8	0.0	0.0	10.495	B
C-AB	74	19	867	0.086	74	0.1	0.2	4.539	A
C-A	410	102			410				
A-B	4	1			4				
A-C	382	95			382				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	23	6	665	0.035	23	0.0	0.0	5.609	A
B-A	8	2	351	0.022	8	0.0	0.0	10.496	B
C-AB	75	19	867	0.086	75	0.2	0.2	4.546	A
C-A	410	102			410				
A-B	4	1			4				
A-C	382	95			382				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	19	5	687	0.028	19	0.0	0.0	5.385	A
B-A	6	2	384	0.016	6	0.0	0.0	9.540	A
C-AB	53	13	826	0.064	53	0.2	0.1	4.662	A
C-A	343	86			343				
A-B	4	0.90			4				
A-C	312	78			312				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	16	4	704	0.023	16	0.0	0.0	5.233	A
B-A	5	1	408	0.013	5	0.0	0.0	8.949	A
C-AB	40	10	798	0.050	40	0.1	0.1	4.753	A
C-A	291	73			291				
A-B	3	0.75			3				
A-C	261	65			261				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.11	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.16	0.03	0.27	0.49	1.07			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 201125 J38_Model_CV_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J38\Model
Report generation date: 18/12/2020 11:57:05

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-AC	0.1	0.5	10.05	0.07	B	0.3	1.2	15.65	0.20	C	0.5	1.9	17.84	0.32	C	0.8	3.9	21.92	0.46	C	0.4	1.8	15.40	0.30	C
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.20	0.01	A	0.0	0.5	4.74	0.01	A	0.0	0.5	4.90	0.01	A
2023 Reference Case																									
Stream B-AC	0.1	0.5	10.28	0.09	B	0.3	1.4	16.71	0.24	C	0.5	2.1	18.78	0.33	C	0.9	4.4	23.82	0.49	C	0.7	3.5	19.12	0.43	C
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.22	0.01	A	0.0	0.5	4.73	0.01	A	0.0	0.5	4.87	0.01	A
2023 Early Years																									
Stream B-AC	0.1	0.5	11.02	0.13	B	0.7	3.5	25.32	0.42	D	0.6	2.8	20.85	0.38	C	1.2	5.6	27.49	0.55	D	2.3	11.4	37.91	0.71	E
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.26	0.01	A	0.0	0.5	4.75	0.01	A	0.0	0.5	4.66	0.01	A
2028 Reference Case																									
Stream B-AC	0.1	0.5	10.44	0.09	B	0.3	1.1	17.34	0.26	C	0.5	2.4	19.52	0.35	C	1.0	4.6	25.07	0.50	D	0.8	3.6	19.91	0.44	C
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.10	0.01	A	0.0	0.5	4.72	0.01	A	0.0	0.5	4.86	0.01	A
2028 Peak Construction																									
Stream B-AC	0.1	0.5	12.48	0.11	B	0.5	1.9	22.48	0.32	C	0.6	2.8	21.40	0.37	C	1.5	7.2	34.05	0.61	D	0.9	4.1	22.43	0.48	C
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	5.10	0.01	A	0.0	0.5	4.46	0.01	A	0.0	0.5	4.66	0.01	A
2034 Reference Case																									
Stream B-AC	0.1	0.5	10.58	0.09	B	0.4	1.2	17.79	0.27	C	0.6	2.9	20.71	0.38	C	1.2	5.8	29.57	0.56	D	0.3	1.1	15.69	0.26	C
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	4.92	0.01	A	0.0	0.5	4.63	0.01	A	0.0	0.5	4.90	0.01	A
2034 Operational Led																									
Stream B-AC	0.1	0.5	10.54	0.09	B	0.4	1.2	17.77	0.27	C	0.6	2.8	20.55	0.38	C	1.2	5.7	29.47	0.56	D	0.3	1.1	15.66	0.26	C
Stream C-AB	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	4.91	0.01	A	0.0	0.5	4.63	0.01	A	0.0	0.5	4.89	0.01	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

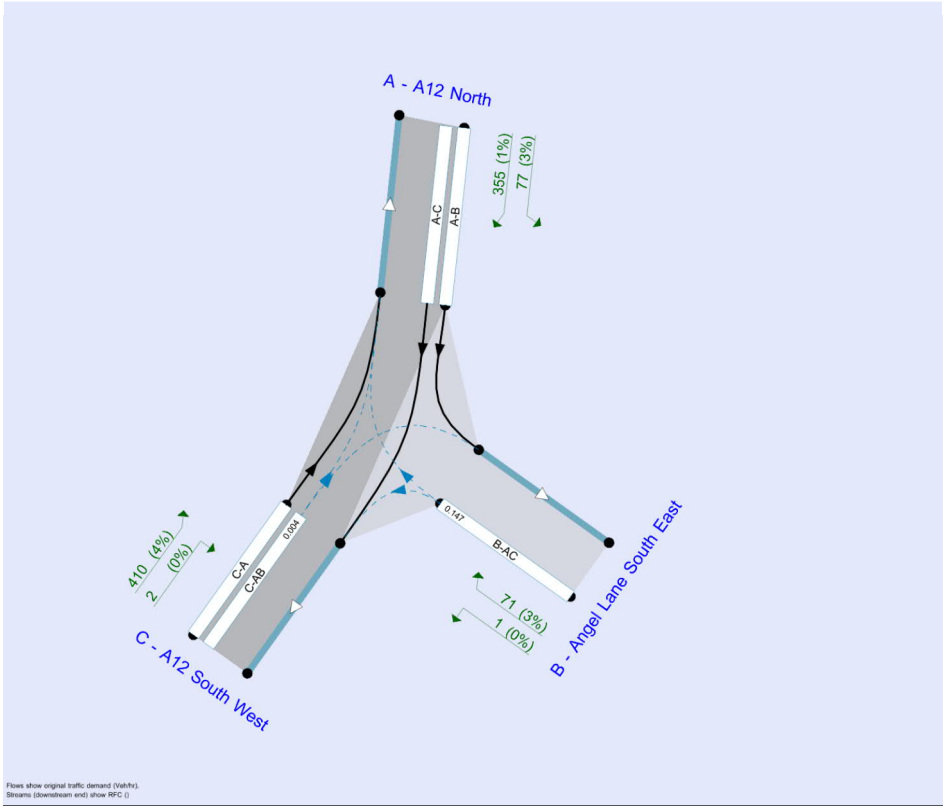
File Description

Title	A12 / B1125 Angel Lane
Location	52.321370, 1.598029

Site number	38
Date	01/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 North		Major
B	Angel Lane South East		Minor
C	A12 South West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 South West	5.50			50.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Angel Lane South East	One lane	3.72	15	75

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-50

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J38	B-A	557	0.104	0.262	0.165	0.374
J38	B-C	720	0.113	0.285	-	-
J38	C-B	603	0.239	0.239	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	308	100.000
B - Angel Lane South East		ONE HOUR	✓	25	100.000
C - A12 South West		ONE HOUR	✓	96	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	58	250
	B - Angel Lane South East	25	0	0
	C - A12 South West	96	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	7	8
	B - Angel Lane South East	4	0	0
	C - A12 South West	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	10.05	0.1	0.5	B	23	34
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						88	132
A-B						53	80
A-C						229	344

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	19	5	418	0.045	19	0.0	0.0	9.015	A
C-AB	0	0	504	0.000	0	0.0	0.0	0.000	A
C-A	72	18			72				
A-B	44	11			44				
A-C	188	47			188				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	6	404	0.056	22	0.0	0.1	9.424	A
C-AB	0	0	493	0.000	0	0.0	0.0	0.000	A
C-A	86	22			86				
A-B	52	13			52				
A-C	225	56			225				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	386	0.071	27	0.1	0.1	10.043	B
C-AB	0	0	478	0.000	0	0.0	0.0	0.000	A
C-A	106	26			106				
A-B	64	16			64				
A-C	275	69			275				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	386	0.071	28	0.1	0.1	10.048	B
C-AB	0	0	478	0.000	0	0.0	0.0	0.000	A
C-A	106	26			106				
A-B	64	16			64				
A-C	275	69			275				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	22	6	404	0.056	23	0.1	0.1	9.429	A
C-AB	0	0	493	0.000	0	0.0	0.0	0.000	A
C-A	86	22			86				
A-B	52	13			52				
A-C	225	56			225				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	19	5	418	0.045	19	0.1	0.0	9.024	A
C-AB	0	0	504	0.000	0	0.0	0.0	0.000	A
C-A	72	18			72				
A-B	44	11			44				
A-C	188	47			188				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	607	100.000
B - Angel Lane South East		ONE HOUR	✓	53	100.000
C - A12 South West		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	163	444
	B - Angel Lane South East	51	0	2
	C - A12 South West	262	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	9
	B - Angel Lane South East	4	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	15.65	0.3	1.2	C	49	73
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						240	361
A-B						150	224
A-C						407	611

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	40	10	353	0.113	39	0.0	0.1	11.460	B
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	197	49			197				
A-B	123	31			123				
A-C	334	84			334				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	48	12	326	0.146	47	0.1	0.2	12.922	B
C-AB	0	0	439	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	147	37			147				
A-C	399	100			399				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	58	15	288	0.202	58	0.2	0.2	15.608	C
C-AB	0	0	408	0.000	0	0.0	0.0	0.000	A
C-A	288	72			288				
A-B	179	45			179				
A-C	489	122			489				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	58	15	288	0.202	58	0.2	0.3	15.651	C
C-AB	0	0	408	0.000	0	0.0	0.0	0.000	A
C-A	288	72			288				
A-B	179	45			179				
A-C	489	122			489				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	48	12	326	0.146	48	0.3	0.2	12.969	B
C-AB	0	0	439	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	147	37			147				
A-C	399	100			399				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	40	10	353	0.113	40	0.2	0.1	11.512	B
C-AB	0	0	460	0.000	0	0.0	0.0	0.000	A
C-A	197	49			197				
A-B	123	31			123				
A-C	334	84			334				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.30	0.86	1.21			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	476	100.000
B - Angel Lane South East		ONE HOUR	✓	85	100.000
C - A12 South West		ONE HOUR	✓	365	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	118	358
	B - Angel Lane South East	85	0	0
	C - A12 South West	363	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	9
	B - Angel Lane South East	4	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	17.84	0.5	1.9	C	78	117
C-AB	0.01	5.20	0.0	0.5	A	3	5
C-A						331	497
A-B						108	162
A-C						329	493

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	357	0.179	63	0.0	0.2	12.230	B
C-AB	2	0.62	698	0.004	2	0.0	0.0	5.177	A
C-A	272	68			272				
A-B	89	22			89				
A-C	270	67			270				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	76	19	331	0.231	76	0.2	0.3	14.109	B
C-AB	3	0.82	720	0.005	3	0.0	0.0	5.011	A
C-A	325	81			325				
A-B	106	27			106				
A-C	322	80			322				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	23	295	0.317	93	0.3	0.5	17.733	C
C-AB	5	1	752	0.006	5	0.0	0.0	4.801	A
C-A	397	99			397				
A-B	130	32			130				
A-C	394	99			394				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	23	295	0.317	94	0.5	0.5	17.838	C
C-AB	5	1	752	0.006	5	0.0	0.0	4.818	A
C-A	397	99			397				
A-B	130	32			130				
A-C	394	99			394				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	76	19	331	0.231	77	0.5	0.3	14.215	B
C-AB	3	0.82	720	0.005	3	0.0	0.0	5.049	A
C-A	325	81			325				
A-B	106	27			106				
A-C	322	80			322				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	357	0.179	64	0.3	0.2	12.329	B
C-AB	2	0.62	698	0.004	2	0.0	0.0	5.198	A
C-A	272	68			272				
A-B	89	22			89				
A-C	270	67			270				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.03	0.31	1.37	1.93			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	2.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	408	100.000
B - Angel Lane South East		ONE HOUR	✓	127	100.000
C - A12 South West		ONE HOUR	✓	465	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	74	334
	B - Angel Lane South East	125	0	2
	C - A12 South West	463	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	7
	B - Angel Lane South East	1	0	0
	C - A12 South West	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	21.92	0.8	3.9	C	117	175
C-AB	0.01	4.74	0.0	0.5	A	4	6
C-A						423	634
A-B						68	102
A-C						306	460

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	96	24	367	0.260	94	0.0	0.3	13.116	B
C-AB	3	0.69	765	0.004	3	0.0	0.0	4.723	A
C-A	347	87			347				
A-B	56	14			56				
A-C	251	63			251				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	114	29	341	0.335	114	0.3	0.5	15.806	C
C-AB	4	0.94	800	0.005	4	0.0	0.0	4.512	A
C-A	414	104			414				
A-B	67	17			67				
A-C	300	75			300				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	140	35	304	0.460	139	0.5	0.8	21.600	C
C-AB	6	1	851	0.006	6	0.0	0.0	4.250	A
C-A	506	127			506				
A-B	81	20			81				
A-C	368	92			368				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	140	35	304	0.460	140	0.8	0.8	21.915	C
C-AB	6	1	851	0.006	6	0.0	0.0	4.259	A
C-A	506	127			506				
A-B	81	20			81				
A-C	368	92			368				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	114	29	341	0.335	115	0.8	0.5	16.067	C
C-AB	4	0.94	800	0.005	4	0.0	0.0	4.534	A
C-A	414	104			414				
A-B	67	17			67				
A-C	300	75			300				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	96	24	367	0.260	96	0.5	0.4	13.310	B
C-AB	3	0.69	765	0.004	3	0.0	0.0	4.736	A
C-A	347	87			347				
A-B	56	14			56				
A-C	251	63			251				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.82	0.03	0.27	0.82	1.41			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.83	0.03	0.29	1.48	3.90			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.05	0.46	1.29	1.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.32	1.04	1.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	361	100.000
B - Angel Lane South East		ONE HOUR	✓	91	100.000
C - A12 South West		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	71	290
	B - Angel Lane South East	90	0	1
	C - A12 South West	387	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	1
	B - Angel Lane South East	2	0	0
	C - A12 South West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.30	15.40	0.4	1.8	C	84	125
C-AB	0.01	4.90	0.0	0.5	A	3	5
C-A						353	530
A-B						65	98
A-C						266	399

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	385	0.178	68	0.0	0.2	11.299	B
C-AB	2	0.62	738	0.003	2	0.0	0.0	4.895	A
C-A	290	73			290				
A-B	53	13			53				
A-C	218	55			218				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	82	20	364	0.225	82	0.2	0.3	12.739	B
C-AB	3	0.82	766	0.004	3	0.0	0.0	4.711	A
C-A	346	87			346				
A-B	64	16			64				
A-C	261	65			261				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	100	25	334	0.300	100	0.3	0.4	15.334	C
C-AB	5	1	808	0.006	5	0.0	0.0	4.477	A
C-A	424	106			424				
A-B	78	20			78				
A-C	319	80			319				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	100	25	334	0.300	100	0.4	0.4	15.400	C
C-AB	5	1	808	0.006	5	0.0	0.0	4.485	A
C-A	424	106			424				
A-B	78	20			78				
A-C	319	80			319				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	82	20	364	0.225	82	0.4	0.3	12.813	B
C-AB	3	0.83	766	0.004	3	0.0	0.0	4.725	A
C-A	346	87			346				
A-B	64	16			64				
A-C	261	65			261				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	385	0.178	69	0.3	0.2	11.379	B
C-AB	2	0.62	738	0.003	2	0.0	0.0	4.905	A
C-A	290	73			290				
A-B	53	13			53				
A-C	218	55			218				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.03	0.31	1.32	1.77			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	336	100.000
B - Angel Lane South East		ONE HOUR	✓	31	100.000
C - A12 South West		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	78	258
	B - Angel Lane South East	31	0	0
	C - A12 South West	99	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	10.28	0.1	0.5	B	28	42
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						91	136
A-B						72	107
A-C						236	355

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	23	6	418	0.055	23	0.0	0.1	9.115	A
C-AB	0	0	501	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	59	15			59				
A-C	194	49			194				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	28	7	404	0.068	27	0.1	0.1	9.573	A
C-AB	0	0	490	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	70	18			70				
A-C	232	58			232				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	8	384	0.088	34	0.1	0.1	10.274	B
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	86	21			86				
A-C	284	71			284				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	8	384	0.088	34	0.1	0.1	10.279	B
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	86	21			86				
A-C	284	71			284				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	404	0.068	28	0.1	0.1	9.581	A
C-AB	0	0	490	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	70	18			70				
A-C	232	58			232				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	23	6	418	0.055	23	0.1	0.1	9.126	A
C-AB	0	0	501	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	59	15			59				
A-C	194	49			194				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	597	100.000
B - Angel Lane South East		ONE HOUR	✓	63	100.000
C - A12 South West		ONE HOUR	✓	293	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	438
	B - Angel Lane South East	61	0	2
	C - A12 South West	293	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	16.71	0.3	1.4	C	58	86
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						269	403
A-B						146	219
A-C						402	603

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	351	0.135	47	0.0	0.2	11.801	B
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	220	55			220				
A-B	120	30			120				
A-C	330	82			330				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	56	14	323	0.175	56	0.2	0.2	13.473	B
C-AB	0	0	441	0.000	0	0.0	0.0	0.000	A
C-A	263	66			263				
A-B	143	36			143				
A-C	394	98			394				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	285	0.243	69	0.2	0.3	16.644	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	322	81			322				
A-B	176	44			176				
A-C	482	121			482				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	285	0.243	69	0.3	0.3	16.706	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	322	81			322				
A-B	176	44			176				
A-C	482	121			482				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	56	14	323	0.175	57	0.3	0.2	13.536	B
C-AB	0	0	441	0.000	0	0.0	0.0	0.000	A
C-A	263	66			263				
A-B	143	36			143				
A-C	394	98			394				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	351	0.135	47	0.2	0.2	11.865	B
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	220	55			220				
A-B	120	30			120				
A-C	330	82			330				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.31	1.12	1.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	522	100.000
B - Angel Lane South East		ONE HOUR	✓	86	100.000
C - A12 South West		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	151	371
	B - Angel Lane South East	86	0	0
	C - A12 South West	372	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	10
	B - Angel Lane South East	4	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	18.78	0.5	2.1	C	78	118
C-AB	0.01	5.22	0.0	0.5	A	4	5
C-A						340	510
A-B						139	208
A-C						340	510

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	350	0.184	63	0.0	0.2	12.522	B
C-AB	3	0.63	695	0.004	3	0.0	0.0	5.196	A
C-A	279	70			279				
A-B	114	28			114				
A-C	279	70			279				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	77	19	323	0.238	77	0.2	0.3	14.580	B
C-AB	3	0.84	717	0.005	3	0.0	0.0	5.029	A
C-A	333	83			333				
A-B	136	34			136				
A-C	333	83			333				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	24	286	0.330	93	0.3	0.5	18.656	C
C-AB	5	1	750	0.007	5	0.0	0.0	4.817	A
C-A	407	102			407				
A-B	167	42			167				
A-C	408	102			408				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	94	24	286	0.330	94	0.5	0.5	18.783	C
C-AB	5	1	750	0.007	5	0.0	0.0	4.835	A
C-A	407	102			407				
A-B	167	42			167				
A-C	408	102			408				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	77	19	323	0.238	78	0.5	0.3	14.699	B
C-AB	3	0.85	717	0.005	3	0.0	0.0	5.070	A
C-A	333	83			333				
A-B	136	34			136				
A-C	333	83			333				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	64	16	350	0.184	65	0.3	0.2	12.630	B
C-AB	3	0.63	695	0.004	3	0.0	0.0	5.219	A
C-A	279	70			279				
A-B	114	28			114				
A-C	279	70			279				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.03	0.26	0.48	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.03	0.31	1.41	2.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	2.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	428	100.000
B - Angel Lane South East		ONE HOUR	✓	131	100.000
C - A12 South West		ONE HOUR	✓	475	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	77	351
	B - Angel Lane South East	129	0	2
	C - A12 South West	473	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	8
	B - Angel Lane South East	1	0	0
	C - A12 South West	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.49	23.82	0.9	4.4	C	120	180
C-AB	0.01	4.73	0.0	0.5	A	4	6
C-A						432	647
A-B						70	105
A-C						322	484

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	99	25	361	0.273	97	0.0	0.4	13.551	B
C-AB	3	0.70	766	0.004	3	0.0	0.0	4.716	A
C-A	355	89			355				
A-B	58	14			58				
A-C	265	66			265				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	118	29	334	0.353	117	0.4	0.5	16.578	C
C-AB	4	0.96	802	0.005	4	0.0	0.0	4.502	A
C-A	423	106			423				
A-B	69	17			69				
A-C	316	79			316				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	144	36	295	0.489	143	0.5	0.9	23.388	C
C-AB	6	1	853	0.007	6	0.0	0.0	4.237	A
C-A	517	129			517				
A-B	84	21			84				
A-C	387	97			387				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	144	36	295	0.489	144	0.9	0.9	23.817	C
C-AB	6	1	853	0.007	6	0.0	0.0	4.247	A
C-A	517	129			517				
A-B	84	21			84				
A-C	387	97			387				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	118	29	334	0.353	119	0.9	0.6	16.911	C
C-AB	4	0.96	802	0.005	4	0.0	0.0	4.527	A
C-A	423	106			423				
A-B	69	17			69				
A-C	316	79			316				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	99	25	361	0.273	99	0.6	0.4	13.776	B
C-AB	3	0.71	766	0.004	3	0.0	0.0	4.731	A
C-A	355	89			355				
A-B	58	14			58				
A-C	265	66			265				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.91	0.03	0.27	0.91	1.89			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.93	0.03	0.29	1.05	4.36			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.05	0.49	1.33	1.43			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.34	1.14	1.33			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	2.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	368	100.000
B - Angel Lane South East		ONE HOUR	✓	129	100.000
C - A12 South West		ONE HOUR	✓	403	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	73	296
	B - Angel Lane South East	128	0	1
	C - A12 South West	401	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	2
	B - Angel Lane South East	2	0	0
	C - A12 South West	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	19.12	0.7	3.5	C	118	178
C-AB	0.01	4.87	0.0	0.5	A	4	5
C-A						366	549
A-B						67	100
A-C						271	407

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	384	0.253	96	0.0	0.3	12.444	B
C-AB	3	0.63	743	0.003	3	0.0	0.0	4.861	A
C-A	301	75			301				
A-B	55	14			55				
A-C	223	56			223				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	116	29	361	0.321	115	0.3	0.5	14.612	B
C-AB	3	0.84	773	0.004	3	0.0	0.0	4.671	A
C-A	359	90			359				
A-B	65	16			65				
A-C	266	66			266				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	142	35	330	0.430	141	0.5	0.7	18.920	C
C-AB	5	1	816	0.006	5	0.0	0.0	4.432	A
C-A	439	110			439				
A-B	80	20			80				
A-C	326	81			326				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	142	35	330	0.430	142	0.7	0.7	19.120	C
C-AB	5	1	816	0.006	5	0.0	0.0	4.438	A
C-A	439	110			439				
A-B	80	20			80				
A-C	326	81			326				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	116	29	361	0.321	117	0.7	0.5	14.798	B
C-AB	3	0.84	773	0.004	3	0.0	0.0	4.689	A
C-A	359	90			359				
A-B	65	16			65				
A-C	266	66			266				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	384	0.253	98	0.5	0.3	12.609	B
C-AB	3	0.64	743	0.003	3	0.0	0.0	4.871	A
C-A	301	75			301				
A-B	55	14			55				
A-C	223	56			223				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.73	0.03	0.26	0.73	0.73			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.74	0.03	0.29	1.40	3.46			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.04	0.43	1.26	1.38			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.30	0.86	1.18			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	417	100.000
B - Angel Lane South East		ONE HOUR	✓	43	100.000
C - A12 South West		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	136	281
	B - Angel Lane South East	43	0	0
	C - A12 South West	99	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	8
	B - Angel Lane South East	2	0	0
	C - A12 South West	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	11.02	0.1	0.5	B	39	59
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						91	136
A-B						125	187
A-C						258	386

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	412	0.078	32	0.0	0.1	9.461	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	102	26			102				
A-C	211	53			211				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	38	10	396	0.097	38	0.1	0.1	10.064	B
C-AB	0	0	473	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	122	31			122				
A-C	252	63			252				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	374	0.126	47	0.1	0.1	11.011	B
C-AB	0	0	453	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	150	37			150				
A-C	309	77			309				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	374	0.126	47	0.1	0.1	11.020	B
C-AB	0	0	453	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	150	37			150				
A-C	309	77			309				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	38	10	396	0.097	38	0.1	0.1	10.078	B
C-AB	0	0	473	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	122	31			122				
A-C	252	63			252				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	32	8	412	0.078	32	0.1	0.1	9.481	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	102	26			102				
A-C	211	53			211				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	791	100.000
B - Angel Lane South East		ONE HOUR	✓	94	100.000
C - A12 South West		ONE HOUR	✓	290	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	259	532
	B - Angel Lane South East	92	0	2
	C - A12 South West	290	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	11
	B - Angel Lane South East	2	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	25.32	0.7	3.5	D	86	129
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						266	399
A-B						238	357
A-C						488	732

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	71	18	325	0.217	69	0.0	0.3	14.011	B
C-AB	0	0	427	0.000	0	0.0	0.0	0.000	A
C-A	218	55			218				
A-B	195	49			195				
A-C	400	100			400				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	84	21	292	0.289	84	0.3	0.4	17.267	C
C-AB	0	0	398	0.000	0	0.0	0.0	0.000	A
C-A	261	65			261				
A-B	233	58			233				
A-C	478	120			478				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	103	26	245	0.421	102	0.4	0.7	24.933	C
C-AB	0	0	359	0.000	0	0.0	0.0	0.000	A
C-A	319	80			319				
A-B	286	71			286				
A-C	586	146			586				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	103	26	245	0.421	103	0.7	0.7	25.317	D
C-AB	0	0	359	0.000	0	0.0	0.0	0.000	A
C-A	319	80			319				
A-B	286	71			286				
A-C	586	146			586				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	84	21	292	0.289	85	0.7	0.4	17.547	C
C-AB	0	0	398	0.000	0	0.0	0.0	0.000	A
C-A	261	65			261				
A-B	233	58			233				
A-C	478	120			478				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	71	18	325	0.217	71	0.4	0.3	14.187	B
C-AB	0	0	427	0.000	0	0.0	0.0	0.000	A
C-A	218	55			218				
A-B	195	49			195				
A-C	400	100			400				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.03	0.27	0.70	1.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.03	0.30	1.23	3.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.03	0.35	1.14	1.32			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.27	0.49	0.90			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	546	100.000
B - Angel Lane South East		ONE HOUR	✓	96	100.000
C - A12 South West		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	153	393
	B - Angel Lane South East	96	0	0
	C - A12 South West	371	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	11
	B - Angel Lane South East	3	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	20.85	0.6	2.8	C	88	131
C-AB	0.01	5.26	0.0	0.5	A	4	5
C-A						339	508
A-B						141	211
A-C						360	541

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	345	0.208	71	0.0	0.3	13.078	B
C-AB	3	0.63	689	0.004	3	0.0	0.0	5.241	A
C-A	278	70			278				
A-B	115	29			115				
A-C	296	74			296				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	86	21	317	0.271	85	0.3	0.4	15.528	C
C-AB	3	0.85	710	0.005	3	0.0	0.0	5.076	A
C-A	332	83			332				
A-B	138	34			138				
A-C	353	88			353				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	105	26	278	0.379	104	0.4	0.6	20.649	C
C-AB	5	1	742	0.007	5	0.0	0.0	4.867	A
C-A	406	102			406				
A-B	169	42			169				
A-C	433	108			433				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	105	26	278	0.379	105	0.6	0.6	20.849	C
C-AB	5	1	742	0.007	5	0.0	0.0	4.885	A
C-A	406	102			406				
A-B	169	42			169				
A-C	433	108			433				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	86	21	317	0.271	87	0.6	0.4	15.704	C
C-AB	3	0.85	710	0.005	3	0.0	0.0	5.120	A
C-A	332	83			332				
A-B	138	34			138				
A-C	353	88			353				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	345	0.208	72	0.4	0.3	13.220	B
C-AB	3	0.63	689	0.004	3	0.0	0.0	5.263	A
C-A	278	70			278				
A-B	115	29			115				
A-C	296	74			296				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.03	0.26	0.59	0.59			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.03	0.30	1.49	2.82			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.29	0.74	1.12			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	3.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	429	100.000
B - Angel Lane South East		ONE HOUR	✓	147	100.000
C - A12 South West		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	79	350
	B - Angel Lane South East	145	0	2
	C - A12 South West	471	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	10
	B - Angel Lane South East	1	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.55	27.49	1.2	5.6	D	135	202
C-AB	0.01	4.75	0.0	0.5	A	4	6
C-A						430	645
A-B						72	108
A-C						322	482

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	111	28	360	0.308	109	0.0	0.4	14.267	B
C-AB	3	0.70	763	0.004	3	0.0	0.0	4.737	A
C-A	353	88			353				
A-B	59	15			59				
A-C	264	66			264				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	132	33	331	0.399	131	0.4	0.6	17.918	C
C-AB	4	1	798	0.005	4	0.0	0.0	4.524	A
C-A	421	105			421				
A-B	71	18			71				
A-C	315	79			315				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	162	40	292	0.554	160	0.6	1.2	26.733	D
C-AB	6	1	849	0.007	6	0.0	0.0	4.260	A
C-A	515	129			515				
A-B	87	22			87				
A-C	386	96			386				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	162	40	292	0.554	162	1.2	1.2	27.488	D
C-AB	6	1	848	0.007	6	0.0	0.0	4.271	A
C-A	515	129			515				
A-B	87	22			87				
A-C	386	96			386				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	132	33	331	0.399	134	1.2	0.7	18.447	C
C-AB	4	1	798	0.005	4	0.0	0.0	4.554	A
C-A	421	105			421				
A-B	71	18			71				
A-C	315	79			315				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	111	28	360	0.308	112	0.7	0.5	14.573	B
C-AB	3	0.71	762	0.004	3	0.0	0.0	4.753	A
C-A	353	88			353				
A-B	59	15			59				
A-C	264	66			264				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.18	0.92	1.38	1.44			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.17	0.03	0.29	1.17	4.58			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.20	0.03	0.30	1.33	5.55			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.05	0.53	1.49	1.59			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.04	0.37	1.31	1.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	7.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	368	100.000
B - Angel Lane South East		ONE HOUR	✓	204	100.000
C - A12 South West		ONE HOUR	✓	471	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	76	293
	B - Angel Lane South East	203	0	1
	C - A12 South West	469	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	3
	B - Angel Lane South East	1	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.71	37.91	2.3	11.4	E	187	281
C-AB	0.01	4.66	0.0	0.5	A	4	6
C-A						428	642
A-B						69	104
A-C						269	403

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	154	38	376	0.408	151	0.0	0.7	15.799	C
C-AB	3	0.69	777	0.004	3	0.0	0.0	4.649	A
C-A	352	88			352				
A-B	57	14			57				
A-C	220	55			220				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	183	46	352	0.521	182	0.7	1.0	21.003	C
C-AB	4	0.93	814	0.005	4	0.0	0.0	4.436	A
C-A	420	105			420				
A-B	68	17			68				
A-C	263	66			263				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	225	56	318	0.706	220	1.0	2.1	35.327	E
C-AB	5	1	867	0.006	5	0.0	0.0	4.171	A
C-A	513	128			513				
A-B	83	21			83				
A-C	322	81			322				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	225	56	318	0.706	224	2.1	2.3	37.906	E
C-AB	5	1	867	0.006	5	0.0	0.0	4.180	A
C-A	513	128			513				
A-B	83	21			83				
A-C	322	81			322				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	183	46	352	0.521	188	2.3	1.1	22.513	C
C-AB	4	0.94	814	0.005	4	0.0	0.0	4.455	A
C-A	420	105			420				
A-B	68	17			68				
A-C	263	66			263				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	154	38	376	0.408	155	1.1	0.7	16.420	C
C-AB	3	0.69	777	0.004	3	0.0	0.0	4.660	A
C-A	352	88			352				
A-B	57	14			57				
A-C	220	55			220				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.67	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.04	0.14	1.01	1.56	1.86			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.14	0.03	0.35	4.94	11.24			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.25	0.03	0.31	3.42	11.35			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.14	0.04	0.45	2.78	4.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.04	0.35	1.67	2.96			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	351	100.000
B - Angel Lane South East		ONE HOUR	✓	32	100.000
C - A12 South West		ONE HOUR	✓	103	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	81	270
	B - Angel Lane South East	32	0	0
	C - A12 South West	103	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	10.44	0.1	0.5	B	29	44
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						95	142
A-B						74	111
A-C						247	371

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	415	0.057	24	0.0	0.1	9.194	A
C-AB	0	0	500	0.000	0	0.0	0.0	0.000	A
C-A	78	19			78				
A-B	61	15			61				
A-C	203	51			203				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	28	7	400	0.071	28	0.1	0.1	9.684	A
C-AB	0	0	488	0.000	0	0.0	0.0	0.000	A
C-A	93	23			93				
A-B	73	18			73				
A-C	242	61			242				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	380	0.092	35	0.1	0.1	10.435	B
C-AB	0	0	471	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	89	22			89				
A-C	297	74			297				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	380	0.092	35	0.1	0.1	10.439	B
C-AB	0	0	471	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	89	22			89				
A-C	297	74			297				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	400	0.071	29	0.1	0.1	9.690	A
C-AB	0	0	488	0.000	0	0.0	0.0	0.000	A
C-A	93	23			93				
A-B	73	18			73				
A-C	242	61			242				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	415	0.057	24	0.1	0.1	9.210	A
C-AB	0	0	500	0.000	0	0.0	0.0	0.000	A
C-A	78	19			78				
A-B	61	15			61				
A-C	203	51			203				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	600	100.000
B - Angel Lane South East		ONE HOUR	✓	66	100.000
C - A12 South West		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	441
	B - Angel Lane South East	64	0	2
	C - A12 South West	314	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	11
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.26	17.34	0.3	1.1	C	60	90
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						288	432
A-B						146	219
A-C						405	607

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	49	12	348	0.142	49	0.0	0.2	12.006	B
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	120	30			120				
A-C	332	83			332				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	59	15	320	0.185	59	0.2	0.2	13.798	B
C-AB	0	0	442	0.000	0	0.0	0.0	0.000	A
C-A	282	71			282				
A-B	143	36			143				
A-C	396	99			396				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	280	0.259	72	0.2	0.3	17.263	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	345	86			345				
A-B	176	44			176				
A-C	485	121			485				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	72	18	280	0.259	72	0.3	0.3	17.338	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	345	86			345				
A-B	176	44			176				
A-C	485	121			485				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	59	15	320	0.185	60	0.3	0.2	13.870	B
C-AB	0	0	442	0.000	0	0.0	0.0	0.000	A
C-A	282	71			282				
A-B	143	36			143				
A-C	396	99			396				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	49	12	348	0.142	50	0.2	0.2	12.077	B
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	120	30			120				
A-C	332	83			332				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.31	1.08	1.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	517	100.000
B - Angel Lane South East		ONE HOUR	✓	89	100.000
C - A12 South West		ONE HOUR	✓	403	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	149	368
	B - Angel Lane South East	89	0	0
	C - A12 South West	401	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	19.52	0.5	2.4	C	81	122
C-AB	0.01	5.10	0.0	0.5	A	4	6
C-A						366	549
A-B						137	206
A-C						338	506

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	348	0.192	66	0.0	0.2	12.731	B
C-AB	3	0.65	712	0.004	3	0.0	0.0	5.077	A
C-A	301	75			301				
A-B	112	28			112				
A-C	277	69			277				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	80	20	320	0.249	79	0.2	0.3	14.954	B
C-AB	4	0.88	737	0.005	4	0.0	0.0	4.895	A
C-A	359	90			359				
A-B	134	34			134				
A-C	331	83			331				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	282	0.346	97	0.3	0.5	19.374	C
C-AB	5	1	774	0.007	5	0.0	0.0	4.665	A
C-A	439	110			439				
A-B	164	41			164				
A-C	405	101			405				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	282	0.346	97	0.5	0.5	19.523	C
C-AB	5	1	774	0.007	5	0.0	0.0	4.682	A
C-A	439	110			439				
A-B	164	41			164				
A-C	405	101			405				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	80	20	320	0.249	80	0.5	0.3	15.070	C
C-AB	4	0.88	737	0.005	4	0.0	0.0	4.931	A
C-A	359	90			359				
A-B	134	34			134				
A-C	331	83			331				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	67	17	348	0.192	67	0.3	0.2	12.849	B
C-AB	3	0.66	711	0.004	3	0.0	0.0	5.098	A
C-A	301	75			301				
A-B	112	28			112				
A-C	277	69			277				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.03	0.26	0.51	0.51			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.52	0.03	0.31	1.44	2.38			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	449	100.000
B - Angel Lane South East		ONE HOUR	✓	131	100.000
C - A12 South West		ONE HOUR	✓	485	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	81	368
	B - Angel Lane South East	129	0	2
	C - A12 South West	483	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	8
	B - Angel Lane South East	1	0	0
	C - A12 South West	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.50	25.07	1.0	4.6	D	120	180
C-AB	0.01	4.72	0.0	0.5	A	4	6
C-A						441	661
A-B						74	111
A-C						338	507

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	99	25	356	0.277	97	0.0	0.4	13.819	B
C-AB	3	0.71	768	0.004	3	0.0	0.0	4.704	A
C-A	362	91			362				
A-B	61	15			61				
A-C	277	69			277				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	118	29	327	0.360	117	0.4	0.5	17.060	C
C-AB	4	1	804	0.005	4	0.0	0.0	4.487	A
C-A	432	108			432				
A-B	72	18			72				
A-C	331	83			331				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	144	36	288	0.502	143	0.5	1.0	24.561	C
C-AB	6	1	857	0.007	6	0.0	0.0	4.219	A
C-A	528	132			528				
A-B	89	22			89				
A-C	406	101			406				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	144	36	288	0.502	144	1.0	1.0	25.070	D
C-AB	6	1	857	0.007	6	0.0	0.0	4.229	A
C-A	528	132			528				
A-B	89	22			89				
A-C	406	101			406				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	118	29	327	0.360	119	1.0	0.6	17.437	C
C-AB	4	1	804	0.005	4	0.0	0.0	4.514	A
C-A	432	108			432				
A-B	72	18			72				
A-C	331	83			331				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	99	25	356	0.277	99	0.6	0.4	14.059	B
C-AB	3	0.72	768	0.004	3	0.0	0.0	4.717	A
C-A	362	91			362				
A-B	61	15			61				
A-C	277	69			277				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.96	0.03	0.27	0.96	2.47			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.98	0.03	0.30	1.15	4.61			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.05	0.50	1.35	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.39	0.03	0.35	1.17	1.35			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	2.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	388	100.000
B - Angel Lane South East		ONE HOUR	✓	129	100.000
C - A12 South West		ONE HOUR	✓	412	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	72	317
	B - Angel Lane South East	128	0	1
	C - A12 South West	410	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	2
	B - Angel Lane South East	2	0	0
	C - A12 South West	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.44	19.91	0.8	3.6	C	118	178
C-AB	0.01	4.86	0.0	0.5	A	4	5
C-A						374	561
A-B						66	98
A-C						291	436

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	379	0.256	96	0.0	0.3	12.667	B
C-AB	3	0.64	745	0.003	3	0.0	0.0	4.849	A
C-A	307	77			307				
A-B	54	13			54				
A-C	238	60			238				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	116	29	355	0.326	115	0.3	0.5	14.981	B
C-AB	3	0.86	775	0.004	3	0.0	0.0	4.657	A
C-A	367	92			367				
A-B	64	16			64				
A-C	285	71			285				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	142	35	323	0.440	141	0.5	0.8	19.678	C
C-AB	5	1	819	0.006	5	0.0	0.0	4.415	A
C-A	449	112			449				
A-B	79	20			79				
A-C	349	87			349				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	142	35	323	0.440	142	0.8	0.8	19.908	C
C-AB	5	1	819	0.006	5	0.0	0.0	4.421	A
C-A	449	112			449				
A-B	79	20			79				
A-C	349	87			349				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	116	29	355	0.326	117	0.8	0.5	15.187	C
C-AB	3	0.86	775	0.004	3	0.0	0.0	4.675	A
C-A	367	92			367				
A-B	64	16			64				
A-C	285	71			285				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	97	24	379	0.256	98	0.5	0.4	12.840	B
C-AB	3	0.64	745	0.003	3	0.0	0.0	4.859	A
C-A	307	77			307				
A-B	54	13			54				
A-C	238	60			238				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.03	0.26	0.76	0.89			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.77	0.03	0.29	1.41	3.60			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.04	0.44	1.27	1.39			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.31	0.95	1.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	541	100.000
B - Angel Lane South East		ONE HOUR	✓	32	100.000
C - A12 South West		ONE HOUR	✓	110	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	81	460
	B - Angel Lane South East	32	0	0
	C - A12 South West	110	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	6
	B - Angel Lane South East	3	0	0
	C - A12 South West	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	12.48	0.1	0.5	B	29	44
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						101	152
A-B						74	111
A-C						422	633

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	376	0.063	24	0.0	0.1	10.197	B
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
A-B	61	15			61				
A-C	346	87			346				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	28	7	354	0.080	28	0.1	0.1	11.050	B
C-AB	0	0	447	0.000	0	0.0	0.0	0.000	A
C-A	99	25			99				
A-B	73	18			73				
A-C	413	103			413				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	323	0.108	35	0.1	0.1	12.468	B
C-AB	0	0	421	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	89	22			89				
A-C	506	127			506				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	323	0.108	35	0.1	0.1	12.478	B
C-AB	0	0	421	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	89	22			89				
A-C	506	127			506				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	354	0.080	29	0.1	0.1	11.065	B
C-AB	0	0	447	0.000	0	0.0	0.0	0.000	A
C-A	99	25			99				
A-B	73	18			73				
A-C	413	103			413				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	376	0.063	24	0.1	0.1	10.218	B
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
A-B	61	15			61				
A-C	346	87			346				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	740	100.000
B - Angel Lane South East		ONE HOUR	✓	68	100.000
C - A12 South West		ONE HOUR	✓	332	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	581
	B - Angel Lane South East	66	0	2
	C - A12 South West	332	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	22.48	0.5	1.9	C	62	93
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						304	457
A-B						146	219
A-C						533	799

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	51	13	317	0.161	50	0.0	0.2	13.444	B
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	250	62			250				
A-B	120	30			120				
A-C	437	109			437				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	61	15	283	0.215	61	0.2	0.3	16.188	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	298	75			298				
A-B	143	36			143				
A-C	522	131			522				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	75	19	235	0.318	74	0.3	0.5	22.287	C
C-AB	0	0	374	0.000	0	0.0	0.0	0.000	A
C-A	365	91			365				
A-B	176	44			176				
A-C	640	160			640				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	75	19	235	0.318	75	0.5	0.5	22.476	C
C-AB	0	0	374	0.000	0	0.0	0.0	0.000	A
C-A	365	91			365				
A-B	176	44			176				
A-C	640	160			640				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	61	15	283	0.215	62	0.5	0.3	16.341	C
C-AB	0	0	411	0.000	0	0.0	0.0	0.000	A
C-A	298	75			298				
A-B	143	36			143				
A-C	522	131			522				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	51	13	317	0.161	51	0.3	0.2	13.556	B
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	250	62			250				
A-B	120	30			120				
A-C	437	109			437				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.03	0.32	1.40	1.88			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	541	100.000
B - Angel Lane South East		ONE HOUR	✓	92	100.000
C - A12 South West		ONE HOUR	✓	414	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	147	394
	B - Angel Lane South East	92	0	0
	C - A12 South West	412	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	12
	B - Angel Lane South East	3	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	21.40	0.6	2.8	C	84	126
C-AB	0.01	5.10	0.0	0.5	A	4	6
C-A						376	564
A-B						135	203
A-C						361	542

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	339	0.203	68	0.0	0.3	13.234	B
C-AB	3	0.67	711	0.004	3	0.0	0.0	5.080	A
C-A	309	77			309				
A-B	111	28			111				
A-C	296	74			296				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	82	21	310	0.266	82	0.3	0.4	15.783	C
C-AB	4	0.91	737	0.005	4	0.0	0.0	4.894	A
C-A	369	92			369				
A-B	132	33			132				
A-C	354	89			354				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	101	25	269	0.375	100	0.4	0.6	21.185	C
C-AB	5	1	775	0.007	5	0.0	0.0	4.660	A
C-A	451	113			451				
A-B	162	41			162				
A-C	434	108			434				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	101	25	269	0.375	101	0.6	0.6	21.398	C
C-AB	5	1	775	0.007	5	0.0	0.0	4.676	A
C-A	451	113			451				
A-B	162	41			162				
A-C	434	108			434				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	82	21	310	0.266	83	0.6	0.4	15.963	C
C-AB	4	0.91	737	0.005	4	0.0	0.0	4.936	A
C-A	369	92			369				
A-B	132	33			132				
A-C	354	89			354				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	339	0.203	69	0.4	0.3	13.375	B
C-AB	3	0.67	711	0.004	3	0.0	0.0	5.101	A
C-A	309	77			309				
A-B	111	28			111				
A-C	296	74			296				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.03	0.26	0.58	0.58			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.03	0.31	1.49	2.75			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.03	0.28	0.57	1.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	458	100.000
B - Angel Lane South East		ONE HOUR	✓	146	100.000
C - A12 South West		ONE HOUR	✓	576	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	86	372
	B - Angel Lane South East	144	0	2
	C - A12 South West	574	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	10
	B - Angel Lane South East	1	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.61	34.05	1.5	7.2	D	134	201
C-AB	0.01	4.46	0.0	0.5	A	5	7
C-A						523	785
A-B						79	118
A-C						342	513

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	110	27	341	0.322	108	0.0	0.5	15.314	C
C-AB	3	0.80	813	0.004	3	0.0	0.0	4.445	A
C-A	430	108			430				
A-B	64	16			64				
A-C	280	70			280				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	131	33	310	0.424	130	0.5	0.7	19.955	C
C-AB	5	1	859	0.005	5	0.0	0.0	4.204	A
C-A	513	128			513				
A-B	77	19			77				
A-C	335	84			335				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	161	40	266	0.605	158	0.7	1.4	32.586	D
C-AB	7	2	926	0.008	7	0.0	0.0	3.909	A
C-A	627	157			627				
A-B	94	24			94				
A-C	410	103			410				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	161	40	266	0.605	161	1.4	1.5	34.046	D
C-AB	7	2	926	0.008	7	0.0	0.0	3.918	A
C-A	627	157			627				
A-B	94	24			94				
A-C	410	103			410				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	131	33	310	0.424	134	1.5	0.8	20.813	C
C-AB	5	1	859	0.005	5	0.0	0.0	4.230	A
C-A	513	128			513				
A-B	77	19			77				
A-C	335	84			335				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	110	27	341	0.322	111	0.8	0.5	15.701	C
C-AB	3	0.81	813	0.004	3	0.0	0.0	4.459	A
C-A	430	108			430				
A-B	64	16			64				
A-C	280	70			280				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.71	0.17	0.91	1.38	1.44			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.41	0.03	0.30	1.96	6.91			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.47	0.03	0.30	2.01	7.18			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.76	0.05	0.48	1.51	2.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.04	0.36	1.42	1.56			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	2.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	392	100.000
B - Angel Lane South East		ONE HOUR	✓	134	100.000
C - A12 South West		ONE HOUR	✓	479	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	77	316
	B - Angel Lane South East	133	0	1
	C - A12 South West	477	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	3
	B - Angel Lane South East	2	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.48	22.43	0.9	4.1	C	123	184
C-AB	0.01	4.66	0.0	0.5	A	4	6
C-A						435	653
A-B						70	105
A-C						290	434

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	101	25	369	0.274	99	0.0	0.4	13.306	B
C-AB	3	0.70	777	0.004	3	0.0	0.0	4.647	A
C-A	358	89			358				
A-B	58	14			58				
A-C	238	59			238				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	120	30	343	0.351	120	0.4	0.5	16.081	C
C-AB	4	0.95	815	0.005	4	0.0	0.0	4.432	A
C-A	427	107			427				
A-B	69	17			69				
A-C	284	71			284				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	147	37	308	0.479	146	0.5	0.9	22.077	C
C-AB	6	1	868	0.006	6	0.0	0.0	4.165	A
C-A	522	130			522				
A-B	84	21			84				
A-C	348	87			348				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	147	37	308	0.479	147	0.9	0.9	22.432	C
C-AB	6	1	868	0.006	6	0.0	0.0	4.172	A
C-A	522	130			522				
A-B	84	21			84				
A-C	348	87			348				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	120	30	343	0.351	122	0.9	0.6	16.374	C
C-AB	4	0.95	815	0.005	4	0.0	0.0	4.452	A
C-A	427	107			427				
A-B	69	17			69				
A-C	284	71			284				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	101	25	369	0.274	102	0.6	0.4	13.520	B
C-AB	3	0.70	777	0.004	3	0.0	0.0	4.657	A
C-A	358	89			358				
A-B	58	14			58				
A-C	238	59			238				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.53	0.53	1.00	1.40	1.45			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.88	0.03	0.27	0.88	1.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.90	0.03	0.29	1.46	4.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.05	0.50	1.32	1.42			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.34	1.13	1.32			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	362	100.000
B - Angel Lane South East		ONE HOUR	✓	32	100.000
C - A12 South West		ONE HOUR	✓	112	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	83	279
	B - Angel Lane South East	32	0	0
	C - A12 South West	112	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	10.58	0.1	0.5	B	29	44
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						103	154
A-B						76	114
A-C						256	384

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	412	0.058	24	0.0	0.1	9.267	A
C-AB	0	0	499	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	62	16			62				
A-C	210	52			210				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	28	7	396	0.072	28	0.1	0.1	9.780	A
C-AB	0	0	486	0.000	0	0.0	0.0	0.000	A
C-A	101	25			101				
A-B	75	19			75				
A-C	251	63			251				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	375	0.093	35	0.1	0.1	10.571	B
C-AB	0	0	469	0.000	0	0.0	0.0	0.000	A
C-A	123	31			123				
A-B	91	23			91				
A-C	307	77			307				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	375	0.093	35	0.1	0.1	10.577	B
C-AB	0	0	469	0.000	0	0.0	0.0	0.000	A
C-A	123	31			123				
A-B	91	23			91				
A-C	307	77			307				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	396	0.072	29	0.1	0.1	9.787	A
C-AB	0	0	486	0.000	0	0.0	0.0	0.000	A
C-A	101	25			101				
A-B	75	19			75				
A-C	251	63			251				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	412	0.058	24	0.1	0.1	9.283	A
C-AB	0	0	499	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	62	16			62				
A-C	210	52			210				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	599	100.000
B - Angel Lane South East		ONE HOUR	✓	67	100.000
C - A12 South West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	440
	B - Angel Lane South East	65	0	2
	C - A12 South West	345	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	17.79	0.4	1.2	C	61	92
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						316	475
A-B						146	219
A-C						404	605

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	13	345	0.146	50	0.0	0.2	12.146	B
C-AB	0	0	467	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	120	30			120				
A-C	331	83			331				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	60	15	316	0.190	60	0.2	0.2	14.024	B
C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	143	36			143				
A-C	395	99			395				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	276	0.266	73	0.2	0.4	17.707	C
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	176	44			176				
A-C	484	121			484				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	276	0.266	73	0.4	0.4	17.789	C
C-AB	0	0	415	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	176	44			176				
A-C	484	121			484				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	60	15	316	0.190	60	0.4	0.2	14.105	B
C-AB	0	0	445	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	143	36			143				
A-C	395	99			395				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	13	345	0.146	51	0.2	0.2	12.223	B
C-AB	0	0	467	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	120	30			120				
A-C	331	83			331				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.31	1.22	1.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	466	100.000
B - Angel Lane South East		ONE HOUR	✓	99	100.000
C - A12 South West		ONE HOUR	✓	436	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	93	373
	B - Angel Lane South East	99	0	0
	C - A12 South West	434	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	7	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	20.71	0.6	2.9	C	90	136
C-AB	0.01	4.92	0.0	0.5	A	4	6
C-A						396	595
A-B						86	128
A-C						342	513

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	74	19	348	0.213	73	0.0	0.3	13.031	B
C-AB	3	0.68	737	0.004	3	0.0	0.0	4.901	A
C-A	326	81			326				
A-B	70	18			70				
A-C	281	70			281				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	89	22	321	0.276	88	0.3	0.4	15.458	C
C-AB	4	0.92	767	0.005	4	0.0	0.0	4.702	A
C-A	388	97			388				
A-B	84	21			84				
A-C	335	84			335				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	108	27	282	0.384	108	0.4	0.6	20.509	C
C-AB	5	1	811	0.007	5	0.0	0.0	4.453	A
C-A	475	119			475				
A-B	103	26			103				
A-C	410	103			410				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	108	27	282	0.384	108	0.6	0.6	20.711	C
C-AB	5	1	811	0.007	5	0.0	0.0	4.467	A
C-A	475	119			475				
A-B	103	26			103				
A-C	410	103			410				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	89	22	321	0.276	89	0.6	0.4	15.638	C
C-AB	4	0.92	767	0.005	4	0.0	0.0	4.735	A
C-A	388	97			388				
A-B	84	21			84				
A-C	335	84			335				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	74	19	348	0.213	75	0.4	0.3	13.176	B
C-AB	3	0.68	737	0.004	3	0.0	0.0	4.919	A
C-A	326	81			326				
A-B	70	18			70				
A-C	281	70			281				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.03	0.26	0.60	0.60			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.03	0.30	1.49	2.89			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.39	0.03	0.30	0.89	1.19			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	488	100.000
B - Angel Lane South East		ONE HOUR	✓	138	100.000
C - A12 South West		ONE HOUR	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	88	400
	B - Angel Lane South East	136	0	2
	C - A12 South West	516	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	7
	B - Angel Lane South East	1	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.56	29.57	1.2	5.8	D	127	190
C-AB	0.01	4.63	0.0	0.5	A	4	7
C-A						471	706
A-B						80	121
A-C						367	551

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	104	26	347	0.300	102	0.0	0.4	14.643	B
C-AB	3	0.75	782	0.004	3	0.0	0.0	4.623	A
C-A	387	97			387				
A-B	66	16			66				
A-C	301	75			301				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	124	31	316	0.393	123	0.4	0.6	18.619	C
C-AB	4	1	821	0.005	4	0.0	0.0	4.398	A
C-A	461	115			461				
A-B	79	20			79				
A-C	360	90			360				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	152	38	273	0.556	150	0.6	1.2	28.664	D
C-AB	6	2	879	0.007	6	0.0	0.0	4.118	A
C-A	564	141			564				
A-B	96	24			96				
A-C	441	110			441				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	152	38	273	0.556	152	1.2	1.2	29.566	D
C-AB	6	2	879	0.007	6	0.0	0.0	4.126	A
C-A	564	141			564				
A-B	96	24			96				
A-C	441	110			441				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	124	31	316	0.393	126	1.2	0.7	19.208	C
C-AB	4	1	821	0.005	4	0.0	0.0	4.418	A
C-A	461	115			461				
A-B	79	20			79				
A-C	360	90			360				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	104	26	347	0.300	105	0.7	0.4	14.956	B
C-AB	3	0.75	782	0.004	3	0.0	0.0	4.634	A
C-A	387	97			387				
A-B	66	16			66				
A-C	301	75			301				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.16	0.91	1.38	1.44			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.17	0.03	0.29	1.30	4.83			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.21	0.03	0.30	1.54	5.77			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.67	0.05	0.50	1.49	1.58			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.04	0.36	1.29	1.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	433	100.000
B - Angel Lane South East		ONE HOUR	✓	72	100.000
C - A12 South West		ONE HOUR	✓	412	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	78	356
	B - Angel Lane South East	71	0	1
	C - A12 South West	410	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	1
	B - Angel Lane South East	3	0	0
	C - A12 South West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.26	15.69	0.3	1.1	C	66	99
C-AB	0.01	4.90	0.0	0.5	A	4	6
C-A						374	561
A-B						71	107
A-C						326	490

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	14	367	0.147	53	0.0	0.2	11.444	B
C-AB	3	0.65	739	0.004	3	0.0	0.0	4.889	A
C-A	307	77			307				
A-B	58	15			58				
A-C	268	67			268				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	65	16	343	0.189	64	0.2	0.2	12.926	B
C-AB	3	0.87	768	0.005	3	0.0	0.0	4.700	A
C-A	367	92			367				
A-B	70	17			70				
A-C	320	80			320				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	309	0.257	79	0.2	0.3	15.635	C
C-AB	5	1	811	0.006	5	0.0	0.0	4.459	A
C-A	448	112			448				
A-B	85	21			85				
A-C	392	98			392				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	309	0.257	79	0.3	0.3	15.692	C
C-AB	5	1	811	0.006	5	0.0	0.0	4.465	A
C-A	448	112			448				
A-B	85	21			85				
A-C	392	98			392				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	65	16	343	0.189	65	0.3	0.2	12.985	B
C-AB	3	0.87	768	0.005	3	0.0	0.0	4.715	A
C-A	367	92			367				
A-B	70	17			70				
A-C	320	80			320				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	14	367	0.147	54	0.2	0.2	11.512	B
C-AB	3	0.65	739	0.004	3	0.0	0.0	4.899	A
C-A	307	77			307				
A-B	58	15			58				
A-C	268	67			268				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.31	1.08	1.08			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	0.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	359	100.000
B - Angel Lane South East		ONE HOUR	✓	31	100.000
C - A12 South West		ONE HOUR	✓	111	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	80	279
	B - Angel Lane South East	31	0	0
	C - A12 South West	111	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	10.54	0.1	0.5	B	28	42
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						102	153
A-B						73	110
A-C						256	384

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	23	6	412	0.056	23	0.0	0.1	9.251	A
C-AB	0	0	499	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	60	15			60				
A-C	210	52			210				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	28	7	396	0.069	27	0.1	0.1	9.756	A
C-AB	0	0	486	0.000	0	0.0	0.0	0.000	A
C-A	100	25			100				
A-B	72	18			72				
A-C	251	63			251				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	8	375	0.090	34	0.1	0.1	10.535	B
C-AB	0	0	469	0.000	0	0.0	0.0	0.000	A
C-A	122	31			122				
A-B	88	22			88				
A-C	307	77			307				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	34	8	375	0.090	34	0.1	0.1	10.539	B
C-AB	0	0	469	0.000	0	0.0	0.0	0.000	A
C-A	122	31			122				
A-B	88	22			88				
A-C	307	77			307				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	28	7	396	0.069	28	0.1	0.1	9.763	A
C-AB	0	0	486	0.000	0	0.0	0.0	0.000	A
C-A	100	25			100				
A-B	72	18			72				
A-C	251	63			251				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	23	6	412	0.056	23	0.1	0.1	9.266	A
C-AB	0	0	499	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	60	15			60				
A-C	210	52			210				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	595	100.000
B - Angel Lane South East		ONE HOUR	✓	67	100.000
C - A12 South West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	155	440
	B - Angel Lane South East	65	0	2
	C - A12 South West	345	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	17.77	0.4	1.2	C	61	92
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						316	475
A-B						143	214
A-C						404	605

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	13	345	0.145	50	0.0	0.2	12.141	B
C-AB	0	0	468	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	117	29			117				
A-C	331	83			331				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	60	15	316	0.190	60	0.2	0.2	14.017	B
C-AB	0	0	446	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	140	35			140				
A-C	395	99			395				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	276	0.266	73	0.2	0.4	17.693	C
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	171	43			171				
A-C	484	121			484				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	276	0.266	73	0.4	0.4	17.774	C
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	171	43			171				
A-C	484	121			484				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	60	15	316	0.190	60	0.4	0.2	14.100	B
C-AB	0	0	446	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	140	35			140				
A-C	395	99			395				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	50	13	345	0.145	51	0.2	0.2	12.216	B
C-AB	0	0	468	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	117	29			117				
A-C	331	83			331				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.31	1.22	1.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	461	100.000
B - Angel Lane South East		ONE HOUR	✓	98	100.000
C - A12 South West		ONE HOUR	✓	437	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	89	372
	B - Angel Lane South East	98	0	0
	C - A12 South West	435	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	8	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	20.55	0.6	2.8	C	89	134
C-AB	0.01	4.91	0.0	0.5	A	4	6
C-A						397	596
A-B						82	123
A-C						341	512

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	348	0.211	72	0.0	0.3	12.987	B
C-AB	3	0.68	738	0.004	3	0.0	0.0	4.894	A
C-A	326	82			326				
A-B	67	17			67				
A-C	280	70			280				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	88	22	321	0.273	87	0.3	0.4	15.385	C
C-AB	4	0.92	769	0.005	4	0.0	0.0	4.694	A
C-A	389	97			389				
A-B	80	20			80				
A-C	334	84			334				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	107	27	282	0.380	106	0.4	0.6	20.355	C
C-AB	5	1	813	0.007	5	0.0	0.0	4.445	A
C-A	476	119			476				
A-B	98	25			98				
A-C	409	102			409				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	107	27	282	0.380	107	0.6	0.6	20.547	C
C-AB	5	1	813	0.007	5	0.0	0.0	4.458	A
C-A	476	119			476				
A-B	98	25			98				
A-C	409	102			409				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	88	22	321	0.273	89	0.6	0.4	15.561	C
C-AB	4	0.92	768	0.005	4	0.0	0.0	4.726	A
C-A	389	97			389				
A-B	80	20			80				
A-C	334	84			334				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	73	18	348	0.211	74	0.4	0.3	13.129	B
C-AB	3	0.68	738	0.004	3	0.0	0.0	4.913	A
C-A	326	82			326				
A-B	67	17			67				
A-C	280	70			280				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.03	0.26	0.59	0.59			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.03	0.30	1.48	2.84			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.38	0.03	0.29	0.79	1.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	486	100.000
B - Angel Lane South East		ONE HOUR	✓	138	100.000
C - A12 South West		ONE HOUR	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	87	399
	B - Angel Lane South East	136	0	2
	C - A12 South West	516	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	7
	B - Angel Lane South East	1	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.56	29.47	1.2	5.7	D	127	190
C-AB	0.01	4.63	0.0	0.5	A	4	7
C-A						471	706
A-B						79	119
A-C						367	550

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	104	26	347	0.300	102	0.0	0.4	14.626	B
C-AB	3	0.75	782	0.004	3	0.0	0.0	4.621	A
C-A	387	97			387				
A-B	65	16			65				
A-C	301	75			301				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	124	31	316	0.393	123	0.4	0.6	18.587	C
C-AB	4	1	822	0.005	4	0.0	0.0	4.396	A
C-A	461	115			461				
A-B	78	19			78				
A-C	359	90			359				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	152	38	274	0.556	150	0.6	1.2	28.578	D
C-AB	6	2	879	0.007	6	0.0	0.0	4.116	A
C-A	564	141			564				
A-B	95	24			95				
A-C	440	110			440				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	152	38	274	0.556	152	1.2	1.2	29.469	D
C-AB	6	2	879	0.007	6	0.0	0.0	4.124	A
C-A	564	141			564				
A-B	95	24			95				
A-C	440	110			440				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	124	31	316	0.393	126	1.2	0.7	19.171	C
C-AB	4	1	821	0.005	4	0.0	0.0	4.416	A
C-A	461	115			461				
A-B	78	19			78				
A-C	359	90			359				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	104	26	347	0.300	105	0.7	0.4	14.939	B
C-AB	3	0.75	782	0.004	3	0.0	0.0	4.634	A
C-A	387	97			387				
A-B	65	16			65				
A-C	301	75			301				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.16	0.91	1.38	1.44			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.17	0.03	0.29	1.28	4.80			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.21	0.03	0.30	1.53	5.75			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.67	0.05	0.50	1.49	1.57			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.04	0.36	1.29	1.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way	1.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	431	100.000
B - Angel Lane South East		ONE HOUR	✓	72	100.000
C - A12 South West		ONE HOUR	✓	412	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	77	355
	B - Angel Lane South East	71	0	1
	C - A12 South West	410	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	1
	B - Angel Lane South East	3	0	0
	C - A12 South West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.26	15.66	0.3	1.1	C	66	99
C-AB	0.01	4.89	0.0	0.5	A	4	6
C-A						374	561
A-B						70	105
A-C						325	488

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	14	368	0.147	53	0.0	0.2	11.434	B
C-AB	3	0.65	739	0.004	3	0.0	0.0	4.887	A
C-A	307	77			307				
A-B	58	14			58				
A-C	267	67			267				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	65	16	343	0.189	64	0.2	0.2	12.911	B
C-AB	3	0.87	769	0.005	3	0.0	0.0	4.698	A
C-A	367	92			367				
A-B	69	17			69				
A-C	319	80			319				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	309	0.256	79	0.2	0.3	15.608	C
C-AB	5	1	812	0.006	5	0.0	0.0	4.457	A
C-A	448	112			448				
A-B	84	21			84				
A-C	390	98			390				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	79	20	309	0.256	79	0.3	0.3	15.665	C
C-AB	5	1	812	0.006	5	0.0	0.0	4.464	A
C-A	448	112			448				
A-B	84	21			84				
A-C	390	98			390				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	65	16	343	0.189	65	0.3	0.2	12.973	B
C-AB	3	0.87	769	0.005	3	0.0	0.0	4.713	A
C-A	367	92			367				
A-B	69	17			69				
A-C	319	80			319				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	14	368	0.147	54	0.2	0.2	11.502	B
C-AB	3	0.65	739	0.004	3	0.0	0.0	4.895	A
C-A	307	77			307				
A-B	58	14			58				
A-C	267	67			267				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.31	1.08	1.08			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200923_J39_Model_CV.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J39\Model
Report generation date: 18/12/2020 12:00:15

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
»2023 Early Years , 8-9 AM
»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	6.73	0.01	A	0.0	~1	0.00	0.00	A	0.0	0.5	10.67	0.01	B	0.0	~1	0.00	0.00	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	15.85	0.03	C	0.0	~1	0.00	0.00	A	0.0	0.5	17.21	0.02	C	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	0.5	5.93	0.00	A	0.0	0.5	7.24	0.01	A	0.0	0.5	7.14	0.00	A	0.0	0.5	9.27	0.01	A	0.0	0.5	8.14	0.02	A
2023 Reference Case																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	7.06	0.01	A	0.0	~1	0.00	0.00	A	0.0	0.5	11.12	0.01	B	0.0	~1	0.00	0.00	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	18.01	0.04	C	0.0	~1	0.00	0.00	A	0.0	0.5	19.68	0.02	C	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	0.5	6.09	0.00	A	0.0	0.5	7.57	0.02	A	0.0	0.5	7.56	0.01	A	0.0	0.5	9.66	0.02	A	0.0	0.5	8.50	0.02	A
2023 Early Years																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	8.63	0.02	A	0.0	~1	0.00	0.00	A	0.0	0.5	11.49	0.01	B	0.0	~1	0.00	0.00	A
Stream B-A	0.0	~1	0.00	0.00	A	0.1	0.5	31.75	0.06	D	0.0	~1	0.00	0.00	A	0.0	0.5	22.75	0.02	C	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	0.5	6.54	0.00	A	0.0	0.5	9.18	0.02	A	0.0	0.5	8.25	0.01	A	0.0	0.5	9.97	0.02	A	0.0	0.5	8.80	0.02	A
2028 Reference Case																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	7.31	0.02	A	0.0	~1	0.00	0.00	A	0.0	0.5	11.34	0.01	B	0.0	~1	0.00	0.00	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	19.90	0.04	C	0.0	~1	0.00	0.00	A	0.0	0.5	21.61	0.02	C	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	0.5	6.13	0.00	A	0.0	0.5	7.83	0.02	A	0.0	0.5	7.91	0.01	A	0.0	0.5	9.85	0.02	A	0.0	0.5	8.68	0.02	A
2028 Peak Construction																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	7.90	0.02	A	0.0	~1	0.00	0.00	A	0.0	0.5	12.25	0.01	B	0.0	~1	0.00	0.00	A
Stream B-A	0.0	~1	0.00	0.00	A	0.1	0.5	24.86	0.05	C	0.0	~1	0.00	0.00	A	0.0	0.5	30.08	0.03	D	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	0.5	6.32	0.00	A	0.0	0.5	8.44	0.02	A	0.0	0.5	8.58	0.01	A	0.0	0.5	10.61	0.02	B	0.0	0.5	9.13	0.03	A
2034 Reference Case																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	7.43	0.02	A	0.0	~1	0.00	0.00	A	0.0	0.5	11.67	0.01	B	0.0	~1	0.00	0.00	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	20.57	0.04	C	0.0	~1	0.00	0.00	A	0.0	0.5	24.74	0.03	C	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	0.5	6.17	0.00	A	0.0	0.5	7.95	0.02	A	0.0	0.5	7.41	0.01	A	0.0	0.5	10.12	0.02	B	0.0	0.5	8.82	0.03	A
2034 Operational Led																									
Stream B-C	0.0	~1	0.00	0.00	A	0.0	0.5	7.57	0.02	A	0.0	~1	0.00	0.00	A	0.0	0.5	11.72	0.01	B	0.0	~1	0.00	0.00	A
Stream B-A	0.0	~1	0.00	0.00	A	0.0	0.5	21.53	0.05	C	0.0	~1	0.00	0.00	A	0.0	0.5	25.23	0.03	D	0.0	~1	0.00	0.00	A
Stream C-AB	0.0	0.5	6.17	0.00	A	0.0	0.5	8.10	0.02	A	0.0	0.5	7.47	0.01	A	0.0	0.5	10.17	0.02	B	0.0	0.5	8.85	0.03	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

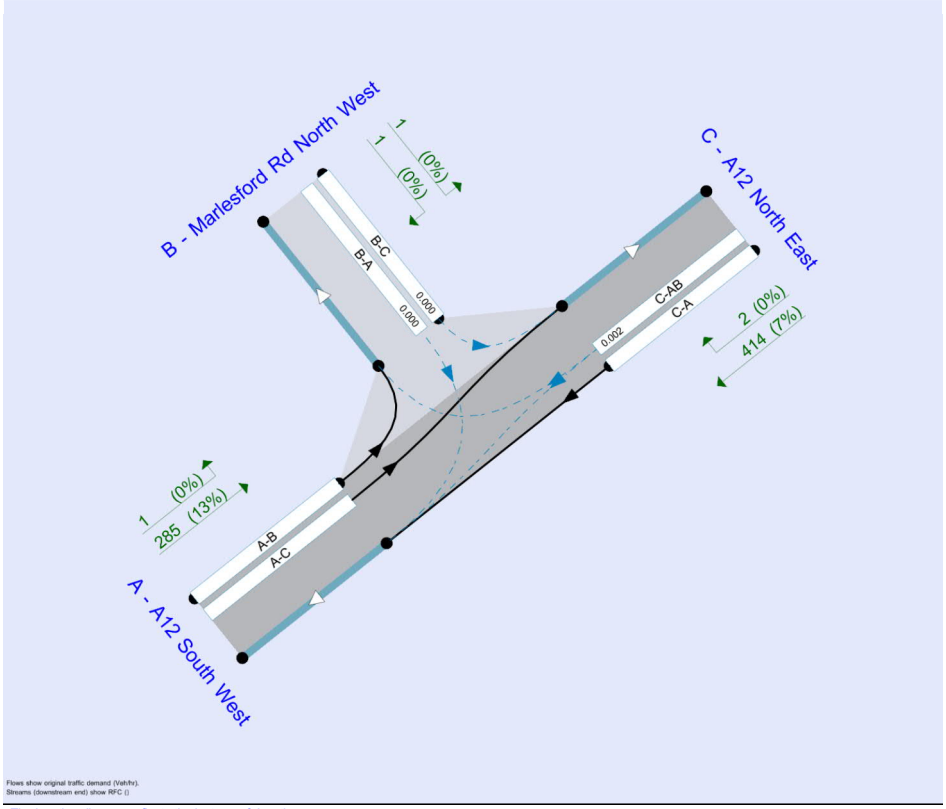
File summary

File Description

Title	A12 / Marlesford Road
Location	52°10'3.90"N, 1°23'50.45"E
Site number	39
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 South West		Major
B	Marlesford Rd North West		Minor
C	A12 North East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 North East	7.40		✓	2.52	175.7	✓	2.63

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Marlesford Rd North West	One lane plus flare	10.00	7.90	3.80	2.20	2.20	✓	1.00	39	57

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J39	B-A	541	0.092	0.234	0.147	0.334
J39	B-C	757	0.109	0.276	-	-
J39	C-B	699	0.254	0.254	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	286	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	416	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	285
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	414	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	13
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	5.93	0.0	0.5	A	2	3
C-A						380	570
A-B						0.92	1
A-C						262	392

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	691	0.000	0	0.0	0.0	0.000	A
B-A	0	0	434	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.38	638	0.002	1	0.0	0.0	5.659	A
C-A	312	78			312				
A-B	0.75	0.19			0.75				
A-C	215	54			215				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	678	0.000	0	0.0	0.0	0.000	A
B-A	0	0	414	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.45	626	0.003	2	0.0	0.0	5.770	A
C-A	372	93			372				
A-B	0.90	0.22			0.90				
A-C	256	64			256				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	660	0.000	0	0.0	0.0	0.000	A
B-A	0	0	385	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.55	609	0.004	2	0.0	0.0	5.931	A
C-A	456	114			456				
A-B	1	0.28			1				
A-C	314	78			314				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	660	0.000	0	0.0	0.0	0.000	A
B-A	0	0	385	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.55	609	0.004	2	0.0	0.0	5.931	A
C-A	456	114			456				
A-B	1	0.28			1				
A-C	314	78			314				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	678	0.000	0	0.0	0.0	0.000	A
B-A	0	0	414	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.45	626	0.003	2	0.0	0.0	5.772	A
C-A	372	93			372				
A-B	0.90	0.22			0.90				
A-C	256	64			256				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	691	0.000	0	0.0	0.0	0.000	A
B-A	0	0	434	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.38	638	0.002	2	0.0	0.0	5.659	A
C-A	312	78			312				
A-B	0.75	0.19			0.75				
A-C	215	54			215				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A

C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	636	100.000
B - Marlesford Rd North West		ONE HOUR	✓	12	100.000
C - A12 North East		ONE HOUR	✓	738	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	636
	B - Marlesford Rd North West	6	0	6
	C - A12 North East	732	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	10
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.73	0.0	0.5	A	6	8
B-A	0.03	15.85	0.0	0.5	C	6	8
C-AB	0.01	7.24	0.0	0.5	A	6	8
C-A						672	1008
A-B						0	0
A-C						584	875

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	610	0.007	4	0.0	0.0	5.941	A
B-A	5	1	331	0.014	4	0.0	0.0	11.031	B
C-AB	5	1	566	0.008	4	0.0	0.0	6.415	A
C-A	551	138			551				
A-B	0	0			0				
A-C	479	120			479				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	5	1	581	0.009	5	0.0	0.0	6.249	A
B-A	5	1	290	0.019	5	0.0	0.0	12.645	B
C-AB	5	1	540	0.010	5	0.0	0.0	6.738	A
C-A	658	165			658				
A-B	0	0			0				
A-C	572	143			572				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	541	0.012	7	0.0	0.0	6.731	A
B-A	7	2	234	0.028	7	0.0	0.0	15.846	C
C-AB	7	2	504	0.013	7	0.0	0.0	7.240	A
C-A	806	201			806				
A-B	0	0			0				
A-C	700	175			700				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	541	0.012	7	0.0	0.0	6.734	A
B-A	7	2	234	0.028	7	0.0	0.0	15.848	C
C-AB	7	2	504	0.013	7	0.0	0.0	7.240	A
C-A	806	201			806				
A-B	0	0			0				
A-C	700	175			700				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	581	0.009	5	0.0	0.0	6.253	A
B-A	5	1	290	0.019	5	0.0	0.0	12.645	B
C-AB	5	1	540	0.010	5	0.0	0.0	6.741	A
C-A	658	165			658				
A-B	0	0			0				
A-C	572	143			572				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	610	0.007	5	0.0	0.0	5.946	A
B-A	5	1	331	0.014	5	0.0	0.0	11.034	B
C-AB	5	1	566	0.008	5	0.0	0.0	6.416	A
C-A	551	138			551				
A-B	0	0			0				
A-C	479	120			479				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	630	100.000
B - Marlesford Rd North West		ONE HOUR	✓	3	100.000
C - A12 North East		ONE HOUR	✓	807	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	629
	B - Marlesford Rd North West	3	0	0
	C - A12 North East	805	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	7.14	0.0	0.5	A	2	3
C-A						739	1108
A-B						0.92	1
A-C						577	866

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	614	0.000	0	0.0	0.0	0.000	A
B-A	0	0	325	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.38	567	0.003	1	0.0	0.0	6.362	A
C-A	606	152			606				
A-B	0.75	0.19			0.75				
A-C	474	118			474				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	587	0.000	0	0.0	0.0	0.000	A
B-A	0	0	283	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.45	542	0.003	2	0.0	0.0	6.667	A
C-A	724	181			724				
A-B	0.90	0.22			0.90				
A-C	565	141			565				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	548	0.000	0	0.0	0.0	0.000	A
B-A	0	0	225	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.55	506	0.004	2	0.0	0.0	7.141	A
C-A	886	222			886				
A-B	1	0.28			1				
A-C	693	173			693				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	548	0.000	0	0.0	0.0	0.000	A
B-A	0	0	225	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.55	506	0.004	2	0.0	0.0	7.141	A
C-A	886	222			886				
A-B	1	0.28			1				
A-C	693	173			693				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	587	0.000	0	0.0	0.0	0.000	A
B-A	0	0	283	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.45	542	0.003	2	0.0	0.0	6.667	A
C-A	724	181			724				
A-B	0.90	0.22			0.90				
A-C	565	141			565				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	614	0.000	0	0.0	0.0	0.000	A
B-A	0	0	325	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.38	567	0.003	2	0.0	0.0	6.364	A
C-A	606	152			606				
A-B	0.75	0.19			0.75				
A-C	474	118			474				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	778	100.000
B - Marlesford Rd North West		ONE HOUR	✓	5	100.000
C - A12 North East		ONE HOUR	✓	685	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	778
	B - Marlesford Rd North West	3	0	2
	C - A12 North East	680	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	4
	B - Marlesford Rd North West	0	0	50
	C - A12 North East	7	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.67	0.0	0.5	B	2	3
B-A	0.02	17.21	0.0	0.5	C	3	4
C-AB	0.01	9.27	0.0	0.5	A	5	7
C-A						624	936
A-B						0	0
A-C						714	1071

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	392	0.004	1	0.0	0.0	9.212	A
B-A	2	0.56	316	0.007	2	0.0	0.0	11.465	B
C-AB	4	1	454	0.008	4	0.0	0.0	8.002	A
C-A	512	128			512				
A-B	0	0			0				
A-C	586	146			586				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.45	370	0.005	2	0.0	0.0	9.770	A
B-A	3	0.67	273	0.010	3	0.0	0.0	13.334	B
C-AB	4	1	429	0.010	4	0.0	0.0	8.489	A
C-A	611	153			611				
A-B	0	0			0				
A-C	699	175			699				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	340	0.006	2	0.0	0.0	10.663	B
B-A	3	0.83	212	0.016	3	0.0	0.0	17.212	C
C-AB	6	1	394	0.014	5	0.0	0.0	9.268	A
C-A	749	187			749				
A-B	0	0			0				
A-C	857	214			857				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	340	0.006	2	0.0	0.0	10.667	B
B-A	3	0.83	212	0.016	3	0.0	0.0	17.213	C
C-AB	6	1	394	0.014	6	0.0	0.0	9.268	A
C-A	749	187			749				
A-B	0	0			0				
A-C	857	214			857				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	370	0.005	2	0.0	0.0	9.778	A
B-A	3	0.67	273	0.010	3	0.0	0.0	13.336	B
C-AB	4	1	429	0.010	5	0.0	0.0	8.491	A
C-A	611	153			611				
A-B	0	0			0				
A-C	699	175			699				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	392	0.004	2	0.0	0.0	9.216	A
B-A	2	0.56	316	0.007	2	0.0	0.0	11.467	B
C-AB	4	1	454	0.008	4	0.0	0.0	8.004	A
C-A	512	128			512				
A-B	0	0			0				
A-C	586	146			586				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	863	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	3	860
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	578	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	3
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.02	8.14	0.0	0.5	A	7	11
C-A						530	796
A-B						3	4
A-C						789	1184

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	574	0.000	0	0.0	0.0	0.000	A
B-A	0	0	317	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	530	0.011	6	0.0	0.0	6.875	A
C-A	435	109			435				
A-B	2	0.56			2				
A-C	647	162			647				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	538	0.000	0	0.0	0.0	0.000	A
B-A	0	0	274	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	497	0.014	7	0.0	0.0	7.354	A
C-A	520	130			520				
A-B	3	0.67			3				
A-C	773	193			773				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	489	0.000	0	0.0	0.0	0.000	A
B-A	0	0	214	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	451	0.020	9	0.0	0.0	8.139	A
C-A	636	159			636				
A-B	3	0.83			3				
A-C	947	237			947				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	489	0.000	0	0.0	0.0	0.000	A
B-A	0	0	214	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	451	0.020	9	0.0	0.0	8.139	A
C-A	636	159			636				
A-B	3	0.83			3				
A-C	947	237			947				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	538	0.000	0	0.0	0.0	0.000	A
B-A	0	0	274	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	497	0.014	7	0.0	0.0	7.355	A
C-A	520	130			520				
A-B	3	0.67			3				
A-C	773	193			773				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	574	0.000	0	0.0	0.0	0.000	A
B-A	0	0	317	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	530	0.011	6	0.0	0.0	6.876	A
C-A	435	109			435				
A-B	2	0.56			2				
A-C	647	162			647				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	346	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	445	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	345
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	443	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	6.09	0.0	0.5	A	2	3
C-A						407	610
A-B						1	2
A-C						316	474

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	679	0.000	0	0.0	0.0	0.000	A
B-A	0	0	422	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	627	0.003	2	0.0	0.0	5.754	A
C-A	334	83			334				
A-B	0.84	0.21			0.84				
A-C	259	65			259				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	664	0.000	0	0.0	0.0	0.000	A
B-A	0	0	399	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	613	0.003	2	0.0	0.0	5.889	A
C-A	398	100			398				
A-B	1.00	0.25			1.00				
A-C	310	77			310				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	643	0.000	0	0.0	0.0	0.000	A
B-A	0	0	367	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	594	0.004	2	0.0	0.0	6.086	A
C-A	488	122			488				
A-B	1	0.31			1				
A-C	379	95			379				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	643	0.000	0	0.0	0.0	0.000	A
B-A	0	0	367	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	594	0.004	2	0.0	0.0	6.086	A
C-A	488	122			488				
A-B	1	0.31			1				
A-C	379	95			379				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	664	0.000	0	0.0	0.0	0.000	A
B-A	0	0	399	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	613	0.003	2	0.0	0.0	5.892	A
C-A	398	100			398				
A-B	1.00	0.25			1.00				
A-C	310	77			310				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	679	0.000	0	0.0	0.0	0.000	A
B-A	0	0	422	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	627	0.003	2	0.0	0.0	5.755	A
C-A	334	83			334				
A-B	0.84	0.21			0.84				
A-C	259	65			259				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	701	100.000
B - Marlesford Rd North West		ONE HOUR	✓	13	100.000
C - A12 North East		ONE HOUR	✓	770	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	701
	B - Marlesford Rd North West	7	0	7
	C - A12 North East	764	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	10
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.06	0.0	0.5	A	6	9
B-A	0.04	18.01	0.0	0.5	C	6	9
C-AB	0.02	7.57	0.0	0.5	A	6	9
C-A						701	1051
A-B						0	0
A-C						643	964

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	594	0.008	5	0.0	0.0	6.106	A
B-A	5	1	313	0.016	5	0.0	0.0	11.698	B
C-AB	5	1	551	0.009	5	0.0	0.0	6.590	A
C-A	575	144			575				
A-B	0	0			0				
A-C	527	132			527				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	6	1	562	0.011	6	0.0	0.0	6.470	A
B-A	6	1	268	0.022	6	0.0	0.0	13.716	B
C-AB	6	1	522	0.011	6	0.0	0.0	6.970	A
C-A	687	172			687				
A-B	0	0			0				
A-C	630	157			630				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	518	0.014	7	0.0	0.0	7.052	A
B-A	7	2	207	0.035	7	0.0	0.0	18.006	C
C-AB	7	2	483	0.015	7	0.0	0.0	7.572	A
C-A	841	210			841				
A-B	0	0			0				
A-C	771	193			771				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	517	0.014	7	0.0	0.0	7.056	A
B-A	7	2	207	0.035	7	0.0	0.0	18.011	C
C-AB	7	2	483	0.015	7	0.0	0.0	7.572	A
C-A	841	210			841				
A-B	0	0			0				
A-C	771	193			771				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	562	0.011	6	0.0	0.0	6.478	A
B-A	6	1	268	0.022	6	0.0	0.0	13.722	B
C-AB	6	1	522	0.011	6	0.0	0.0	6.970	A
C-A	687	172			687				
A-B	0	0			0				
A-C	630	157			630				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	594	0.008	5	0.0	0.0	6.114	A
B-A	5	1	313	0.016	5	0.0	0.0	11.703	B
C-AB	5	1	551	0.009	5	0.0	0.0	6.591	A
C-A	575	144			575				
A-B	0	0			0				
A-C	527	132			527				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	721	100.000
B - Marlesford Rd North West		ONE HOUR	✓	3	100.000
C - A12 North East		ONE HOUR	✓	847	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	720
	B - Marlesford Rd North West	3	0	0
	C - A12 North East	844	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	7.56	0.0	0.5	A	2	3
C-A						775	1162
A-B						1	2
A-C						661	991

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	594	0.000	0	0.0	0.0	0.000	A
B-A	0	0	302	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	548	0.003	2	0.0	0.0	6.583	A
C-A	636	159			636				
A-B	0.84	0.21			0.84				
A-C	542	136			542				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	562	0.000	0	0.0	0.0	0.000	A
B-A	0	0	255	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	519	0.004	2	0.0	0.0	6.960	A
C-A	759	190			759				
A-B	1.00	0.25			1.00				
A-C	648	162			648				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	519	0.000	0	0.0	0.0	0.000	A
B-A	0	0	191	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	479	0.005	2	0.0	0.0	7.557	A
C-A	930	232			930				
A-B	1	0.31			1				
A-C	793	198			793				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	519	0.000	0	0.0	0.0	0.000	A
B-A	0	0	191	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	479	0.005	2	0.0	0.0	7.557	A
C-A	930	232			930				
A-B	1	0.31			1				
A-C	793	198			793				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	562	0.000	0	0.0	0.0	0.000	A
B-A	0	0	255	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	519	0.004	2	0.0	0.0	6.960	A
C-A	759	190			759				
A-B	1.00	0.25			1.00				
A-C	648	162			648				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	594	0.000	0	0.0	0.0	0.000	A
B-A	0	0	302	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	548	0.003	2	0.0	0.0	6.585	A
C-A	636	159			636				
A-B	0.84	0.21			0.84				
A-C	542	136			542				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	833	100.000
B - Marlesford Rd North West		ONE HOUR	✓	6	100.000
C - A12 North East		ONE HOUR	✓	733	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	833
	B - Marlesford Rd North West	3	0	2
	C - A12 North East	727	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	5
	B - Marlesford Rd North West	0	0	50
	C - A12 North East	8	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	11.12	0.0	0.5	B	2	3
B-A	0.02	19.68	0.0	0.5	C	3	5
C-AB	0.02	9.66	0.0	0.5	A	5	8
C-A						667	1001
A-B						0	0
A-C						765	1147

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	383	0.004	2	0.0	0.0	9.437	A
B-A	3	0.63	299	0.008	2	0.0	0.0	12.156	B
C-AB	4	1	443	0.009	4	0.0	0.0	8.200	A
C-A	547	137			547				
A-B	0	0			0				
A-C	627	157			627				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.50	359	0.006	2	0.0	0.0	10.074	B
B-A	3	0.75	252	0.012	3	0.0	0.0	14.481	B
C-AB	5	1	416	0.012	5	0.0	0.0	8.756	A
C-A	654	163			654				
A-B	0	0			0				
A-C	749	187			749				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	326	0.008	2	0.0	0.0	11.116	B
B-A	4	0.92	187	0.020	4	0.0	0.0	19.674	C
C-AB	6	2	379	0.016	6	0.0	0.0	9.661	A
C-A	801	200			801				
A-B	0	0			0				
A-C	918	229			918				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	326	0.008	2	0.0	0.0	11.122	B
B-A	4	0.92	187	0.020	4	0.0	0.0	19.677	C
C-AB	6	2	379	0.016	6	0.0	0.0	9.661	A
C-A	801	200			801				
A-B	0	0			0				
A-C	918	229			918				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	359	0.006	2	0.0	0.0	10.085	B
B-A	3	0.75	252	0.012	3	0.0	0.0	14.480	B
C-AB	5	1	416	0.012	5	0.0	0.0	8.758	A
C-A	654	163			654				
A-B	0	0			0				
A-C	749	187			749				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	383	0.004	2	0.0	0.0	9.444	A
B-A	3	0.63	299	0.008	3	0.0	0.0	12.160	B
C-AB	4	1	443	0.009	4	0.0	0.0	8.202	A
C-A	547	137			547				
A-B	0	0			0				
A-C	627	157			627				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	913	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	685	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	3	910
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	676	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	4
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.02	8.50	0.0	0.5	A	8	12
C-A						621	931
A-B						3	5
A-C						835	1252

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	561	0.000	0	0.0	0.0	0.000	A
B-A	0	0	294	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	517	0.013	7	0.0	0.0	7.048	A
C-A	509	127			509				
A-B	3	0.63			3				
A-C	685	171			685				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	523	0.000	0	0.0	0.0	0.000	A
B-A	0	0	246	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	482	0.017	8	0.0	0.0	7.591	A
C-A	608	152			608				
A-B	3	0.75			3				
A-C	818	204			818				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	470	0.000	0	0.0	0.0	0.000	A
B-A	0	0	180	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	433	0.023	10	0.0	0.0	8.499	A
C-A	745	186			745				
A-B	4	0.92			4				
A-C	1002	250			1002				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	470	0.000	0	0.0	0.0	0.000	A
B-A	0	0	180	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	433	0.023	10	0.0	0.0	8.499	A
C-A	745	186			745				
A-B	4	0.92			4				
A-C	1002	250			1002				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	523	0.000	0	0.0	0.0	0.000	A
B-A	0	0	246	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	482	0.017	8	0.0	0.0	7.592	A
C-A	608	152			608				
A-B	3	0.75			3				
A-C	818	204			818				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	561	0.000	0	0.0	0.0	0.000	A
B-A	0	0	294	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	517	0.013	7	0.0	0.0	7.051	A
C-A	509	127			509				
A-B	3	0.63			3				
A-C	685	171			685				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	474	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	473
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	461	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	10
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	6.54	0.0	0.5	A	2	3
C-A						423	635
A-B						1	2
A-C						434	650

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	649	0.000	0	0.0	0.0	0.000	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	599	0.003	2	0.0	0.0	6.025	A
C-A	347	87			347				
A-B	0.84	0.21			0.84				
A-C	356	89			356				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	628	0.000	0	0.0	0.0	0.000	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	580	0.003	2	0.0	0.0	6.231	A
C-A	415	104			415				
A-B	1.00	0.25			1.00				
A-C	425	106			425				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	599	0.000	0	0.0	0.0	0.000	A
B-A	0	0	326	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	553	0.004	2	0.0	0.0	6.540	A
C-A	508	127			508				
A-B	1	0.31			1				
A-C	520	130			520				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	599	0.000	0	0.0	0.0	0.000	A
B-A	0	0	326	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	553	0.004	2	0.0	0.0	6.540	A
C-A	508	127			508				
A-B	1	0.31			1				
A-C	520	130			520				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	628	0.000	0	0.0	0.0	0.000	A
B-A	0	0	366	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	580	0.003	2	0.0	0.0	6.233	A
C-A	415	104			415				
A-B	1.00	0.25			1.00				
A-C	425	106			425				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	649	0.000	0	0.0	0.0	0.000	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	599	0.003	2	0.0	0.0	6.027	A
C-A	347	87			347				
A-B	0.84	0.21			0.84				
A-C	356	89			356				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	954	100.000
B - Marlesford Rd North West		ONE HOUR	✓	13	100.000
C - A12 North East		ONE HOUR	✓	827	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	954
	B - Marlesford Rd North West	7	0	7
	C - A12 North East	821	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	12
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	8.63	0.0	0.5	A	6	9
B-A	0.06	31.75	0.1	0.5	D	6	9
C-AB	0.02	9.18	0.0	0.5	A	6	9
C-A						753	1130
A-B						0	0
A-C						875	1313

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	532	0.009	5	0.0	0.0	6.824	A
B-A	5	1	253	0.020	5	0.0	0.0	14.480	B
C-AB	5	1	494	0.010	5	0.0	0.0	7.359	A
C-A	618	154			618				
A-B	0	0			0				
A-C	718	179			718				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	6	1	488	0.012	6	0.0	0.0	7.469	A
B-A	6	1	198	0.030	6	0.0	0.0	18.765	C
C-AB	6	1	454	0.013	6	0.0	0.0	8.029	A
C-A	738	184			738				
A-B	0	0			0				
A-C	857	214			857				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	425	0.017	7	0.0	0.0	8.614	A
B-A	7	2	121	0.061	7	0.0	0.1	31.698	D
C-AB	7	2	399	0.018	7	0.0	0.0	9.185	A
C-A	904	226			904				
A-B	0	0			0				
A-C	1050	262			1050				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	425	0.017	7	0.0	0.0	8.627	A
B-A	7	2	121	0.061	7	0.1	0.1	31.747	D
C-AB	7	2	399	0.018	7	0.0	0.0	9.185	A
C-A	904	226			904				
A-B	0	0			0				
A-C	1050	262			1050				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	1	487	0.012	6	0.0	0.0	7.489	A
B-A	6	1	198	0.030	6	0.1	0.0	18.781	C
C-AB	6	1	454	0.013	6	0.0	0.0	8.030	A
C-A	738	184			738				
A-B	0	0			0				
A-C	857	214			857				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	532	0.009	5	0.0	0.0	6.837	A
B-A	5	1	254	0.020	5	0.0	0.0	14.489	B
C-AB	5	1	494	0.010	5	0.0	0.0	7.362	A
C-A	618	154			618				
A-B	0	0			0				
A-C	718	179			718				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	803	100.000
B - Marlesford Rd North West		ONE HOUR	✓	3	100.000
C - A12 North East		ONE HOUR	✓	873	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	802
	B - Marlesford Rd North West	3	0	0
	C - A12 North East	870	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	16
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	8.25	0.0	0.5	A	2	3
C-A						799	1198
A-B						1	2
A-C						736	1104

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	564	0.000	0	0.0	0.0	0.000	A
B-A	0	0	272	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	521	0.003	2	0.0	0.0	6.930	A
C-A	655	164			655				
A-B	0.84	0.21			0.84				
A-C	604	151			604				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	527	0.000	0	0.0	0.0	0.000	A
B-A	0	0	220	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	486	0.004	2	0.0	0.0	7.430	A
C-A	783	196			783				
A-B	1.00	0.25			1.00				
A-C	721	180			721				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	475	0.000	0	0.0	0.0	0.000	A
B-A	0	0	148	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	439	0.006	2	0.0	0.0	8.253	A
C-A	958	240			958				
A-B	1	0.31			1				
A-C	883	221			883				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	475	0.000	0	0.0	0.0	0.000	A
B-A	0	0	148	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.61	439	0.006	2	0.0	0.0	8.253	A
C-A	958	240			958				
A-B	1	0.31			1				
A-C	883	221			883				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	527	0.000	0	0.0	0.0	0.000	A
B-A	0	0	220	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.50	486	0.004	2	0.0	0.0	7.430	A
C-A	783	196			783				
A-B	1.00	0.25			1.00				
A-C	721	180			721				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	564	0.000	0	0.0	0.0	0.000	A
B-A	0	0	272	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.42	521	0.003	2	0.0	0.0	6.930	A
C-A	655	164			655				
A-B	0.84	0.21			0.84				
A-C	604	151			604				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	857	100.000
B - Marlesford Rd North West		ONE HOUR	✓	6	100.000
C - A12 North East		ONE HOUR	✓	773	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	857
	B - Marlesford Rd North West	3	0	2
	C - A12 North East	767	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	8
	B - Marlesford Rd North West	0	0	50
	C - A12 North East	12	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	11.49	0.0	0.5	B	2	3
B-A	0.02	22.75	0.0	0.5	C	3	5
C-AB	0.02	9.97	0.0	0.5	A	5	8
C-A						704	1056
A-B						0	0
A-C						787	1180

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	376	0.004	2	0.0	0.0	9.611	A
B-A	3	0.63	282	0.009	2	0.0	0.0	12.893	B
C-AB	4	1	435	0.010	4	0.0	0.0	8.351	A
C-A	578	144			578				
A-B	0	0			0				
A-C	645	161			645				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.50	351	0.006	2	0.0	0.0	10.314	B
B-A	3	0.75	231	0.013	3	0.0	0.0	15.761	C
C-AB	5	1	407	0.012	5	0.0	0.0	8.963	A
C-A	690	172			690				
A-B	0	0			0				
A-C	771	193			771				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	316	0.008	2	0.0	0.0	11.481	B
B-A	4	0.92	162	0.023	4	0.0	0.0	22.746	C
C-AB	6	2	367	0.017	6	0.0	0.0	9.972	A
C-A	845	211			845				
A-B	0	0			0				
A-C	944	236			944				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	316	0.008	2	0.0	0.0	11.489	B
B-A	4	0.92	162	0.023	4	0.0	0.0	22.752	C
C-AB	6	2	367	0.017	6	0.0	0.0	9.972	A
C-A	845	211			845				
A-B	0	0			0				
A-C	944	236			944				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	351	0.006	2	0.0	0.0	10.326	B
B-A	3	0.75	231	0.013	3	0.0	0.0	15.761	C
C-AB	5	1	407	0.012	5	0.0	0.0	8.965	A
C-A	690	172			690				
A-B	0	0			0				
A-C	771	193			771				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	376	0.004	2	0.0	0.0	9.620	A
B-A	3	0.63	282	0.009	3	0.0	0.0	12.897	B
C-AB	4	1	435	0.010	4	0.0	0.0	8.352	A
C-A	578	144			578				
A-B	0	0			0				
A-C	645	161			645				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	952	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	862	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	3	949
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	853	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	5
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.02	8.80	0.0	0.5	A	8	12
C-A						783	1175
A-B						3	5
A-C						871	1306

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	550	0.000	0	0.0	0.0	0.000	A
B-A	0	0	261	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	507	0.013	7	0.0	0.0	7.188	A
C-A	643	161			643				
A-B	3	0.63			3				
A-C	714	179			714				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	510	0.000	0	0.0	0.0	0.000	A
B-A	0	0	207	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	470	0.017	8	0.0	0.0	7.788	A
C-A	767	192			767				
A-B	3	0.75			3				
A-C	853	213			853				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	454	0.000	0	0.0	0.0	0.000	A
B-A	0	0	132	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	419	0.023	10	0.0	0.0	8.802	A
C-A	940	235			940				
A-B	4	0.92			4				
A-C	1045	261			1045				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	454	0.000	0	0.0	0.0	0.000	A
B-A	0	0	132	0.000	0	0.0	0.0	0.000	A
C-AB	10	2	419	0.023	10	0.0	0.0	8.802	A
C-A	940	235			940				
A-B	4	0.92			4				
A-C	1045	261			1045				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	510	0.000	0	0.0	0.0	0.000	A
B-A	0	0	207	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	470	0.017	8	0.0	0.0	7.789	A
C-A	767	192			767				
A-B	3	0.75			3				
A-C	853	213			853				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	550	0.000	0	0.0	0.0	0.000	A
B-A	0	0	261	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	507	0.013	7	0.0	0.0	7.189	A
C-A	643	161			643				
A-B	3	0.63			3				
A-C	714	179			714				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	359	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	358
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	459	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	6.13	0.0	0.5	A	2	3
C-A						421	632
A-B						1	2
A-C						328	492

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	676	0.000	0	0.0	0.0	0.000	A
B-A	0	0	417	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	624	0.003	2	0.0	0.0	5.780	A
C-A	346	86			346				
A-B	0.88	0.22			0.88				
A-C	269	67			269				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	661	0.000	0	0.0	0.0	0.000	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	610	0.003	2	0.0	0.0	5.922	A
C-A	413	103			413				
A-B	1	0.26			1				
A-C	321	80			321				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	639	0.000	0	0.0	0.0	0.000	A
B-A	0	0	360	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	590	0.004	3	0.0	0.0	6.129	A
C-A	506	126			506				
A-B	1	0.32			1				
A-C	394	98			394				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	639	0.000	0	0.0	0.0	0.000	A
B-A	0	0	360	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	590	0.004	3	0.0	0.0	6.129	A
C-A	506	126			506				
A-B	1	0.32			1				
A-C	394	98			394				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	661	0.000	0	0.0	0.0	0.000	A
B-A	0	0	394	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	610	0.003	2	0.0	0.0	5.922	A
C-A	413	103			413				
A-B	1	0.26			1				
A-C	321	80			321				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	676	0.000	0	0.0	0.0	0.000	A
B-A	0	0	417	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	624	0.003	2	0.0	0.0	5.783	A
C-A	346	86			346				
A-B	0.88	0.22			0.88				
A-C	269	67			269				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	756	100.000
B - Marlesford Rd North West		ONE HOUR	✓	14	100.000
C - A12 North East		ONE HOUR	✓	795	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	756
	B - Marlesford Rd North West	7	0	7
	C - A12 North East	788	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	10
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.31	0.0	0.5	A	6	10
B-A	0.04	19.90	0.0	0.5	C	6	10
C-AB	0.02	7.83	0.0	0.5	A	6	10
C-A						723	1084
A-B						0	0
A-C						693	1040

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	583	0.009	5	0.0	0.0	6.232	A
B-A	5	1	300	0.018	5	0.0	0.0	12.214	B
C-AB	5	1	541	0.010	5	0.0	0.0	6.724	A
C-A	593	148			593				
A-B	0	0			0				
A-C	569	142			569				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	6	2	548	0.011	6	0.0	0.0	6.640	A
B-A	6	2	253	0.025	6	0.0	0.0	14.578	B
C-AB	6	2	510	0.012	6	0.0	0.0	7.149	A
C-A	708	177			708				
A-B	0	0			0				
A-C	679	170			679				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	500	0.015	8	0.0	0.0	7.306	A
B-A	8	2	189	0.041	8	0.0	0.0	19.895	C
C-AB	8	2	467	0.017	8	0.0	0.0	7.834	A
C-A	867	217			867				
A-B	0	0			0				
A-C	832	208			832				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	500	0.015	8	0.0	0.0	7.311	A
B-A	8	2	189	0.041	8	0.0	0.0	19.904	C
C-AB	8	2	467	0.017	8	0.0	0.0	7.834	A
C-A	867	217			867				
A-B	0	0			0				
A-C	832	208			832				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	548	0.011	6	0.0	0.0	6.648	A
B-A	6	2	253	0.025	6	0.0	0.0	14.583	B
C-AB	6	2	510	0.012	6	0.0	0.0	7.149	A
C-A	708	177			708				
A-B	0	0			0				
A-C	679	170			679				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	582	0.009	5	0.0	0.0	6.241	A
B-A	5	1	300	0.018	5	0.0	0.0	12.219	B
C-AB	5	1	541	0.010	5	0.0	0.0	6.727	A
C-A	593	148			593				
A-B	0	0			0				
A-C	569	142			569				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	792	100.000
B - Marlesford Rd North West		ONE HOUR	✓	4	100.000
C - A12 North East		ONE HOUR	✓	859	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	791
	B - Marlesford Rd North West	4	0	0
	C - A12 North East	856	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	7.91	0.0	0.5	A	2	3
C-A						786	1179
A-B						1	2
A-C						726	1089

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	579	0.000	0	0.0	0.0	0.000	A
B-A	0	0	287	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	534	0.003	2	0.0	0.0	6.762	A
C-A	645	161			645				
A-B	0.88	0.22			0.88				
A-C	596	149			596				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	544	0.000	0	0.0	0.0	0.000	A
B-A	0	0	238	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	502	0.004	2	0.0	0.0	7.200	A
C-A	770	192			770				
A-B	1	0.26			1				
A-C	711	178			711				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	496	0.000	0	0.0	0.0	0.000	A
B-A	0	0	170	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	458	0.006	3	0.0	0.0	7.909	A
C-A	943	236			943				
A-B	1	0.32			1				
A-C	871	218			871				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	496	0.000	0	0.0	0.0	0.000	A
B-A	0	0	170	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	458	0.006	3	0.0	0.0	7.909	A
C-A	943	236			943				
A-B	1	0.32			1				
A-C	871	218			871				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	544	0.000	0	0.0	0.0	0.000	A
B-A	0	0	238	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	502	0.004	2	0.0	0.0	7.200	A
C-A	770	192			770				
A-B	1	0.26			1				
A-C	711	178			711				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	579	0.000	0	0.0	0.0	0.000	A
B-A	0	0	287	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	534	0.003	2	0.0	0.0	6.764	A
C-A	645	161			645				
A-B	0.88	0.22			0.88				
A-C	596	149			596				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	863	100.000
B - Marlesford Rd North West		ONE HOUR	✓	6	100.000
C - A12 North East		ONE HOUR	✓	782	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	863
	B - Marlesford Rd North West	4	0	2
	C - A12 North East	776	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	5
	B - Marlesford Rd North West	0	0	50
	C - A12 North East	8	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	11.34	0.0	0.5	B	2	3
B-A	0.02	21.61	0.0	0.5	C	3	5
C-AB	0.02	9.85	0.0	0.5	A	5	8
C-A						712	1068
A-B						0	0
A-C						792	1188

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	379	0.005	2	0.0	0.0	9.540	A
B-A	3	0.66	287	0.009	3	0.0	0.0	12.635	B
C-AB	4	1	439	0.010	4	0.0	0.0	8.291	A
C-A	584	146			584				
A-B	0	0			0				
A-C	650	163			650				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.53	354	0.006	2	0.0	0.0	10.217	B
B-A	3	0.79	238	0.013	3	0.0	0.0	15.305	C
C-AB	5	1	411	0.013	5	0.0	0.0	8.880	A
C-A	698	174			698				
A-B	0	0			0				
A-C	776	194			776				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	320	0.008	3	0.0	0.0	11.333	B
B-A	4	0.97	170	0.023	4	0.0	0.0	21.609	C
C-AB	6	2	372	0.017	6	0.0	0.0	9.847	A
C-A	855	214			855				
A-B	0	0			0				
A-C	951	238			951				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	320	0.008	3	0.0	0.0	11.339	B
B-A	4	0.97	170	0.023	4	0.0	0.0	21.613	C
C-AB	6	2	372	0.017	6	0.0	0.0	9.847	A
C-A	855	214			855				
A-B	0	0			0				
A-C	951	238			951				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.53	354	0.006	2	0.0	0.0	10.229	B
B-A	3	0.79	238	0.013	3	0.0	0.0	15.307	C
C-AB	5	1	411	0.013	5	0.0	0.0	8.881	A
C-A	698	174			698				
A-B	0	0			0				
A-C	776	194			776				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	379	0.005	2	0.0	0.0	9.548	A
B-A	3	0.66	288	0.009	3	0.0	0.0	12.639	B
C-AB	4	1	439	0.010	4	0.0	0.0	8.293	A
C-A	584	146			584				
A-B	0	0			0				
A-C	650	163			650				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	954	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	731	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	4	951
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	721	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	3
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.02	8.68	0.0	0.5	A	9	13
C-A						662	993
A-B						3	5
A-C						872	1309

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	554	0.000	0	0.0	0.0	0.000	A
B-A	0	0	284	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	512	0.014	7	0.0	0.0	7.134	A
C-A	543	136			543				
A-B	3	0.66			3				
A-C	716	179			716				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	515	0.000	0	0.0	0.0	0.000	A
B-A	0	0	234	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	475	0.018	8	0.0	0.0	7.713	A
C-A	649	162			649				
A-B	3	0.79			3				
A-C	855	214			855				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	461	0.000	0	0.0	0.0	0.000	A
B-A	0	0	165	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	425	0.024	10	0.0	0.0	8.685	A
C-A	794	199			794				
A-B	4	0.97			4				
A-C	1047	262			1047				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	461	0.000	0	0.0	0.0	0.000	A
B-A	0	0	165	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	425	0.024	10	0.0	0.0	8.685	A
C-A	794	199			794				
A-B	4	0.97			4				
A-C	1047	262			1047				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	515	0.000	0	0.0	0.0	0.000	A
B-A	0	0	234	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	475	0.018	8	0.0	0.0	7.715	A
C-A	649	162			649				
A-B	3	0.79			3				
A-C	855	214			855				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	554	0.000	0	0.0	0.0	0.000	A
B-A	0	0	284	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	512	0.014	7	0.0	0.0	7.135	A
C-A	543	136			543				
A-B	3	0.66			3				
A-C	716	179			716				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	398	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	480	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	397
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	477	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	14
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	6.32	0.0	0.5	A	2	3
C-A						438	657
A-B						1	2
A-C						364	546

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	663	0.000	0	0.0	0.0	0.000	A
B-A	0	0	403	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	612	0.003	2	0.0	0.0	5.895	A
C-A	359	90			359				
A-B	0.88	0.22			0.88				
A-C	299	75			299				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	645	0.000	0	0.0	0.0	0.000	A
B-A	0	0	377	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	596	0.004	2	0.0	0.0	6.066	A
C-A	429	107			429				
A-B	1	0.26			1				
A-C	356	89			356				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	620	0.000	0	0.0	0.0	0.000	A
B-A	0	0	340	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	572	0.004	3	0.0	0.0	6.319	A
C-A	525	131			525				
A-B	1	0.32			1				
A-C	437	109			437				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	620	0.000	0	0.0	0.0	0.000	A
B-A	0	0	340	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	572	0.004	3	0.0	0.0	6.319	A
C-A	525	131			525				
A-B	1	0.32			1				
A-C	437	109			437				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	645	0.000	0	0.0	0.0	0.000	A
B-A	0	0	377	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	596	0.004	2	0.0	0.0	6.068	A
C-A	429	107			429				
A-B	1	0.26			1				
A-C	356	89			356				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	663	0.000	0	0.0	0.0	0.000	A
B-A	0	0	403	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	612	0.003	2	0.0	0.0	5.897	A
C-A	359	90			359				
A-B	0.88	0.22			0.88				
A-C	299	75			299				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	817	100.000
B - Marlesford Rd North West		ONE HOUR	✓	14	100.000
C - A12 North East		ONE HOUR	✓	817	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	817
	B - Marlesford Rd North West	7	0	7
	C - A12 North East	810	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	16
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.90	0.0	0.5	A	6	10
B-A	0.05	24.86	0.1	0.5	C	6	10
C-AB	0.02	8.44	0.0	0.5	A	6	10
C-A						743	1115
A-B						0	0
A-C						749	1124

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	558	0.009	5	0.0	0.0	6.508	A
B-A	5	1	275	0.019	5	0.0	0.0	13.330	B
C-AB	5	1	518	0.010	5	0.0	0.0	7.019	A
C-A	610	152			610				
A-B	0	0			0				
A-C	615	154			615				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	6	2	519	0.012	6	0.0	0.0	7.021	A
B-A	6	2	224	0.028	6	0.0	0.0	16.553	C
C-AB	6	2	483	0.013	6	0.0	0.0	7.552	A
C-A	728	182			728				
A-B	0	0			0				
A-C	734	184			734				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	464	0.017	8	0.0	0.0	7.891	A
B-A	8	2	152	0.051	8	0.0	0.1	24.840	C
C-AB	8	2	434	0.018	8	0.0	0.0	8.439	A
C-A	892	223			892				
A-B	0	0			0				
A-C	899	225			899				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	463	0.017	8	0.0	0.0	7.899	A
B-A	8	2	152	0.051	8	0.1	0.1	24.864	C
C-AB	8	2	434	0.018	8	0.0	0.0	8.439	A
C-A	892	223			892				
A-B	0	0			0				
A-C	899	225			899				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	518	0.012	6	0.0	0.0	7.033	A
B-A	6	2	224	0.028	6	0.1	0.0	16.562	C
C-AB	6	2	483	0.013	6	0.0	0.0	7.556	A
C-A	728	182			728				
A-B	0	0			0				
A-C	734	184			734				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	558	0.009	5	0.0	0.0	6.519	A
B-A	5	1	275	0.019	5	0.0	0.0	13.336	B
C-AB	5	1	518	0.010	5	0.0	0.0	7.019	A
C-A	610	152			610				
A-B	0	0			0				
A-C	615	154			615				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	858	100.000
B - Marlesford Rd North West		ONE HOUR	✓	4	100.000
C - A12 North East		ONE HOUR	✓	891	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	857
	B - Marlesford Rd North West	4	0	0
	C - A12 North East	888	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	15
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	8.58	0.0	0.5	A	2	3
C-A						815	1223
A-B						1	2
A-C						787	1180

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	552	0.000	0	0.0	0.0	0.000	A
B-A	0	0	259	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	510	0.003	2	0.0	0.0	7.086	A
C-A	669	167			669				
A-B	0.88	0.22			0.88				
A-C	645	161			645				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	512	0.000	0	0.0	0.0	0.000	A
B-A	0	0	205	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	473	0.004	2	0.0	0.0	7.645	A
C-A	799	200			799				
A-B	1	0.26			1				
A-C	771	193			771				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	457	0.000	0	0.0	0.0	0.000	A
B-A	0	0	129	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	422	0.006	3	0.0	0.0	8.581	A
C-A	978	245			978				
A-B	1	0.32			1				
A-C	944	236			944				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	457	0.000	0	0.0	0.0	0.000	A
B-A	0	0	129	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.64	422	0.006	3	0.0	0.0	8.581	A
C-A	978	245			978				
A-B	1	0.32			1				
A-C	944	236			944				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	512	0.000	0	0.0	0.0	0.000	A
B-A	0	0	205	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.52	473	0.004	2	0.0	0.0	7.648	A
C-A	799	200			799				
A-B	1	0.26			1				
A-C	771	193			771				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	552	0.000	0	0.0	0.0	0.000	A
B-A	0	0	259	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.44	510	0.003	2	0.0	0.0	7.086	A
C-A	669	167			669				
A-B	0.88	0.22			0.88				
A-C	645	161			645				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	933	100.000
B - Marlesford Rd North West		ONE HOUR	✓	6	100.000
C - A12 North East		ONE HOUR	✓	857	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	933
	B - Marlesford Rd North West	4	0	2
	C - A12 North East	851	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	50
	C - A12 North East	11	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	12.25	0.0	0.5	B	2	3
B-A	0.03	30.08	0.0	0.5	D	3	5
C-AB	0.02	10.61	0.0	0.5	B	5	8
C-A						781	1172
A-B						0	0
A-C						857	1285

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	363	0.005	2	0.0	0.0	9.954	A
B-A	3	0.66	255	0.010	3	0.0	0.0	14.237	B
C-AB	4	1	421	0.010	4	0.0	0.0	8.648	A
C-A	641	160			641				
A-B	0	0			0				
A-C	703	176			703				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.53	336	0.006	2	0.0	0.0	10.794	B
B-A	3	0.79	200	0.016	3	0.0	0.0	18.278	C
C-AB	5	1	389	0.014	5	0.0	0.0	9.378	A
C-A	765	191			765				
A-B	0	0			0				
A-C	839	210			839				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	297	0.009	3	0.0	0.0	12.235	B
B-A	4	0.97	124	0.031	4	0.0	0.0	30.061	D
C-AB	6	2	346	0.019	6	0.0	0.0	10.611	B
C-A	937	234			937				
A-B	0	0			0				
A-C	1028	257			1028				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	296	0.009	3	0.0	0.0	12.250	B
B-A	4	0.97	124	0.031	4	0.0	0.0	30.079	D
C-AB	6	2	346	0.019	6	0.0	0.0	10.611	B
C-A	937	234			937				
A-B	0	0			0				
A-C	1028	257			1028				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.53	335	0.006	2	0.0	0.0	10.816	B
B-A	3	0.79	200	0.016	3	0.0	0.0	18.283	C
C-AB	5	1	389	0.014	5	0.0	0.0	9.381	A
C-A	765	191			765				
A-B	0	0			0				
A-C	839	210			839				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	363	0.005	2	0.0	0.0	9.966	A
B-A	3	0.66	256	0.010	3	0.0	0.0	14.241	B
C-AB	4	1	421	0.010	4	0.0	0.0	8.650	A
C-A	641	160			641				
A-B	0	0			0				
A-C	703	176			703				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	997	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	790	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	4	994
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	780	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	6
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.03	9.13	0.0	0.5	A	9	13
C-A						716	1074
A-B						3	5
A-C						912	1368

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	539	0.000	0	0.0	0.0	0.000	A
B-A	0	0	259	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	498	0.014	7	0.0	0.0	7.337	A
C-A	588	147			588				
A-B	3	0.66			3				
A-C	748	187			748				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	497	0.000	0	0.0	0.0	0.000	A
B-A	0	0	205	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	459	0.018	8	0.0	0.0	7.998	A
C-A	702	175			702				
A-B	3	0.79			3				
A-C	893	223			893				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	439	0.000	0	0.0	0.0	0.000	A
B-A	0	0	129	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	404	0.026	10	0.0	0.0	9.133	A
C-A	859	215			859				
A-B	4	0.97			4				
A-C	1094	274			1094				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	439	0.000	0	0.0	0.0	0.000	A
B-A	0	0	129	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	404	0.026	10	0.0	0.0	9.133	A
C-A	859	215			859				
A-B	4	0.97			4				
A-C	1094	274			1094				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	497	0.000	0	0.0	0.0	0.000	A
B-A	0	0	205	0.000	0	0.0	0.0	0.000	A
C-AB	8	2	459	0.018	8	0.0	0.0	8.000	A
C-A	702	175			702				
A-B	3	0.79			3				
A-C	893	223			893				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	539	0.000	0	0.0	0.0	0.000	A
B-A	0	0	259	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	498	0.014	7	0.0	0.0	7.337	A
C-A	588	147			588				
A-B	3	0.66			3				
A-C	748	187			748				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	372	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	474	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	371
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	471	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	6.17	0.0	0.5	A	2	3
C-A						432	649
A-B						1	2
A-C						340	510

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	673	0.000	0	0.0	0.0	0.000	A
B-A	0	0	414	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	622	0.003	2	0.0	0.0	5.806	A
C-A	355	89			355				
A-B	0.91	0.23			0.91				
A-C	279	70			279				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	657	0.000	0	0.0	0.0	0.000	A
B-A	0	0	389	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	607	0.004	2	0.0	0.0	5.954	A
C-A	424	106			424				
A-B	1	0.27			1				
A-C	333	83			333				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	635	0.000	0	0.0	0.0	0.000	A
B-A	0	0	355	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	586	0.005	3	0.0	0.0	6.171	A
C-A	519	130			519				
A-B	1	0.33			1				
A-C	408	102			408				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	635	0.000	0	0.0	0.0	0.000	A
B-A	0	0	355	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	586	0.005	3	0.0	0.0	6.171	A
C-A	519	130			519				
A-B	1	0.33			1				
A-C	408	102			408				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	657	0.000	0	0.0	0.0	0.000	A
B-A	0	0	389	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	607	0.004	2	0.0	0.0	5.956	A
C-A	424	106			424				
A-B	1	0.27			1				
A-C	333	83			333				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	673	0.000	0	0.0	0.0	0.000	A
B-A	0	0	414	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	622	0.003	2	0.0	0.0	5.806	A
C-A	355	89			355				
A-B	0.91	0.23			0.91				
A-C	279	70			279				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	790	100.000
B - Marlesford Rd North West		ONE HOUR	✓	15	100.000
C - A12 North East		ONE HOUR	✓	809	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	790
	B - Marlesford Rd North West	7	0	7
	C - A12 North East	802	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	8
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.43	0.0	0.5	A	7	10
B-A	0.04	20.57	0.0	0.5	C	7	10
C-AB	0.02	7.95	0.0	0.5	A	7	10
C-A						736	1104
A-B						0	0
A-C						725	1087

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	578	0.009	5	0.0	0.0	6.288	A
B-A	5	1	296	0.018	5	0.0	0.0	12.383	B
C-AB	5	1	536	0.010	5	0.0	0.0	6.783	A
C-A	604	151			604				
A-B	0	0			0				
A-C	594	149			594				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	542	0.012	7	0.0	0.0	6.717	A
B-A	7	2	249	0.026	6	0.0	0.0	14.867	B
C-AB	7	2	504	0.013	7	0.0	0.0	7.229	A
C-A	721	180			721				
A-B	0	0			0				
A-C	710	177			710				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	493	0.016	8	0.0	0.0	7.421	A
B-A	8	2	183	0.044	8	0.0	0.0	20.560	C
C-AB	8	2	461	0.017	8	0.0	0.0	7.952	A
C-A	883	221			883				
A-B	0	0			0				
A-C	869	217			869				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	493	0.016	8	0.0	0.0	7.426	A
B-A	8	2	183	0.044	8	0.0	0.0	20.572	C
C-AB	8	2	461	0.017	8	0.0	0.0	7.952	A
C-A	883	221			883				
A-B	0	0			0				
A-C	869	217			869				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	542	0.012	7	0.0	0.0	6.727	A
B-A	7	2	249	0.026	7	0.0	0.0	14.872	B
C-AB	7	2	504	0.013	7	0.0	0.0	7.229	A
C-A	721	180			721				
A-B	0	0			0				
A-C	710	177			710				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	577	0.009	5	0.0	0.0	6.297	A
B-A	5	1	296	0.018	6	0.0	0.0	12.388	B
C-AB	5	1	536	0.010	5	0.0	0.0	6.786	A
C-A	604	151			604				
A-B	0	0			0				
A-C	594	149			594				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	699	100.000
B - Marlesford Rd North West		ONE HOUR	✓	4	100.000
C - A12 North East		ONE HOUR	✓	910	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	697
	B - Marlesford Rd North West	4	0	0
	C - A12 North East	907	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	8
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	7.41	0.0	0.5	A	2	3
C-A						833	1249
A-B						1	2
A-C						640	960

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	601	0.000	0	0.0	0.0	0.000	A
B-A	0	0	302	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	555	0.003	2	0.0	0.0	6.506	A
C-A	683	171			683				
A-B	0.91	0.23			0.91				
A-C	525	131			525				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	571	0.000	0	0.0	0.0	0.000	A
B-A	0	0	256	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	527	0.004	2	0.0	0.0	6.858	A
C-A	816	204			816				
A-B	1	0.27			1				
A-C	627	157			627				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	529	0.000	0	0.0	0.0	0.000	A
B-A	0	0	192	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	488	0.005	3	0.0	0.0	7.411	A
C-A	999	250			999				
A-B	1	0.33			1				
A-C	768	192			768				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	529	0.000	0	0.0	0.0	0.000	A
B-A	0	0	192	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	488	0.005	3	0.0	0.0	7.411	A
C-A	999	250			999				
A-B	1	0.33			1				
A-C	768	192			768				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	571	0.000	0	0.0	0.0	0.000	A
B-A	0	0	256	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	527	0.004	2	0.0	0.0	6.861	A
C-A	816	204			816				
A-B	1	0.27			1				
A-C	627	157			627				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	601	0.000	0	0.0	0.0	0.000	A
B-A	0	0	302	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	555	0.003	2	0.0	0.0	6.506	A
C-A	683	171			683				
A-B	0.91	0.23			0.91				
A-C	525	131			525				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	914	100.000
B - Marlesford Rd North West		ONE HOUR	✓	6	100.000
C - A12 North East		ONE HOUR	✓	855	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	914
	B - Marlesford Rd North West	4	0	2
	C - A12 North East	849	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	3
	B - Marlesford Rd North West	0	0	50
	C - A12 North East	6	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	11.67	0.0	0.5	B	2	3
B-A	0.03	24.74	0.0	0.5	C	3	5
C-AB	0.02	10.12	0.0	0.5	B	6	8
C-A						779	1169
A-B						0	0
A-C						839	1259

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	373	0.005	2	0.0	0.0	9.693	A
B-A	3	0.69	273	0.010	3	0.0	0.0	13.308	B
C-AB	5	1	432	0.011	5	0.0	0.0	8.422	A
C-A	639	160			639				
A-B	0	0			0				
A-C	688	172			688				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.55	347	0.006	2	0.0	0.0	10.428	B
B-A	3	0.82	221	0.015	3	0.0	0.0	16.513	C
C-AB	5	1	403	0.014	5	0.0	0.0	9.063	A
C-A	763	191			763				
A-B	0	0			0				
A-C	822	206			822				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	311	0.009	3	0.0	0.0	11.660	B
B-A	4	1	149	0.027	4	0.0	0.0	24.735	C
C-AB	7	2	362	0.018	7	0.0	0.0	10.124	B
C-A	935	234			935				
A-B	0	0			0				
A-C	1007	252			1007				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	311	0.009	3	0.0	0.0	11.669	B
B-A	4	1	150	0.027	4	0.0	0.0	24.743	C
C-AB	7	2	362	0.018	7	0.0	0.0	10.124	B
C-A	935	234			935				
A-B	0	0			0				
A-C	1007	252			1007				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	347	0.006	2	0.0	0.0	10.444	B
B-A	3	0.82	221	0.015	3	0.0	0.0	16.515	C
C-AB	5	1	403	0.014	5	0.0	0.0	9.064	A
C-A	763	191			763				
A-B	0	0			0				
A-C	822	206			822				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	373	0.005	2	0.0	0.0	9.700	A
B-A	3	0.69	273	0.010	3	0.0	0.0	13.312	B
C-AB	5	1	432	0.011	5	0.0	0.0	8.424	A
C-A	639	160			639				
A-B	0	0			0				
A-C	688	172			688				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	977	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	4	974
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	720	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	2
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.03	8.82	0.0	0.5	A	9	13
C-A						661	992
A-B						3	5
A-C						894	1340

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	550	0.000	0	0.0	0.0	0.000	A
B-A	0	0	281	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	508	0.014	7	0.0	0.0	7.194	A
C-A	542	136			542				
A-B	3	0.69			3				
A-C	733	183			733				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	510	0.000	0	0.0	0.0	0.000	A
B-A	0	0	230	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	470	0.019	9	0.0	0.0	7.796	A
C-A	648	162			648				
A-B	3	0.82			3				
A-C	875	219			875				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	454	0.000	0	0.0	0.0	0.000	A
B-A	0	0	161	0.000	0	0.0	0.0	0.000	A
C-AB	11	3	419	0.026	11	0.0	0.0	8.815	A
C-A	793	198			793				
A-B	4	1			4				
A-C	1072	268			1072				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	454	0.000	0	0.0	0.0	0.000	A
B-A	0	0	161	0.000	0	0.0	0.0	0.000	A
C-AB	11	3	419	0.026	11	0.0	0.0	8.815	A
C-A	793	198			793				
A-B	4	1			4				
A-C	1072	268			1072				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	510	0.000	0	0.0	0.0	0.000	A
B-A	0	0	230	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	470	0.019	9	0.0	0.0	7.799	A
C-A	648	162			648				
A-B	3	0.82			3				
A-C	875	219			875				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	550	0.000	0	0.0	0.0	0.000	A
B-A	0	0	281	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	508	0.014	7	0.0	0.0	7.197	A
C-A	542	136			542				
A-B	3	0.69			3				
A-C	733	183			733				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	374	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	477	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	373
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	474	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	8
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.00	6.17	0.0	0.5	A	2	3
C-A						435	653
A-B						1	2
A-C						342	513

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	673	0.000	0	0.0	0.0	0.000	A
B-A	0	0	413	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	622	0.003	2	0.0	0.0	5.807	A
C-A	357	89			357				
A-B	0.91	0.23			0.91				
A-C	280	70			280				

06:00 - 06:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	657	0.000	0	0.0	0.0	0.000	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	607	0.004	2	0.0	0.0	5.955	A
C-A	426	107			426				
A-B	1	0.27			1				
A-C	335	84			335				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	635	0.000	0	0.0	0.0	0.000	A
B-A	0	0	354	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	586	0.005	3	0.0	0.0	6.173	A
C-A	522	131			522				
A-B	1	0.33			1				
A-C	410	103			410				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	635	0.000	0	0.0	0.0	0.000	A
B-A	0	0	354	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	586	0.005	3	0.0	0.0	6.173	A
C-A	522	131			522				
A-B	1	0.33			1				
A-C	410	103			410				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	657	0.000	0	0.0	0.0	0.000	A
B-A	0	0	388	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	607	0.004	2	0.0	0.0	5.958	A
C-A	426	107			426				
A-B	1	0.27			1				
A-C	335	84			335				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	673	0.000	0	0.0	0.0	0.000	A
B-A	0	0	413	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	622	0.003	2	0.0	0.0	5.807	A
C-A	357	89			357				
A-B	0.91	0.23			0.91				
A-C	280	70			280				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	814	100.000
B - Marlesford Rd North West		ONE HOUR	✓	15	100.000
C - A12 North East		ONE HOUR	✓	811	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	814
	B - Marlesford Rd North West	7	0	7
	C - A12 North East	804	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	8
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.57	0.0	0.5	A	7	10
B-A	0.05	21.53	0.0	0.5	C	7	10
C-AB	0.02	8.10	0.0	0.5	A	7	10
C-A						738	1106
A-B						0	0
A-C						747	1120

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	572	0.010	5	0.0	0.0	6.355	A
B-A	5	1	291	0.019	5	0.0	0.0	12.614	B
C-AB	5	1	531	0.010	5	0.0	0.0	6.854	A
C-A	605	151			605				
A-B	0	0			0				
A-C	613	153			613				

07:00 - 07:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	7	2	535	0.012	7	0.0	0.0	6.808	A
B-A	7	2	242	0.027	6	0.0	0.0	15.269	C
C-AB	7	2	498	0.013	7	0.0	0.0	7.326	A
C-A	723	181			723				
A-B	0	0			0				
A-C	731	183			731				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	484	0.017	8	0.0	0.0	7.560	A
B-A	8	2	175	0.046	8	0.0	0.0	21.518	C
C-AB	8	2	453	0.018	8	0.0	0.0	8.097	A
C-A	885	221			885				
A-B	0	0			0				
A-C	896	224			896				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	484	0.017	8	0.0	0.0	7.566	A
B-A	8	2	175	0.046	8	0.0	0.0	21.531	C
C-AB	8	2	453	0.018	8	0.0	0.0	8.097	A
C-A	885	221			885				
A-B	0	0			0				
A-C	896	224			896				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	535	0.012	7	0.0	0.0	6.817	A
B-A	7	2	242	0.027	7	0.0	0.0	15.277	C
C-AB	7	2	498	0.013	7	0.0	0.0	7.326	A
C-A	723	181			723				
A-B	0	0			0				
A-C	731	183			731				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	571	0.010	5	0.0	0.0	6.362	A
B-A	5	1	291	0.019	6	0.0	0.0	12.617	B
C-AB	5	1	531	0.010	5	0.0	0.0	6.857	A
C-A	605	151			605				
A-B	0	0			0				
A-C	613	153			613				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	707	100.000
B - Marlesford Rd North West		ONE HOUR	✓	4	100.000
C - A12 North East		ONE HOUR	✓	910	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	1	705
	B - Marlesford Rd North West	4	0	0
	C - A12 North East	907	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	9
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.01	7.47	0.0	0.5	A	2	3
C-A						833	1249
A-B						1	2
A-C						647	971

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	598	0.000	0	0.0	0.0	0.000	A
B-A	0	0	300	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	552	0.003	2	0.0	0.0	6.537	A
C-A	683	171			683				
A-B	0.91	0.23			0.91				
A-C	531	133			531				

08:00 - 08:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	568	0.000	0	0.0	0.0	0.000	A
B-A	0	0	253	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	524	0.004	2	0.0	0.0	6.899	A
C-A	816	204			816				
A-B	1	0.27			1				
A-C	634	159			634				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	525	0.000	0	0.0	0.0	0.000	A
B-A	0	0	188	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	485	0.006	3	0.0	0.0	7.470	A
C-A	999	250			999				
A-B	1	0.33			1				
A-C	777	194			777				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	525	0.000	0	0.0	0.0	0.000	A
B-A	0	0	188	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.67	485	0.006	3	0.0	0.0	7.470	A
C-A	999	250			999				
A-B	1	0.33			1				
A-C	777	194			777				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	568	0.000	0	0.0	0.0	0.000	A
B-A	0	0	253	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.54	524	0.004	2	0.0	0.0	6.901	A
C-A	816	204			816				
A-B	1	0.27			1				
A-C	634	159			634				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	598	0.000	0	0.0	0.0	0.000	A
B-A	0	0	300	0.000	0	0.0	0.0	0.000	A
C-AB	2	0.46	552	0.003	2	0.0	0.0	6.540	A
C-A	683	171			683				
A-B	0.91	0.23			0.91				
A-C	531	133			531				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	920	100.000
B - Marlesford Rd North West		ONE HOUR	✓	6	100.000
C - A12 North East		ONE HOUR	✓	860	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	920
	B - Marlesford Rd North West	4	0	2
	C - A12 North East	854	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	3
	B - Marlesford Rd North West	0	0	50
	C - A12 North East	6	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	11.72	0.0	0.5	B	2	3
B-A	0.03	25.23	0.0	0.5	D	3	5
C-AB	0.02	10.17	0.0	0.5	B	6	8
C-A						784	1176
A-B						0	0
A-C						845	1267

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	372	0.005	2	0.0	0.0	9.718	A
B-A	3	0.69	271	0.010	3	0.0	0.0	13.404	B
C-AB	5	1	431	0.011	5	0.0	0.0	8.445	A
C-A	643	161			643				
A-B	0	0			0				
A-C	693	173			693				

15:00 - 15:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	2	0.55	346	0.006	2	0.0	0.0	10.464	B
B-A	3	0.82	219	0.015	3	0.0	0.0	16.690	C
C-AB	5	1	401	0.014	5	0.0	0.0	9.094	A
C-A	768	192			768				
A-B	0	0			0				
A-C	827	207			827				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	310	0.009	3	0.0	0.0	11.715	B
B-A	4	1	147	0.027	4	0.0	0.0	25.222	D
C-AB	7	2	361	0.019	7	0.0	0.0	10.171	B
C-A	940	235			940				
A-B	0	0			0				
A-C	1013	253			1013				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	310	0.009	3	0.0	0.0	11.725	B
B-A	4	1	147	0.027	4	0.0	0.0	25.232	D
C-AB	7	2	361	0.019	7	0.0	0.0	10.171	B
C-A	940	235			940				
A-B	0	0			0				
A-C	1013	253			1013				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	346	0.006	2	0.0	0.0	10.478	B
B-A	3	0.82	219	0.015	3	0.0	0.0	16.691	C
C-AB	5	1	401	0.014	5	0.0	0.0	9.097	A
C-A	768	192			768				
A-B	0	0			0				
A-C	827	207			827				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	372	0.005	2	0.0	0.0	9.728	A
B-A	3	0.69	271	0.010	3	0.0	0.0	13.408	B
C-AB	5	1	431	0.011	5	0.0	0.0	8.447	A
C-A	643	161			643				
A-B	0	0			0				
A-C	693	173			693				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J39	A12 / Marlesford Road	T-Junction	Two-way	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	983	100.000
B - Marlesford Rd North West		ONE HOUR	✓	2	100.000
C - A12 North East		ONE HOUR	✓	734	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	4	980
	B - Marlesford Rd North West	1	0	1
	C - A12 North East	724	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Marlesford Rd North West	C - A12 North East
From	A - A12 South West	0	0	2
	B - Marlesford Rd North West	0	0	0
	C - A12 North East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.00	0.00	0.0	~1	A	0	0
C-AB	0.03	8.85	0.0	0.5	A	9	13
C-A						665	997
A-B						3	5
A-C						899	1349

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	549	0.000	0	0.0	0.0	0.000	A
B-A	0	0	279	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	506	0.014	7	0.0	0.0	7.211	A
C-A	545	136			545				
A-B	3	0.69			3				
A-C	738	184			738				

17:00 - 17:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

	(Veh/hr)	(Veh)			(Veh/hr)				
B-C	0	0	508	0.000	0	0.0	0.0	0.000	A
B-A	0	0	229	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	469	0.019	9	0.0	0.0	7.820	A
C-A	651	163			651				
A-B	3	0.82			3				
A-C	881	220			881				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	453	0.000	0	0.0	0.0	0.000	A
B-A	0	0	158	0.000	0	0.0	0.0	0.000	A
C-AB	11	3	417	0.026	11	0.0	0.0	8.852	A
C-A	798	199			798				
A-B	4	1			4				
A-C	1079	270			1079				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	453	0.000	0	0.0	0.0	0.000	A
B-A	0	0	158	0.000	0	0.0	0.0	0.000	A
C-AB	11	3	417	0.026	11	0.0	0.0	8.852	A
C-A	798	199			798				
A-B	4	1			4				
A-C	1079	270			1079				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	508	0.000	0	0.0	0.0	0.000	A
B-A	0	0	229	0.000	0	0.0	0.0	0.000	A
C-AB	9	2	469	0.019	9	0.0	0.0	7.823	A
C-A	651	163			651				
A-B	3	0.82			3				
A-C	881	220			881				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	549	0.000	0	0.0	0.0	0.000	A
B-A	0	0	279	0.000	0	0.0	0.0	0.000	A
C-AB	7	2	506	0.014	7	0.0	0.0	7.214	A
C-A	545	136			545				
A-B	3	0.69			3				
A-C	738	184			738				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200923_J40_Model_CV_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J40\Model
Report generation date: 18/12/2020 12:07:11

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
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»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C	0.0	0.5	6.61	0.00	A	0.0	0.5	8.46	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	9.07	0.01	A	0.0	0.5	9.33	0.01	A
Stream B-A	0.1	0.5	10.32	0.05	B	0.2	1.0	19.45	0.18	C	0.4	1.4	23.58	0.28	C	0.2	0.6	22.93	0.16	C	0.1	0.5	21.29	0.13	C
Stream C-AB	0.0	0.5	4.56	0.00	A	0.0	0.5	4.43	0.02	A	0.0	~1	0.00	0.00	A	0.0	0.5	4.28	0.01	A	0.0	0.5	4.60	0.02	A
2023 Reference Case																									
Stream B-C	0.0	0.5	6.81	0.00	A	0.0	0.5	9.06	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	9.68	0.01	A	0.0	0.5	9.95	0.01	A
Stream B-A	0.1	0.5	10.99	0.06	B	0.3	1.3	23.82	0.23	C	0.6	2.6	32.56	0.38	D	0.3	1.2	28.42	0.21	D	0.2	0.9	27.71	0.18	D
Stream C-AB	0.0	0.5	4.53	0.00	A	0.0	0.5	4.40	0.03	A	0.0	~1	0.00	0.00	A	0.0	0.5	4.21	0.02	A	0.0	0.5	4.37	0.02	A
2023 Early Years																									
Stream B-C	0.0	0.5	7.38	0.00	A	0.0	0.5	13.32	0.00	B	0.0	~1	0.00	0.00	A	0.0	0.5	10.22	0.01	B	0.0	0.5	10.76	0.01	B
Stream B-A	0.1	0.5	12.60	0.06	B	0.8	3.3	64.84	0.45	F	1.0	4.7	54.97	0.51	F	0.3	1.4	35.58	0.25	E	0.3	1.4	45.12	0.26	E
Stream C-AB	0.0	0.5	4.61	0.00	A	0.0	0.5	4.39	0.04	A	0.0	~1	0.00	0.00	A	0.0	0.5	4.18	0.02	A	0.0	0.5	3.98	0.03	A
2028 Reference Case																									
Stream B-C	0.0	0.5	6.87	0.00	A	0.0	0.5	9.60	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	10.09	0.01	B	0.0	0.5	10.33	0.01	B
Stream B-A	0.1	0.5	11.25	0.06	B	0.4	1.0	28.19	0.27	D	0.8	3.8	42.37	0.46	E	0.3	1.4	33.56	0.25	D	0.3	1.2	31.86	0.21	D
Stream C-AB	0.0	0.5	4.49	0.00	A	0.0	0.5	4.36	0.03	A	0.0	~1	0.00	0.00	A	0.0	0.5	4.11	0.02	A	0.0	0.5	4.26	0.02	A
2028 Peak Construction																									
Stream B-C	0.0	0.5	7.12	0.01	A	0.0	0.5	10.95	0.00	B	0.0	~1	0.00	0.00	A	0.0	0.5	12.03	0.01	B	0.0	0.5	11.39	0.02	B
Stream B-A	0.1	0.5	12.07	0.06	B	0.5	1.9	40.68	0.35	E	1.5	7.3	82.95	0.63	F	0.6	2.2	61.41	0.38	F	0.4	1.5	48.44	0.29	E
Stream C-AB	0.0	0.5	4.52	0.00	A	0.0	0.5	4.37	0.03	A	0.0	~1	0.00	0.00	A	0.0	0.5	4.03	0.02	A	0.0	0.5	4.21	0.03	A
2034 Reference Case																									
Stream B-C	0.0	0.5	6.93	0.01	A	0.0	0.5	9.86	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	10.71	0.01	B	0.0	0.5	10.56	0.02	B
Stream B-A	0.1	0.5	11.49	0.06	B	0.4	1.4	29.96	0.29	D	0.7	3.2	34.44	0.41	D	0.4	1.4	42.34	0.31	E	0.3	1.3	33.47	0.22	D
Stream C-AB	0.0	0.5	4.47	0.00	A	0.0	0.5	4.32	0.03	A	0.0	~1	0.00	0.00	A	0.0	0.5	3.94	0.02	A	0.0	0.5	4.28	0.03	A
2034 Operational Led																									
Stream B-C	0.0	0.5	6.93	0.01	A	0.0	0.5	10.15	0.00	B	0.0	~1	0.00	0.00	A	0.0	0.5	10.82	0.01	B	0.0	0.5	10.63	0.02	B
Stream B-A	0.1	0.5	11.51	0.06	B	0.4	1.6	32.27	0.31	D	0.7	3.3	35.44	0.42	E	0.4	1.5	43.83	0.31	E	0.3	1.3	34.22	0.23	D
Stream C-AB	0.0	0.5	4.47	0.00	A	0.0	0.5	4.33	0.03	A	0.0	~1	0.00	0.00	A	0.0	0.5	3.94	0.02	A	0.0	0.5	4.27	0.03	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

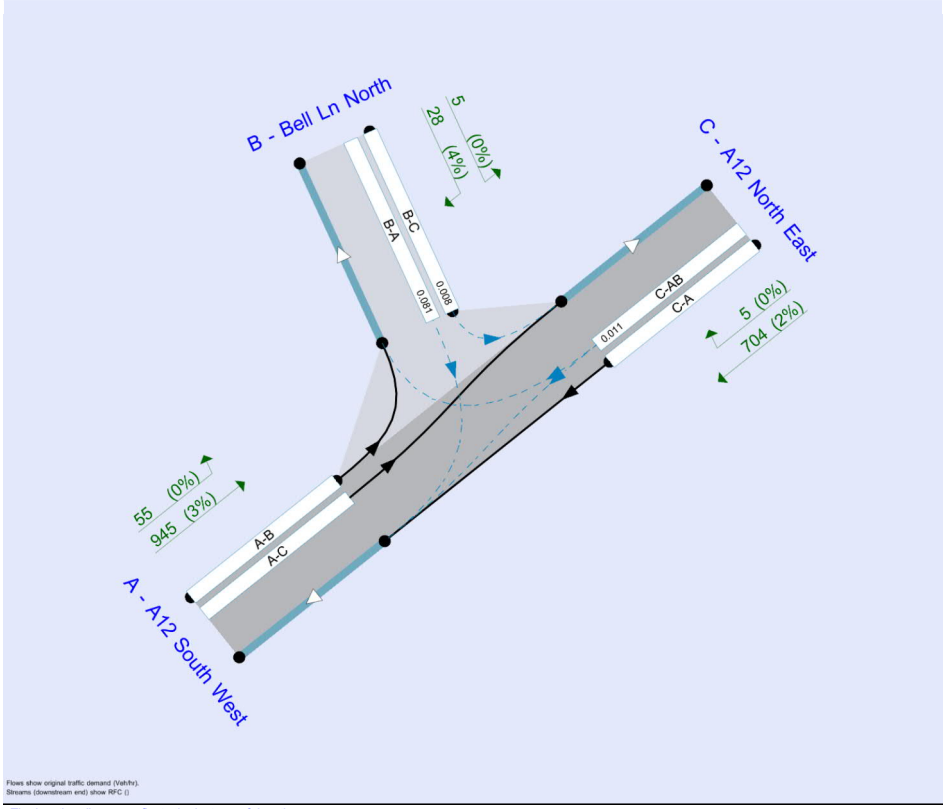
File summary

File Description

Title	A12 / Bell Lane
Location	52°10'8.75"N, 1°24'9.72"E
Site number	40
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	The Give way width on minor arm has been modelled as 10m as Junctions 9 restricts the give way width to less than 10m.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 South West		Major
B	Bell Ln North		Minor
C	A12 North East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 North East	5.75			154.2	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Bell Ln North	One lane plus flare	10.00	5.50	3.30	3.30	3.20	✓	1.00	17	47

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J40	B-A	554	0.102	0.258	0.162	0.368
J40	B-C	640	0.099	0.251	-	-
J40	C-B	663	0.260	0.260	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	279	100.000
B - Bell Ln North		ONE HOUR	✓	18	100.000
C - A12 North East		ONE HOUR	✓	396	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	274
	B - Bell Ln North	16	0	2
	C - A12 North East	395	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
	A - A12 South West	0	0	13

From	B - Bell Ln North	6	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.61	0.0	0.5	A	2	3
B-A	0.05	10.32	0.1	0.5	B	15	22
C-AB	0.00	4.56	0.0	0.5	A	2	3
C-A						362	543
A-B						5	7
A-C						251	377

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	577	0.003	1	0.0	0.0	6.258	A
B-A	12	3	415	0.029	12	0.0	0.0	8.921	A
C-AB	1	0.30	792	0.002	1	0.0	0.0	4.550	A
C-A	297	74			297				
A-B	4	0.94			4				
A-C	206	52			206				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	564	0.003	2	0.0	0.0	6.400	A
B-A	14	4	395	0.036	14	0.0	0.0	9.461	A
C-AB	2	0.40	820	0.002	2	0.0	0.0	4.391	A
C-A	354	89			354				
A-B	4	1			4				
A-C	246	62			246				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	547	0.004	2	0.0	0.0	6.608	A
B-A	18	4	366	0.048	18	0.0	0.0	10.319	B
C-AB	2	0.56	859	0.003	2	0.0	0.0	4.190	A
C-A	434	108			434				
A-B	6	1			6				
A-C	302	75			302				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	547	0.004	2	0.0	0.0	6.609	A
B-A	18	4	366	0.048	18	0.0	0.1	10.320	B
C-AB	2	0.56	859	0.003	2	0.0	0.0	4.201	A
C-A	434	108			434				
A-B	6	1			6				
A-C	302	75			302				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	564	0.003	2	0.0	0.0	6.401	A
B-A	14	4	395	0.036	14	0.1	0.0	9.465	A
C-AB	2	0.40	820	0.002	2	0.0	0.0	4.412	A
C-A	354	89			354				
A-B	4	1			4				
A-C	246	62			246				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	577	0.003	2	0.0	0.0	6.262	A
B-A	12	3	415	0.029	12	0.0	0.0	8.925	A
C-AB	1	0.30	792	0.002	1	0.0	0.0	4.561	A
C-A	297	74			297				
A-B	4	0.94			4				
A-C	206	52			206				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	632	100.000
B - Bell Ln North		ONE HOUR	✓	38	100.000
C - A12 North East		ONE HOUR	✓	708	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	20	612
	B - Bell Ln North	37	0	1
	C - A12 North East	704	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	10
	B - Bell Ln North	0	0	0
	C - A12 North East	6	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	8.46	0.0	0.5	A	0.92	1
B-A	0.18	19.45	0.2	1.0	C	34	51
C-AB	0.02	4.43	0.0	0.5	A	14	21
C-A						635	953
A-B						18	28
A-C						562	842

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	498	0.002	0.75	0.0	0.0	7.237	A
B-A	28	7	330	0.084	27	0.0	0.1	11.891	B
C-AB	9	2	821	0.010	8	0.0	0.0	4.432	A
C-A	525	131			525				
A-B	15	4			15				
A-C	461	115			461				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.90	0.22	469	0.002	0.90	0.0	0.0	7.684	A
B-A	33	8	286	0.116	33	0.1	0.1	14.215	B
C-AB	13	3	885	0.014	13	0.0	0.0	4.147	A
C-A	624	156			624				
A-B	18	4			18				
A-C	550	138			550				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	427	0.003	1	0.0	0.0	8.455	A
B-A	41	10	226	0.180	40	0.1	0.2	19.376	C
C-AB	21	5	978	0.022	21	0.0	0.0	3.782	A
C-A	758	190			758				
A-B	22	6			22				
A-C	674	168			674				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.28	427	0.003	1	0.0	0.0	8.460	A
B-A	41	10	226	0.180	41	0.2	0.2	19.447	C
C-AB	21	5	978	0.022	21	0.0	0.0	3.766	A
C-A	758	190			758				
A-B	22	6			22				
A-C	674	168			674				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.90	0.22	469	0.002	0.90	0.0	0.0	7.690	A
B-A	33	8	286	0.116	34	0.2	0.1	14.270	B
C-AB	13	3	885	0.014	13	0.0	0.0	4.092	A
C-A	624	156			624				
A-B	18	4			18				
A-C	550	138			550				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.75	0.19	498	0.002	0.75	0.0	0.0	7.240	A
B-A	28	7	330	0.084	28	0.1	0.1	11.933	B
C-AB	9	2	821	0.010	9	0.0	0.0	4.402	A
C-A	524	131			524				
A-B	15	4			15				
A-C	461	115			461				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.21	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.22	0.03	0.28	0.50	0.98			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	618	100.000
B - Bell Ln North		ONE HOUR	✓	55	100.000
C - A12 North East		ONE HOUR	✓	744	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	20	598
	B - Bell Ln North	55	0	0
	C - A12 North East	744	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	10
	B - Bell Ln North	5	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.28	23.58	0.4	1.4	C	50	76
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						683	1024
A-B						18	28
A-C						549	823

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	495	0.000	0	0.0	0.0	0.000	A
B-A	41	10	312	0.133	41	0.0	0.2	13.242	B
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
C-A	560	140			560				
A-B	15	4			15				
A-C	450	113			450				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	465	0.000	0	0.0	0.0	0.000	A
B-A	49	12	271	0.183	49	0.2	0.2	16.243	C
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
C-A	669	167			669				
A-B	18	4			18				
A-C	538	134			538				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	421	0.000	0	0.0	0.0	0.000	A
B-A	61	15	213	0.284	60	0.2	0.4	23.394	C
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	819	205			819				
A-B	22	6			22				
A-C	658	165			658				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	421	0.000	0	0.0	0.0	0.000	A
B-A	61	15	213	0.284	61	0.4	0.4	23.583	C
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	819	205			819				
A-B	22	6			22				
A-C	658	165			658				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	465	0.000	0	0.0	0.0	0.000	A
B-A	49	12	271	0.183	50	0.4	0.2	16.376	C
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
C-A	669	167			669				
A-B	18	4			18				
A-C	538	134			538				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	495	0.000	0	0.0	0.0	0.000	A
B-A	41	10	312	0.133	42	0.2	0.2	13.330	B
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
C-A	560	140			560				
A-B	15	4			15				
A-C	450	113			450				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.38	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.39	0.03	0.32	1.28	1.40			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	785	100.000
B - Bell Ln North		ONE HOUR	✓	30	100.000
C - A12 North East		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	33	752
	B - Bell Ln North	28	0	2
	C - A12 North East	658	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	4
	B - Bell Ln North	7	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.07	0.0	0.5	A	2	3
B-A	0.16	22.93	0.2	0.6	C	26	39
C-AB	0.01	4.28	0.0	0.5	A	9	13
C-A						598	897
A-B						30	45
A-C						690	1035

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	479	0.003	1	0.0	0.0	7.541	A
B-A	21	5	292	0.072	21	0.0	0.1	13.250	B
C-AB	5	1	850	0.006	5	0.0	0.0	4.261	A
C-A	492	123			492				
A-B	25	6			25				
A-C	566	142			566				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	447	0.004	2	0.0	0.0	8.094	A
B-A	25	6	248	0.101	25	0.1	0.1	16.110	C
C-AB	8	2	897	0.009	8	0.0	0.0	4.038	A
C-A	586	147			586				
A-B	30	7			30				
A-C	676	169			676				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	399	0.006	2	0.0	0.0	9.062	A
B-A	31	8	188	0.164	31	0.1	0.2	22.836	C
C-AB	13	3	969	0.014	13	0.0	0.0	3.758	A
C-A	715	179			715				
A-B	36	9			36				
A-C	828	207			828				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	399	0.006	2	0.0	0.0	9.067	A
B-A	31	8	188	0.164	31	0.2	0.2	22.927	C
C-AB	13	3	969	0.014	13	0.0	0.0	3.770	A
C-A	715	179			715				
A-B	36	9			36				
A-C	828	207			828				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.45	446	0.004	2	0.0	0.0	8.099	A
B-A	25	6	248	0.101	25	0.2	0.1	16.174	C
C-AB	8	2	897	0.009	8	0.0	0.0	4.063	A
C-A	586	147			586				
A-B	30	7			30				
A-C	676	169			676				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.38	479	0.003	2	0.0	0.0	7.545	A
B-A	21	5	292	0.072	21	0.1	0.1	13.293	B
C-AB	5	1	850	0.006	5	0.0	0.0	4.277	A
C-A	492	123			492				
A-B	25	6			25				
A-C	566	142			566				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.19	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.19	0.03	0.26	0.48	0.56			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	870	100.000
B - Bell Ln North		ONE HOUR	✓	27	100.000
C - A12 North East		ONE HOUR	✓	562	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	45	825
	B - Bell Ln North	23	0	4
	C - A12 North East	558	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.33	0.0	0.5	A	4	6
B-A	0.13	21.29	0.1	0.5	C	21	32
C-AB	0.02	4.60	0.0	0.5	A	10	15
C-A						506	758
A-B						41	62
A-C						757	1136

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.75	474	0.006	3	0.0	0.0	7.638	A
B-A	17	4	300	0.058	17	0.0	0.1	12.706	B
C-AB	6	2	791	0.008	6	0.0	0.0	4.587	A
C-A	417	104			417				
A-B	34	8			34				
A-C	621	155			621				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.90	440	0.008	4	0.0	0.0	8.254	A
B-A	21	5	256	0.081	21	0.1	0.1	15.299	C
C-AB	9	2	826	0.011	9	0.0	0.0	4.405	A
C-A	496	124			496				
A-B	40	10			40				
A-C	742	185			742				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	391	0.011	4	0.0	0.0	9.322	A
B-A	25	6	194	0.130	25	0.1	0.1	21.230	C
C-AB	15	4	879	0.017	15	0.0	0.0	4.162	A
C-A	604	151			604				
A-B	50	12			50				
A-C	908	227			908				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	390	0.011	4	0.0	0.0	9.327	A
B-A	25	6	194	0.130	25	0.1	0.1	21.287	C
C-AB	15	4	879	0.017	15	0.0	0.0	4.166	A
C-A	604	151			604				
A-B	50	12			50				
A-C	908	227			908				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.90	439	0.008	4	0.0	0.0	8.262	A
B-A	21	5	256	0.081	21	0.1	0.1	15.339	C
C-AB	9	2	826	0.011	9	0.0	0.0	4.417	A
C-A	496	124			496				
A-B	40	10			40				
A-C	742	185			742				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.75	474	0.006	3	0.0	0.0	7.646	A
B-A	17	4	300	0.058	17	0.1	0.1	12.737	B
C-AB	6	2	791	0.008	6	0.0	0.0	4.596	A
C-A	417	104			417				
A-B	34	8			34				
A-C	621	155			621				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	339	100.000
B - Bell Ln North		ONE HOUR	✓	20	100.000
C - A12 North East		ONE HOUR	✓	425	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	334
	B - Bell Ln North	18	0	2
	C - A12 North East	424	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.81	0.0	0.5	A	2	3
B-A	0.06	10.99	0.1	0.5	B	16	24
C-AB	0.00	4.53	0.0	0.5	A	2	3
C-A						388	583
A-B						5	8
A-C						306	459

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	566	0.003	2	0.0	0.0	6.379	A
B-A	13	3	402	0.033	13	0.0	0.0	9.250	A
C-AB	1	0.35	799	0.002	1	0.0	0.0	4.514	A
C-A	319	80			319				
A-B	4	1			4				
A-C	251	63			251				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	551	0.004	2	0.0	0.0	6.553	A
B-A	16	4	379	0.042	16	0.0	0.0	9.908	A
C-AB	2	0.46	828	0.002	2	0.0	0.0	4.348	A
C-A	381	95			381				
A-B	5	1			5				
A-C	300	75			300				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	531	0.005	2	0.0	0.0	6.811	A
B-A	20	5	347	0.056	19	0.0	0.1	10.984	B
C-AB	3	0.66	871	0.003	3	0.0	0.0	4.139	A
C-A	466	116			466				
A-B	6	2			6				
A-C	367	92			367				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	531	0.005	2	0.0	0.0	6.812	A
B-A	20	5	347	0.056	20	0.1	0.1	10.985	B
C-AB	3	0.66	871	0.003	3	0.0	0.0	4.147	A
C-A	466	116			466				
A-B	6	2			6				
A-C	367	92			367				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	551	0.004	2	0.0	0.0	6.557	A
B-A	16	4	379	0.042	16	0.1	0.0	9.913	A
C-AB	2	0.46	828	0.002	2	0.0	0.0	4.368	A
C-A	381	95			381				
A-B	5	1			5				
A-C	300	75			300				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	566	0.003	2	0.0	0.0	6.383	A
B-A	13	3	402	0.033	13	0.0	0.0	9.257	A
C-AB	1	0.35	799	0.002	1	0.0	0.0	4.526	A
C-A	319	80			319				
A-B	4	1			4				
A-C	251	63			251				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	699	100.000
B - Bell Ln North		ONE HOUR	✓	42	100.000
C - A12 North East		ONE HOUR	✓	740	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	677
	B - Bell Ln North	41	0	1
	C - A12 North East	736	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	11
	B - Bell Ln North	0	0	0
	C - A12 North East	7	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	9.06	0.0	0.5	A	1	2
B-A	0.23	23.82	0.3	1.3	C	38	57
C-AB	0.03	4.40	0.0	0.5	A	17	26
C-A						662	993
A-B						20	31
A-C						621	931

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.84	0.21	482	0.002	0.83	0.0	0.0	7.479	A
B-A	31	8	310	0.100	30	0.0	0.1	12.875	B
C-AB	10	3	829	0.012	10	0.0	0.0	4.396	A
C-A	547	137			547				
A-B	17	4			17				
A-C	509	127			509				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1.00	0.25	449	0.002	1.00	0.0	0.0	8.029	A
B-A	37	9	262	0.141	37	0.1	0.2	15.957	C
C-AB	15	4	896	0.017	15	0.0	0.0	4.106	A
C-A	650	163			650				
A-B	20	5			20				
A-C	608	152			608				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.31	399	0.003	1	0.0	0.0	9.051	A
B-A	45	11	196	0.230	45	0.2	0.3	23.664	C
C-AB	27	7	994	0.027	27	0.0	0.0	3.738	A
C-A	788	197			788				
A-B	24	6			24				
A-C	745	186			745				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.31	398	0.003	1	0.0	0.0	9.061	A
B-A	45	11	196	0.230	45	0.3	0.3	23.817	C
C-AB	27	7	994	0.027	27	0.0	0.0	3.721	A
C-A	788	197			788				
A-B	24	6			24				
A-C	745	186			745				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1.00	0.25	449	0.002	1	0.0	0.0	8.036	A
B-A	37	9	262	0.141	37	0.3	0.2	16.061	C
C-AB	15	4	896	0.017	15	0.0	0.0	4.055	A
C-A	650	163			650				
A-B	20	5			20				
A-C	608	152			608				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.84	0.21	482	0.002	0.84	0.0	0.0	7.484	A
B-A	31	8	310	0.100	31	0.2	0.1	12.934	B
C-AB	10	3	829	0.012	10	0.0	0.0	4.368	A
C-A	547	137			547				
A-B	17	4			17				
A-C	509	127			509				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.29	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.29	0.03	0.31	1.03	1.32			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	712	100.000
B - Bell Ln North		ONE HOUR	✓	61	100.000
C - A12 North East		ONE HOUR	✓	783	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	689
	B - Bell Ln North	61	0	0
	C - A12 North East	783	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	10
	B - Bell Ln North	5	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.38	32.56	0.6	2.6	D	56	84
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						719	1078
A-B						20	31
A-C						633	949

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	474	0.000	0	0.0	0.0	0.000	A
B-A	46	11	288	0.160	45	0.0	0.2	14.799	B
C-AB	0	0	493	0.000	0	0.0	0.0	0.000	A
C-A	590	147			590				
A-B	17	4			17				
A-C	519	130			519				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	439	0.000	0	0.0	0.0	0.000	A
B-A	55	14	242	0.227	55	0.2	0.3	19.206	C
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	704	176			704				
A-B	20	5			20				
A-C	620	155			620				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	386	0.000	0	0.0	0.0	0.000	A
B-A	67	17	178	0.379	66	0.3	0.6	31.955	D
C-AB	0	0	425	0.000	0	0.0	0.0	0.000	A
C-A	863	216			863				
A-B	24	6			24				
A-C	759	190			759				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	385	0.000	0	0.0	0.0	0.000	A
B-A	67	17	178	0.379	67	0.6	0.6	32.558	D
C-AB	0	0	425	0.000	0	0.0	0.0	0.000	A
C-A	863	216			863				
A-B	24	6			24				
A-C	759	190			759				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	438	0.000	0	0.0	0.0	0.000	A
B-A	55	14	242	0.227	56	0.6	0.3	19.525	C
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	704	176			704				
A-B	20	5			20				
A-C	620	155			620				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	473	0.000	0	0.0	0.0	0.000	A
B-A	46	11	288	0.160	46	0.3	0.2	14.943	B
C-AB	0	0	493	0.000	0	0.0	0.0	0.000	A
C-A	590	147			590				
A-B	17	4			17				
A-C	519	130			519				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.58	0.03	0.27	0.58	1.31			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.59	0.03	0.32	1.26	2.64			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.30	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	844	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	709	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	37	807
	B - Bell Ln North	31	0	2
	C - A12 North East	705	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	5
	B - Bell Ln North	7	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.68	0.0	0.5	A	2	3
B-A	0.21	28.42	0.3	1.2	D	29	43
C-AB	0.02	4.21	0.0	0.5	A	11	17
C-A						639	959
A-B						34	51
A-C						741	1111

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	465	0.004	2	0.0	0.0	7.774	A
B-A	23	6	274	0.086	23	0.0	0.1	14.341	B
C-AB	7	2	865	0.008	6	0.0	0.0	4.192	A
C-A	527	132			527				
A-B	28	7			28				
A-C	608	152			608				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	429	0.005	2	0.0	0.0	8.430	A
B-A	28	7	226	0.124	28	0.1	0.1	18.111	C
C-AB	10	2	917	0.011	10	0.0	0.0	3.958	A
C-A	627	157			627				
A-B	33	8			33				
A-C	726	181			726				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	375	0.007	2	0.0	0.0	9.666	A
B-A	34	9	161	0.213	34	0.1	0.3	28.214	D
C-AB	17	4	996	0.017	17	0.0	0.0	3.667	A
C-A	763	191			763				
A-B	40	10			40				
A-C	889	222			889				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	374	0.007	2	0.0	0.0	9.678	A
B-A	34	9	161	0.213	34	0.3	0.3	28.416	D
C-AB	17	4	996	0.017	17	0.0	0.0	3.679	A
C-A	763	191			763				
A-B	40	10			40				
A-C	889	222			889				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	429	0.005	2	0.0	0.0	8.439	A
B-A	28	7	226	0.124	28	0.3	0.1	18.233	C
C-AB	10	2	917	0.011	10	0.0	0.0	3.984	A
C-A	627	157			627				
A-B	33	8			33				
A-C	726	181			726				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	464	0.004	2	0.0	0.0	7.780	A
B-A	23	6	274	0.086	24	0.1	0.1	14.404	B
C-AB	7	2	865	0.008	7	0.0	0.0	4.207	A
C-A	527	132			527				
A-B	28	7			28				
A-C	608	152			608				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.26	0.03	0.26	0.48	0.72			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.27	0.03	0.30	0.91	1.23			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	925	100.000
B - Bell Ln North		ONE HOUR	✓	30	100.000
C - A12 North East		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	50	875
	B - Bell Ln North	26	0	4
	C - A12 North East	656	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	4
	B - Bell Ln North	4	0	0
	C - A12 North East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.95	0.0	0.5	A	4	6
B-A	0.18	27.71	0.2	0.9	D	23	35
C-AB	0.02	4.37	0.0	0.5	A	14	21
C-A						593	889
A-B						46	69
A-C						803	1204

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.84	461	0.007	3	0.0	0.0	7.873	A
B-A	19	5	275	0.070	19	0.0	0.1	14.028	B
C-AB	8	2	833	0.010	8	0.0	0.0	4.362	A
C-A	489	122			489				
A-B	38	9			38				
A-C	659	165			659				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	423	0.009	4	0.0	0.0	8.597	A
B-A	23	6	226	0.102	23	0.1	0.1	17.699	C
C-AB	12	3	879	0.014	12	0.0	0.0	4.147	A
C-A	582	145			582				
A-B	45	11			45				
A-C	786	197			786				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	367	0.013	5	0.0	0.0	9.938	A
B-A	28	7	158	0.178	28	0.1	0.2	27.556	D
C-AB	21	5	949	0.022	21	0.0	0.0	3.874	A
C-A	707	177			707				
A-B	55	14			55				
A-C	963	241			963				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	367	0.013	5	0.0	0.0	9.951	A
B-A	28	7	158	0.178	28	0.2	0.2	27.706	D
C-AB	21	5	949	0.022	21	0.0	0.0	3.879	A
C-A	707	177			707				
A-B	55	14			55				
A-C	963	241			963				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	422	0.009	4	0.0	0.0	8.610	A
B-A	23	6	226	0.102	23	0.2	0.1	17.789	C
C-AB	12	3	879	0.014	12	0.0	0.0	4.165	A
C-A	582	145			582				
A-B	45	11			45				
A-C	786	197			786				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.84	460	0.007	3	0.0	0.0	7.880	A
B-A	19	5	275	0.070	19	0.1	0.1	14.077	B
C-AB	8	2	833	0.010	8	0.0	0.0	4.371	A
C-A	489	122			489				
A-B	38	9			38				
A-C	659	165			659				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.21	0.03	0.26	0.48	0.71			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.21	0.03	0.27	0.49	0.90			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	467	100.000
B - Bell Ln North		ONE HOUR	✓	20	100.000
C - A12 North East		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	462
	B - Bell Ln North	18	0	2
	C - A12 North East	442	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	10
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	7.38	0.0	0.5	A	2	3
B-A	0.06	12.60	0.1	0.5	B	16	24
C-AB	0.00	4.61	0.0	0.5	A	2	3
C-A						405	607
A-B						5	8
A-C						423	635

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	538	0.003	2	0.0	0.0	6.707	A
B-A	13	3	374	0.036	13	0.0	0.0	9.987	A
C-AB	1	0.36	785	0.002	1	0.0	0.0	4.595	A
C-A	332	83			332				
A-B	4	1			4				
A-C	347	87			347				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	518	0.004	2	0.0	0.0	6.972	A
B-A	16	4	345	0.046	16	0.0	0.0	10.943	B
C-AB	2	0.49	813	0.002	2	0.0	0.0	4.431	A
C-A	397	99			397				
A-B	5	1			5				
A-C	415	104			415				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	490	0.005	2	0.0	0.0	7.378	A
B-A	20	5	305	0.064	19	0.0	0.1	12.598	B
C-AB	3	0.71	854	0.003	3	0.0	0.0	4.218	A
C-A	485	121			485				
A-B	6	2			6				
A-C	508	127			508				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	490	0.005	2	0.0	0.0	7.379	A
B-A	20	5	305	0.064	20	0.1	0.1	12.603	B
C-AB	3	0.71	854	0.003	3	0.0	0.0	4.227	A
C-A	485	121			485				
A-B	6	2			6				
A-C	508	127			508				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	518	0.004	2	0.0	0.0	6.976	A
B-A	16	4	345	0.046	16	0.1	0.0	10.952	B
C-AB	2	0.49	813	0.002	2	0.0	0.0	4.451	A
C-A	397	99			397				
A-B	5	1			5				
A-C	415	104			415				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	538	0.003	2	0.0	0.0	6.709	A
B-A	13	3	374	0.036	13	0.0	0.0	9.998	A
C-AB	1	0.36	785	0.002	1	0.0	0.0	4.608	A
C-A	332	83			332				
A-B	4	1			4				
A-C	347	87			347				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	952	100.000
B - Bell Ln North		ONE HOUR	✓	42	100.000
C - A12 North East		ONE HOUR	✓	797	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	930
	B - Bell Ln North	41	0	1
	C - A12 North East	793	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	13
	B - Bell Ln North	0	0	0
	C - A12 North East	7	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	13.32	0.0	0.5	B	1	2
B-A	0.45	64.84	0.8	3.3	F	38	57
C-AB	0.04	4.39	0.0	0.5	A	22	34
C-A						709	1064
A-B						20	31
A-C						853	1280

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.84	0.21	424	0.002	0.83	0.0	0.0	8.511	A
B-A	31	8	244	0.127	30	0.0	0.1	16.810	C
C-AB	12	3	831	0.014	12	0.0	0.0	4.394	A
C-A	588	147			588				
A-B	17	4			17				
A-C	700	175			700				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1.00	0.25	376	0.003	1.00	0.0	0.0	9.589	A
B-A	37	9	184	0.201	37	0.1	0.2	24.403	C
C-AB	19	5	903	0.021	19	0.0	0.0	4.089	A
C-A	698	174			698				
A-B	20	5			20				
A-C	836	209			836				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.31	277	0.004	1	0.0	0.0	13.057	B
B-A	45	11	100	0.451	43	0.2	0.7	61.341	F
C-AB	36	9	1010	0.036	36	0.0	0.0	3.710	A
C-A	842	210			842				
A-B	24	6			24				
A-C	1024	256			1024				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.31	271	0.005	1	0.0	0.0	13.323	B
B-A	45	11	100	0.451	45	0.7	0.8	64.835	F
C-AB	36	9	1010	0.036	36	0.0	0.0	3.694	A
C-A	842	210			842				
A-B	24	6			24				
A-C	1024	256			1024				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1.00	0.25	374	0.003	1	0.0	0.0	9.642	A
B-A	37	9	184	0.201	39	0.8	0.3	25.215	D
C-AB	19	5	904	0.021	19	0.0	0.0	4.040	A
C-A	698	174			698				
A-B	20	5			20				
A-C	836	209			836				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.84	0.21	423	0.002	0.84	0.0	0.0	8.524	A
B-A	31	8	244	0.127	31	0.3	0.1	16.970	C
C-AB	12	3	831	0.014	12	0.0	0.0	4.362	A
C-A	588	147			588				
A-B	17	4			17				
A-C	700	175			700				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.73	0.03	0.28	0.95	2.92			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.77	0.04	0.36	1.83	3.27			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.26	0.03	0.28	0.50	0.96			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.15	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	794	100.000
B - Bell Ln North		ONE HOUR	✓	61	100.000
C - A12 North East		ONE HOUR	✓	809	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	771
	B - Bell Ln North	61	0	0
	C - A12 North East	809	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	17
	B - Bell Ln North	5	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.51	54.97	1.0	4.7	F	56	84
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						743	1114
A-B						20	31
A-C						708	1062

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	445	0.000	0	0.0	0.0	0.000	A
B-A	46	11	257	0.179	45	0.0	0.2	16.954	C
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	609	152			609				
A-B	17	4			17				
A-C	581	145			581				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	404	0.000	0	0.0	0.0	0.000	A
B-A	55	14	204	0.269	54	0.2	0.4	23.903	C
C-AB	0	0	430	0.000	0	0.0	0.0	0.000	A
C-A	728	182			728				
A-B	20	5			20				
A-C	693	173			693				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	337	0.000	0	0.0	0.0	0.000	A
B-A	67	17	132	0.509	65	0.4	0.9	52.004	F
C-AB	0	0	383	0.000	0	0.0	0.0	0.000	A
C-A	891	223			891				
A-B	24	6			24				
A-C	849	212			849				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	335	0.000	0	0.0	0.0	0.000	A
B-A	67	17	132	0.509	67	0.9	1.0	54.972	F
C-AB	0	0	383	0.000	0	0.0	0.0	0.000	A
C-A	891	223			891				
A-B	24	6			24				
A-C	849	212			849				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	402	0.000	0	0.0	0.0	0.000	A
B-A	55	14	204	0.269	57	1.0	0.4	24.843	C
C-AB	0	0	430	0.000	0	0.0	0.0	0.000	A
C-A	728	182			728				
A-B	20	5			20				
A-C	693	173			693				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	445	0.000	0	0.0	0.0	0.000	A
B-A	46	11	257	0.179	47	0.4	0.2	17.190	C
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	609	152			609				
A-B	17	4			17				
A-C	581	145			581				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.93	0.03	0.29	1.31	4.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.98	0.03	0.34	2.31	4.72			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.38	0.03	0.34	1.15	1.34			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.22	0.03	0.29	0.71	1.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	868	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	749	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	37	831
	B - Bell Ln North	31	0	2
	C - A12 North East	745	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	8
	B - Bell Ln North	7	0	0
	C - A12 North East	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.22	0.0	0.5	B	2	3
B-A	0.25	35.58	0.3	1.4	E	29	43
C-AB	0.02	4.18	0.0	0.5	A	12	19
C-A						674	1012
A-B						34	51
A-C						763	1144

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	455	0.004	2	0.0	0.0	7.943	A
B-A	23	6	256	0.092	23	0.0	0.1	15.406	C
C-AB	7	2	874	0.008	7	0.0	0.0	4.153	A
C-A	557	139			557				
A-B	28	7			28				
A-C	626	156			626				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	417	0.005	2	0.0	0.0	8.683	A
B-A	28	7	206	0.136	28	0.1	0.2	20.224	C
C-AB	11	3	929	0.012	11	0.0	0.0	3.905	A
C-A	662	166			662				
A-B	33	8			33				
A-C	747	187			747				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	356	0.007	2	0.0	0.0	10.192	B
B-A	34	9	135	0.253	34	0.2	0.3	35.141	E
C-AB	19	5	1014	0.019	19	0.0	0.0	3.604	A
C-A	805	201			805				
A-B	40	10			40				
A-C	915	229			915				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.61	355	0.007	2	0.0	0.0	10.217	B
B-A	34	9	135	0.253	34	0.3	0.3	35.576	E
C-AB	19	5	1014	0.019	19	0.0	0.0	3.620	A
C-A	805	201			805				
A-B	40	10			40				
A-C	915	229			915				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.50	416	0.005	2	0.0	0.0	8.697	A
B-A	28	7	206	0.136	29	0.3	0.2	20.428	C
C-AB	11	3	929	0.012	11	0.0	0.0	3.943	A
C-A	662	166			662				
A-B	33	8			33				
A-C	747	187			747				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.42	455	0.004	2	0.0	0.0	7.951	A
B-A	23	6	256	0.092	24	0.2	0.1	15.492	C
C-AB	7	2	874	0.008	7	0.0	0.0	4.175	A
C-A	556	139			556				
A-B	28	7			28				
A-C	626	156			626				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.32	0.03	0.27	0.48	1.06			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.33	0.03	0.32	1.13	1.40			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	964	100.000
B - Bell Ln North		ONE HOUR	✓	30	100.000
C - A12 North East		ONE HOUR	✓	838	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	50	914
	B - Bell Ln North	26	0	4
	C - A12 North East	833	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	6
	B - Bell Ln North	4	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.76	0.0	0.5	B	4	6
B-A	0.26	45.12	0.3	1.4	E	23	35
C-AB	0.03	3.98	0.0	0.5	A	20	30
C-A						749	1124
A-B						46	69
A-C						838	1258

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.84	450	0.007	3	0.0	0.0	8.067	A
B-A	19	5	241	0.080	19	0.0	0.1	16.190	C
C-AB	11	3	918	0.012	11	0.0	0.0	3.966	A
C-A	620	155			620				
A-B	38	9			38				
A-C	688	172			688				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	408	0.010	4	0.0	0.0	8.902	A
B-A	23	6	185	0.124	23	0.1	0.1	22.153	C
C-AB	17	4	985	0.017	17	0.0	0.0	3.709	A
C-A	737	184			737				
A-B	45	11			45				
A-C	821	205			821				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	341	0.014	5	0.0	0.0	10.710	B
B-A	28	7	108	0.261	27	0.1	0.3	44.364	E
C-AB	32	8	1086	0.029	32	0.0	0.0	3.405	A
C-A	891	223			891				
A-B	55	14			55				
A-C	1006	252			1006				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	340	0.014	5	0.0	0.0	10.756	B
B-A	28	7	108	0.261	28	0.3	0.3	45.119	E
C-AB	32	8	1086	0.029	32	0.0	0.0	3.415	A
C-A	891	223			891				
A-B	55	14			55				
A-C	1006	252			1006				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	407	0.010	4	0.0	0.0	8.931	A
B-A	23	6	185	0.124	24	0.3	0.1	22.415	C
C-AB	17	4	985	0.017	17	0.0	0.0	3.732	A
C-A	736	184			736				
A-B	45	11			45				
A-C	821	205			821				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.84	449	0.007	3	0.0	0.0	8.078	A
B-A	19	5	241	0.080	19	0.1	0.1	16.270	C
C-AB	11	3	918	0.012	11	0.0	0.0	3.981	A
C-A	620	155			620				
A-B	38	9			38				
A-C	688	172			688				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.33	0.03	0.27	0.49	1.33			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.34	0.03	0.32	1.15	1.40			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	352	100.000
B - Bell Ln North		ONE HOUR	✓	21	100.000
C - A12 North East		ONE HOUR	✓	441	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	347
	B - Bell Ln North	19	0	2
	C - A12 North East	440	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.87	0.0	0.5	A	2	3
B-A	0.06	11.25	0.1	0.5	B	17	26
C-AB	0.00	4.49	0.0	0.5	A	2	3
C-A						403	604
A-B						5	8
A-C						318	477

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	563	0.003	2	0.0	0.0	6.414	A
B-A	14	4	398	0.035	14	0.0	0.0	9.376	A
C-AB	1	0.37	804	0.002	1	0.0	0.0	4.483	A
C-A	331	83			331				
A-B	4	1			4				
A-C	261	65			261				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.52	548	0.004	2	0.0	0.0	6.597	A
B-A	17	4	374	0.045	17	0.0	0.0	10.082	B
C-AB	2	0.50	835	0.002	2	0.0	0.0	4.313	A
C-A	395	99			395				
A-B	5	1			5				
A-C	312	78			312				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	526	0.005	3	0.0	0.0	6.870	A
B-A	21	5	341	0.060	20	0.0	0.1	11.244	B
C-AB	3	0.72	880	0.003	3	0.0	0.0	4.098	A
C-A	483	121			483				
A-B	6	2			6				
A-C	382	95			382				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	526	0.005	3	0.0	0.0	6.871	A
B-A	21	5	341	0.060	21	0.1	0.1	11.249	B
C-AB	3	0.72	880	0.003	3	0.0	0.0	4.107	A
C-A	483	121			483				
A-B	6	2			6				
A-C	382	95			382				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.52	548	0.004	2	0.0	0.0	6.598	A
B-A	17	4	374	0.045	17	0.1	0.0	10.088	B
C-AB	2	0.50	835	0.002	2	0.0	0.0	4.334	A
C-A	395	99			395				
A-B	5	1			5				
A-C	312	78			312				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	563	0.003	2	0.0	0.0	6.418	A
B-A	14	4	398	0.035	14	0.0	0.0	9.386	A
C-AB	1	0.37	804	0.002	2	0.0	0.0	4.493	A
C-A	331	83			331				
A-B	4	1			4				
A-C	261	65			261				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	755	100.000
B - Bell Ln North		ONE HOUR	✓	44	100.000
C - A12 North East		ONE HOUR	✓	764	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	732
	B - Bell Ln North	43	0	1
	C - A12 North East	760	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	10
	B - Bell Ln North	0	0	0
	C - A12 North East	7	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	9.60	0.0	0.5	A	1	2
B-A	0.27	28.19	0.4	1.0	D	40	59
C-AB	0.03	4.36	0.0	0.5	A	20	29
C-A						682	1023
A-B						21	32
A-C						671	1007

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.88	0.22	470	0.002	0.87	0.0	0.0	7.670	A
B-A	33	8	295	0.110	32	0.0	0.1	13.654	B
C-AB	11	3	836	0.013	11	0.0	0.0	4.362	A
C-A	564	141			564				
A-B	18	4			18				
A-C	551	138			551				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.26	434	0.002	1	0.0	0.0	8.307	A
B-A	39	10	245	0.159	39	0.1	0.2	17.433	C
C-AB	17	4	906	0.019	17	0.0	0.0	4.067	A
C-A	670	168			670				
A-B	21	5			21				
A-C	658	164			658				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.32	377	0.003	1	0.0	0.0	9.584	A
B-A	48	12	175	0.271	47	0.2	0.4	27.906	D
C-AB	30	8	1008	0.030	30	0.0	0.0	3.699	A
C-A	811	203			811				
A-B	26	6			26				
A-C	806	201			806				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.32	376	0.003	1	0.0	0.0	9.603	A
B-A	48	12	175	0.271	48	0.4	0.4	28.191	D
C-AB	30	8	1008	0.030	30	0.0	0.0	3.685	A
C-A	811	203			811				
A-B	26	6			26				
A-C	806	201			806				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.26	434	0.002	1	0.0	0.0	8.320	A
B-A	39	10	245	0.159	40	0.4	0.2	17.592	C
C-AB	17	4	906	0.019	17	0.0	0.0	4.017	A
C-A	670	168			670				
A-B	21	5			21				
A-C	658	164			658				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.88	0.22	470	0.002	0.88	0.0	0.0	7.676	A
B-A	33	8	295	0.110	33	0.2	0.1	13.731	B
C-AB	11	3	837	0.013	11	0.0	0.0	4.333	A
C-A	564	141			564				
A-B	18	4			18				
A-C	551	138			551				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.36	0.03	0.26	0.48	0.72			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.36	0.03	0.32	1.03	1.03			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	784	100.000
B - Bell Ln North		ONE HOUR	✓	64	100.000
C - A12 North East		ONE HOUR	✓	795	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	760
	B - Bell Ln North	64	0	0
	C - A12 North East	795	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	5	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.46	42.37	0.8	3.8	E	59	88
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						730	1095
A-B						21	32
A-C						698	1047

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	458	0.000	0	0.0	0.0	0.000	A
B-A	48	12	272	0.177	47	0.0	0.2	15.943	C
C-AB	0	0	479	0.000	0	0.0	0.0	0.000	A
C-A	599	150			599				
A-B	18	4			18				
A-C	572	143			572				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	419	0.000	0	0.0	0.0	0.000	A
B-A	58	14	223	0.258	57	0.2	0.3	21.610	C
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	715	179			715				
A-B	21	5			21				
A-C	684	171			684				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	359	0.000	0	0.0	0.0	0.000	A
B-A	71	18	155	0.455	69	0.3	0.8	40.936	E
C-AB	0	0	405	0.000	0	0.0	0.0	0.000	A
C-A	876	219			876				
A-B	26	6			26				
A-C	837	209			837				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	358	0.000	0	0.0	0.0	0.000	A
B-A	71	18	155	0.455	71	0.8	0.8	42.375	E
C-AB	0	0	405	0.000	0	0.0	0.0	0.000	A
C-A	876	219			876				
A-B	26	6			26				
A-C	837	209			837				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	418	0.000	0	0.0	0.0	0.000	A
B-A	58	14	223	0.258	59	0.8	0.4	22.203	C
C-AB	0	0	448	0.000	0	0.0	0.0	0.000	A
C-A	715	179			715				
A-B	21	5			21				
A-C	684	171			684				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	458	0.000	0	0.0	0.0	0.000	A
B-A	48	12	272	0.177	49	0.4	0.2	16.139	C
C-AB	0	0	479	0.000	0	0.0	0.0	0.000	A
C-A	599	150			599				
A-B	18	4			18				
A-C	572	143			572				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.77	0.03	0.28	0.77	2.33			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.80	0.03	0.33	1.79	3.83			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.36	0.03	0.32	1.04	1.27			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.22	0.03	0.27	0.49	0.89			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	876	100.000
B - Bell Ln North		ONE HOUR	✓	35	100.000
C - A12 North East		ONE HOUR	✓	758	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	39	837
	B - Bell Ln North	33	0	2
	C - A12 North East	754	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	5
	B - Bell Ln North	7	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.09	0.0	0.5	B	2	3
B-A	0.25	33.56	0.3	1.4	D	30	45
C-AB	0.02	4.11	0.0	0.5	A	13	19
C-A						682	1024
A-B						35	53
A-C						768	1153

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	458	0.004	2	0.0	0.0	7.896	A
B-A	25	6	262	0.094	24	0.0	0.1	15.137	C
C-AB	7	2	887	0.008	7	0.0	0.0	4.094	A
C-A	563	141			563				
A-B	29	7			29				
A-C	630	158			630				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.53	420	0.005	2	0.0	0.0	8.615	A
B-A	29	7	212	0.139	29	0.1	0.2	19.676	C
C-AB	11	3	944	0.012	11	0.0	0.0	3.849	A
C-A	670	167			670				
A-B	35	9			35				
A-C	753	188			753				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	360	0.007	3	0.0	0.0	10.065	B
B-A	36	9	143	0.252	35	0.2	0.3	33.193	D
C-AB	20	5	1031	0.019	20	0.0	0.0	3.550	A
C-A	814	204			814				
A-B	43	11			43				
A-C	922	230			922				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	359	0.007	3	0.0	0.0	10.086	B
B-A	36	9	143	0.252	36	0.3	0.3	33.564	D
C-AB	20	5	1031	0.019	20	0.0	0.0	3.561	A
C-A	814	204			814				
A-B	43	11			43				
A-C	922	230			922				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.53	419	0.005	2	0.0	0.0	8.629	A
B-A	29	7	212	0.139	30	0.3	0.2	19.864	C
C-AB	11	3	944	0.012	11	0.0	0.0	3.875	A
C-A	670	167			670				
A-B	35	9			35				
A-C	753	188			753				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	457	0.004	2	0.0	0.0	7.903	A
B-A	25	6	262	0.094	25	0.2	0.1	15.222	C
C-AB	7	2	887	0.008	7	0.0	0.0	4.109	A
C-A	563	141			563				
A-B	29	7			29				
A-C	630	158			630				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.32	0.03	0.27	0.48	0.98			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.33	0.03	0.32	1.13	1.40			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	968	100.000
B - Bell Ln North		ONE HOUR	✓	32	100.000
C - A12 North East		ONE HOUR	✓	706	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	53	916
	B - Bell Ln North	27	0	5
	C - A12 North East	701	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.33	0.0	0.5	B	4	6
B-A	0.21	31.86	0.3	1.2	D	25	37
C-AB	0.02	4.26	0.0	0.5	A	16	24
C-A						632	948
A-B						48	73
A-C						840	1260

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.88	454	0.008	3	0.0	0.0	7.997	A
B-A	20	5	265	0.077	20	0.0	0.1	14.688	B
C-AB	9	2	855	0.011	9	0.0	0.0	4.256	A
C-A	522	131			522				
A-B	40	10			40				
A-C	689	172			689				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	414	0.010	4	0.0	0.0	8.782	A
B-A	24	6	213	0.113	24	0.1	0.1	18.986	C
C-AB	14	3	906	0.015	14	0.0	0.0	4.032	A
C-A	621	155			621				
A-B	47	12			47				
A-C	823	206			823				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	354	0.015	5	0.0	0.0	10.306	B
B-A	30	7	143	0.208	29	0.1	0.3	31.602	D
C-AB	24	6	983	0.025	24	0.0	0.0	3.747	A
C-A	753	188			753				
A-B	58	15			58				
A-C	1008	252			1008				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	354	0.015	5	0.0	0.0	10.325	B
B-A	30	7	143	0.208	30	0.3	0.3	31.858	D
C-AB	24	6	984	0.025	24	0.0	0.0	3.751	A
C-A	753	188			753				
A-B	58	15			58				
A-C	1008	252			1008				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	413	0.010	4	0.0	0.0	8.798	A
B-A	24	6	214	0.113	25	0.3	0.1	19.119	C
C-AB	14	3	906	0.015	14	0.0	0.0	4.044	A
C-A	621	155			621				
A-B	47	12			47				
A-C	823	206			823				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.88	453	0.008	4	0.0	0.0	8.007	A
B-A	20	5	265	0.077	20	0.1	0.1	14.746	B
C-AB	9	2	855	0.011	9	0.0	0.0	4.264	A
C-A	522	131			522				
A-B	40	10			40				
A-C	689	172			689				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.25	0.03	0.27	0.48	0.88			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.26	0.03	0.29	0.84	1.19			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	391	100.000
B - Bell Ln North		ONE HOUR	✓	21	100.000
C - A12 North East		ONE HOUR	✓	459	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	386
	B - Bell Ln North	19	0	2
	C - A12 North East	458	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	15
	B - Bell Ln North	6	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.12	0.0	0.5	A	2	3
B-A	0.06	12.07	0.1	0.5	B	17	26
C-AB	0.00	4.52	0.0	0.5	A	2	3
C-A						419	629
A-B						5	8
A-C						354	531

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	551	0.003	2	0.0	0.0	6.557	A
B-A	14	4	383	0.037	14	0.0	0.0	9.755	A
C-AB	2	0.39	801	0.002	2	0.0	0.0	4.502	A
C-A	344	86			344				
A-B	4	1			4				
A-C	290	73			290				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.52	533	0.004	2	0.0	0.0	6.779	A
B-A	17	4	356	0.047	17	0.0	0.0	10.613	B
C-AB	2	0.52	832	0.003	2	0.0	0.0	4.327	A
C-A	411	103			411				
A-B	5	1			5				
A-C	347	87			347				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	508	0.005	3	0.0	0.0	7.115	A
B-A	21	5	319	0.065	20	0.0	0.1	12.069	B
C-AB	3	0.76	877	0.003	3	0.0	0.0	4.107	A
C-A	503	126			503				
A-B	6	2			6				
A-C	424	106			424				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	508	0.005	3	0.0	0.0	7.116	A
B-A	21	5	319	0.065	21	0.1	0.1	12.073	B
C-AB	3	0.76	877	0.003	3	0.0	0.0	4.118	A
C-A	503	126			503				
A-B	6	2			6				
A-C	424	106			424				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.52	533	0.004	2	0.0	0.0	6.783	A
B-A	17	4	356	0.047	17	0.1	0.1	10.621	B
C-AB	2	0.52	832	0.003	2	0.0	0.0	4.355	A
C-A	411	103			411				
A-B	5	1			5				
A-C	347	87			347				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	551	0.003	2	0.0	0.0	6.561	A
B-A	14	4	383	0.037	14	0.1	0.0	9.766	A
C-AB	2	0.39	801	0.002	2	0.0	0.0	4.515	A
C-A	344	86			344				
A-B	4	1			4				
A-C	290	73			290				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	816	100.000
B - Bell Ln North		ONE HOUR	✓	44	100.000
C - A12 North East		ONE HOUR	✓	786	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	793
	B - Bell Ln North	43	0	1
	C - A12 North East	782	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	16
	B - Bell Ln North	0	0	0
	C - A12 North East	9	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	10.95	0.0	0.5	B	1	2
B-A	0.35	40.68	0.5	1.9	E	40	59
C-AB	0.03	4.37	0.0	0.5	A	22	33
C-A						700	1050
A-B						21	32
A-C						727	1091

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.88	0.22	448	0.002	0.87	0.0	0.0	8.059	A
B-A	33	8	268	0.121	32	0.0	0.1	15.200	C
C-AB	12	3	835	0.014	12	0.0	0.0	4.372	A
C-A	580	145			580				
A-B	18	4			18				
A-C	597	149			597				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.26	406	0.003	1	0.0	0.0	8.889	A
B-A	39	10	213	0.182	38	0.1	0.2	20.624	C
C-AB	19	5	907	0.021	19	0.0	0.0	4.070	A
C-A	688	172			688				
A-B	21	5			21				
A-C	713	178			713				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.32	332	0.004	1	0.0	0.0	10.888	B
B-A	48	12	136	0.350	46	0.2	0.5	39.764	E
C-AB	35	9	1012	0.034	35	0.0	0.0	3.697	A
C-A	831	208			831				
A-B	26	6			26				
A-C	873	218			873				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.32	330	0.004	1	0.0	0.0	10.952	B
B-A	48	12	136	0.350	47	0.5	0.5	40.681	E
C-AB	35	9	1012	0.034	35	0.0	0.0	3.686	A
C-A	831	208			831				
A-B	26	6			26				
A-C	873	218			873				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.26	405	0.003	1	0.0	0.0	8.915	A
B-A	39	10	213	0.183	40	0.5	0.2	20.980	C
C-AB	19	5	907	0.021	19	0.0	0.0	4.026	A
C-A	688	172			688				
A-B	21	5			21				
A-C	713	178			713				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.88	0.22	447	0.002	0.88	0.0	0.0	8.069	A
B-A	33	8	268	0.121	33	0.2	0.1	15.316	C
C-AB	12	3	835	0.014	12	0.0	0.0	4.344	A
C-A	580	145			580				
A-B	18	4			18				
A-C	597	149			597				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.51	0.03	0.27	0.51	1.02			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.52	0.03	0.34	1.03	1.95			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.23	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	2.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	850	100.000
B - Bell Ln North		ONE HOUR	✓	64	100.000
C - A12 North East		ONE HOUR	✓	827	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	826
	B - Bell Ln North	64	0	0
	C - A12 North East	827	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	16
	B - Bell Ln North	5	0	0
	C - A12 North East	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.63	82.95	1.5	7.3	F	59	88
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						759	1139
A-B						21	32
A-C						758	1137

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	433	0.000	0	0.0	0.0	0.000	A
B-A	48	12	243	0.199	47	0.0	0.2	18.291	C
C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	623	156			623				
A-B	18	4			18				
A-C	622	156			622				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	387	0.000	0	0.0	0.0	0.000	A
B-A	58	14	188	0.306	57	0.2	0.4	27.246	D
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	744	186			744				
A-B	21	5			21				
A-C	743	186			743				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	311	0.000	0	0.0	0.0	0.000	A
B-A	71	18	112	0.628	67	0.4	1.4	73.753	F
C-AB	0	0	366	0.000	0	0.0	0.0	0.000	A
C-A	911	228			911				
A-B	26	6			26				
A-C	910	227			910				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	308	0.000	0	0.0	0.0	0.000	A
B-A	71	18	112	0.628	70	1.4	1.5	82.950	F
C-AB	0	0	366	0.000	0	0.0	0.0	0.000	A
C-A	911	228			911				
A-B	26	6			26				
A-C	910	227			910				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	384	0.000	0	0.0	0.0	0.000	A
B-A	58	14	188	0.306	62	1.5	0.5	29.313	D
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	744	186			744				
A-B	21	5			21				
A-C	743	186			743				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	432	0.000	0	0.0	0.0	0.000	A
B-A	48	12	243	0.199	49	0.5	0.3	18.623	C
C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	623	156			623				
A-B	18	4			18				
A-C	622	156			622				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.42	0.03	0.30	0.89	1.20			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.39	0.03	0.34	3.31	7.06			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.51	0.04	0.38	3.92	7.34			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.46	0.04	0.36	1.37	1.38			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.25	0.03	0.29	0.91	1.37			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	946	100.000
B - Bell Ln North		ONE HOUR	✓	35	100.000
C - A12 North East		ONE HOUR	✓	833	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	39	907
	B - Bell Ln North	33	0	2
	C - A12 North East	829	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	9
	B - Bell Ln North	7	0	0
	C - A12 North East	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	12.03	0.0	0.5	B	2	3
B-A	0.38	61.41	0.6	2.2	F	30	45
C-AB	0.02	4.03	0.0	0.5	A	16	24
C-A						748	1122
A-B						35	53
A-C						833	1249

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	435	0.004	2	0.0	0.0	8.312	A
B-A	25	6	228	0.108	24	0.0	0.1	17.604	C
C-AB	8	2	907	0.009	8	0.0	0.0	4.006	A
C-A	618	155			618				
A-B	29	7			29				
A-C	683	171			683				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.53	391	0.005	2	0.0	0.0	9.262	A
B-A	29	7	172	0.171	29	0.1	0.2	25.132	D
C-AB	14	3	972	0.014	14	0.0	0.0	3.741	A
C-A	735	184			735				
A-B	35	9			35				
A-C	816	204			816				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	305	0.008	3	0.0	0.0	11.883	B
B-A	36	9	94	0.383	35	0.2	0.6	58.996	F
C-AB	26	7	1073	0.024	26	0.0	0.0	3.428	A
C-A	891	223			891				
A-B	43	11			43				
A-C	999	250			999				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.64	302	0.009	3	0.0	0.0	12.028	B
B-A	36	9	94	0.383	36	0.6	0.6	61.409	F
C-AB	26	7	1073	0.024	26	0.0	0.0	3.439	A
C-A	891	223			891				
A-B	43	11			43				
A-C	999	250			999				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.53	389	0.005	2	0.0	0.0	9.299	A
B-A	29	7	172	0.171	31	0.6	0.2	25.769	D
C-AB	14	3	972	0.014	14	0.0	0.0	3.776	A
C-A	735	184			735				
A-B	35	9			35				
A-C	816	204			816				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.44	434	0.004	2	0.0	0.0	8.323	A
B-A	25	6	228	0.108	25	0.2	0.1	17.748	C
C-AB	9	2	907	0.009	9	0.0	0.0	4.029	A
C-A	618	155			618				
A-B	29	7			29				
A-C	683	171			683				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.56	0.03	0.28	0.56	1.96			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.59	0.04	0.35	1.28	2.19			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	1011	100.000
B - Bell Ln North		ONE HOUR	✓	32	100.000
C - A12 North East		ONE HOUR	✓	765	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	53	959
	B - Bell Ln North	27	0	5
	C - A12 North East	760	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	6
	B - Bell Ln North	4	0	0
	C - A12 North East	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	11.39	0.0	0.5	B	4	6
B-A	0.29	48.44	0.4	1.5	E	25	37
C-AB	0.03	4.21	0.0	0.5	A	19	28
C-A						683	1025
A-B						48	73
A-C						880	1320

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.88	439	0.008	3	0.0	0.0	8.274	A
B-A	20	5	238	0.085	20	0.0	0.1	16.465	C
C-AB	10	3	869	0.012	10	0.0	0.0	4.194	A
C-A	566	141			566				
A-B	40	10			40				
A-C	722	180			722				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	395	0.011	4	0.0	0.0	9.210	A
B-A	24	6	182	0.133	24	0.1	0.1	22.778	C
C-AB	16	4	925	0.017	16	0.0	0.0	3.948	A
C-A	672	168			672				
A-B	47	12			47				
A-C	862	215			862				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	323	0.016	5	0.0	0.0	11.332	B
B-A	30	7	104	0.286	29	0.1	0.4	47.461	E
C-AB	30	7	1013	0.029	30	0.0	0.0	3.651	A
C-A	813	203			813				
A-B	58	15			58				
A-C	1056	264			1056				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	321	0.016	5	0.0	0.0	11.394	B
B-A	30	7	104	0.286	30	0.4	0.4	48.437	E
C-AB	30	7	1013	0.030	30	0.0	0.0	3.664	A
C-A	813	203			813				
A-B	58	15			58				
A-C	1056	264			1056				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	394	0.011	4	0.0	0.0	9.244	A
B-A	24	6	182	0.133	25	0.4	0.2	23.092	C
C-AB	16	4	925	0.018	16	0.0	0.0	3.981	A
C-A	672	168			672				
A-B	47	12			47				
A-C	862	215			862				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.88	438	0.008	4	0.0	0.0	8.285	A
B-A	20	5	238	0.085	21	0.2	0.1	16.555	C
C-AB	10	3	869	0.012	10	0.0	0.0	4.214	A
C-A	566	141			566				
A-B	40	10			40				
A-C	722	180			722				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.37	0.03	0.27	0.49	1.45			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.39	0.03	0.33	1.25	1.49			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.16	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	366	100.000
B - Bell Ln North		ONE HOUR	✓	22	100.000
C - A12 North East		ONE HOUR	✓	453	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	360
	B - Bell Ln North	19	0	2
	C - A12 North East	452	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.93	0.0	0.5	A	2	3
B-A	0.06	11.49	0.1	0.5	B	18	27
C-AB	0.00	4.47	0.0	0.5	A	2	3
C-A						414	621
A-B						6	8
A-C						330	495

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	560	0.003	2	0.0	0.0	6.448	A
B-A	15	4	394	0.037	14	0.0	0.0	9.484	A
C-AB	2	0.39	808	0.002	2	0.0	0.0	4.462	A
C-A	340	85			340				
A-B	5	1			5				
A-C	271	68			271				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.54	544	0.004	2	0.0	0.0	6.641	A
B-A	17	4	369	0.047	17	0.0	0.0	10.238	B
C-AB	2	0.53	840	0.003	2	0.0	0.0	4.289	A
C-A	406	101			406				
A-B	5	1			5				
A-C	323	81			323				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	522	0.005	3	0.0	0.0	6.929	A
B-A	21	5	335	0.064	21	0.0	0.1	11.483	B
C-AB	3	0.76	886	0.003	3	0.0	0.0	4.070	A
C-A	496	124			496				
A-B	7	2			7				
A-C	396	99			396				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	522	0.005	3	0.0	0.0	6.929	A
B-A	21	5	335	0.064	21	0.1	0.1	11.487	B
C-AB	3	0.76	886	0.003	3	0.0	0.0	4.078	A
C-A	496	124			496				
A-B	7	2			7				
A-C	396	99			396				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.54	544	0.004	2	0.0	0.0	6.645	A
B-A	17	4	369	0.047	17	0.1	0.1	10.244	B
C-AB	2	0.53	840	0.003	2	0.0	0.0	4.310	A
C-A	406	101			406				
A-B	5	1			5				
A-C	323	81			323				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	560	0.003	2	0.0	0.0	6.452	A
B-A	15	4	394	0.037	15	0.1	0.0	9.498	A
C-AB	2	0.39	808	0.002	2	0.0	0.0	4.473	A
C-A	340	85			340				
A-B	5	1			5				
A-C	271	68			271				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	790	100.000
B - Bell Ln North		ONE HOUR	✓	46	100.000
C - A12 North East		ONE HOUR	✓	779	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	766
	B - Bell Ln North	45	0	1
	C - A12 North East	774	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	8
	B - Bell Ln North	0	0	0
	C - A12 North East	5	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	9.86	0.0	0.5	A	1	2
B-A	0.29	29.96	0.4	1.4	D	41	62
C-AB	0.03	4.32	0.0	0.5	A	21	31
C-A						694	1041
A-B						22	33
A-C						703	1054

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.91	0.23	465	0.002	0.90	0.0	0.0	7.750	A
B-A	34	8	291	0.116	33	0.0	0.1	13.919	B
C-AB	12	3	845	0.014	12	0.0	0.0	4.319	A
C-A	574	144			574				
A-B	18	5			18				
A-C	576	144			576				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.27	428	0.003	1	0.0	0.0	8.426	A
B-A	40	10	240	0.168	40	0.1	0.2	17.965	C
C-AB	18	5	917	0.020	18	0.0	0.0	4.026	A
C-A	682	170			682				
A-B	22	5			22				
A-C	688	172			688				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.33	367	0.004	1	0.0	0.0	9.831	A
B-A	49	12	169	0.291	49	0.2	0.4	29.601	D
C-AB	32	8	1021	0.032	32	0.0	0.0	3.658	A
C-A	825	206			825				
A-B	27	7			27				
A-C	843	211			843				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.33	367	0.004	1	0.0	0.0	9.856	A
B-A	49	12	169	0.291	49	0.4	0.4	29.956	D
C-AB	32	8	1021	0.032	32	0.0	0.0	3.642	A
C-A	825	206			825				
A-B	27	7			27				
A-C	843	211			843				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.27	428	0.003	1	0.0	0.0	8.440	A
B-A	40	10	240	0.168	41	0.4	0.2	18.155	C
C-AB	18	5	917	0.020	18	0.0	0.0	3.970	A
C-A	682	170			682				
A-B	22	5			22				
A-C	688	172			688				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.91	0.23	465	0.002	0.91	0.0	0.0	7.758	A
B-A	34	8	291	0.116	34	0.2	0.1	14.013	B
C-AB	12	3	845	0.014	12	0.0	0.0	4.285	A
C-A	574	144			574				
A-B	18	5			18				
A-C	576	144			576				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.39	0.03	0.27	0.48	0.87			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.40	0.03	0.33	1.30	1.37			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	691	100.000
B - Bell Ln North		ONE HOUR	✓	67	100.000
C - A12 North East		ONE HOUR	✓	846	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	666
	B - Bell Ln North	67	0	0
	C - A12 North East	846	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	5	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.41	34.44	0.7	3.2	D	61	92
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						777	1165
A-B						22	33
A-C						611	917

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	478	0.000	0	0.0	0.0	0.000	A
B-A	50	13	288	0.174	49	0.0	0.2	15.047	C
C-AB	0	0	504	0.000	0	0.0	0.0	0.000	A
C-A	637	159			637				
A-B	18	5			18				
A-C	502	125			502				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	443	0.000	0	0.0	0.0	0.000	A
B-A	60	15	242	0.248	59	0.2	0.3	19.713	C
C-AB	0	0	477	0.000	0	0.0	0.0	0.000	A
C-A	761	190			761				
A-B	22	5			22				
A-C	599	150			599				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	390	0.000	0	0.0	0.0	0.000	A
B-A	73	18	178	0.413	72	0.3	0.7	33.662	D
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	932	233			932				
A-B	27	7			27				
A-C	734	183			734				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	389	0.000	0	0.0	0.0	0.000	A
B-A	73	18	178	0.413	73	0.7	0.7	34.437	D
C-AB	0	0	438	0.000	0	0.0	0.0	0.000	A
C-A	932	233			932				
A-B	27	7			27				
A-C	734	183			734				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	442	0.000	0	0.0	0.0	0.000	A
B-A	60	15	242	0.248	61	0.7	0.3	20.113	C
C-AB	0	0	477	0.000	0	0.0	0.0	0.000	A
C-A	761	190			761				
A-B	22	5			22				
A-C	599	150			599				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	477	0.000	0	0.0	0.0	0.000	A
B-A	50	13	288	0.174	51	0.3	0.2	15.210	C
C-AB	0	0	504	0.000	0	0.0	0.0	0.000	A
C-A	637	159			637				
A-B	18	5			18				
A-C	502	125			502				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.66	0.03	0.27	0.66	1.18			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.68	0.03	0.32	1.48	3.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.34	0.03	0.29	0.76	1.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.22	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	929	100.000
B - Bell Ln North		ONE HOUR	✓	36	100.000
C - A12 North East		ONE HOUR	✓	831	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	40	888
	B - Bell Ln North	34	0	2
	C - A12 North East	827	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	3
	B - Bell Ln North	7	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.71	0.0	0.5	B	2	3
B-A	0.31	42.34	0.4	1.4	E	31	47
C-AB	0.02	3.94	0.0	0.5	A	15	23
C-A						747	1121
A-B						37	55
A-C						815	1223

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	449	0.004	2	0.0	0.0	8.047	A
B-A	26	6	247	0.104	25	0.0	0.1	16.170	C
C-AB	8	2	924	0.009	8	0.0	0.0	3.931	A
C-A	617	154			617				
A-B	30	8			30				
A-C	669	167			669				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	409	0.005	2	0.0	0.0	8.851	A
B-A	31	8	195	0.157	30	0.1	0.2	21.838	C
C-AB	13	3	991	0.013	13	0.0	0.0	3.676	A
C-A	734	183			734				
A-B	36	9			36				
A-C	799	200			799				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	340	0.008	3	0.0	0.0	10.664	B
B-A	37	9	122	0.307	37	0.2	0.4	41.531	E
C-AB	24	6	1091	0.022	24	0.0	0.0	3.368	A
C-A	890	223			890				
A-B	44	11			44				
A-C	978	245			978				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	339	0.008	3	0.0	0.0	10.711	B
B-A	37	9	122	0.307	37	0.4	0.4	42.341	E
C-AB	24	6	1091	0.022	24	0.0	0.0	3.373	A
C-A	890	223			890				
A-B	44	11			44				
A-C	978	245			978				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	408	0.005	2	0.0	0.0	8.873	A
B-A	31	8	195	0.157	32	0.4	0.2	22.161	C
C-AB	13	3	991	0.013	13	0.0	0.0	3.694	A
C-A	734	183			734				
A-B	36	9			36				
A-C	799	200			799				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	449	0.004	2	0.0	0.0	8.056	A
B-A	26	6	247	0.104	26	0.2	0.1	16.278	C
C-AB	8	2	924	0.009	8	0.0	0.0	3.942	A
C-A	617	154			617				
A-B	30	8			30				
A-C	669	167			669				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.42	0.03	0.27	0.49	1.40			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.43	0.03	0.34	1.34	1.44			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	993	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	705	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	55	939
	B - Bell Ln North	28	0	5
	C - A12 North East	700	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	10.56	0.0	0.5	B	4	7
B-A	0.22	33.47	0.3	1.3	D	26	39
C-AB	0.03	4.28	0.0	0.5	A	16	25
C-A						631	946
A-B						50	75
A-C						861	1292

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.92	449	0.008	4	0.0	0.0	8.075	A
B-A	21	5	262	0.080	21	0.0	0.1	14.913	B
C-AB	10	2	853	0.011	10	0.0	0.0	4.269	A
C-A	521	130			521				
A-B	41	10			41				
A-C	707	177			707				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	409	0.011	4	0.0	0.0	8.899	A
B-A	25	6	210	0.120	25	0.1	0.1	19.441	C
C-AB	14	4	903	0.016	14	0.0	0.0	4.047	A
C-A	620	155			620				
A-B	49	12			49				
A-C	844	211			844				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	347	0.015	5	0.0	0.0	10.534	B
B-A	31	8	138	0.223	30	0.1	0.3	33.161	D
C-AB	25	6	981	0.026	25	0.0	0.0	3.764	A
C-A	751	188			751				
A-B	60	15			60				
A-C	1034	258			1034				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	346	0.015	5	0.0	0.0	10.558	B
B-A	31	8	138	0.223	31	0.3	0.3	33.471	D
C-AB	25	6	981	0.026	25	0.0	0.0	3.770	A
C-A	751	188			751				
A-B	60	15			60				
A-C	1034	258			1034				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	408	0.011	4	0.0	0.0	8.917	A
B-A	25	6	210	0.120	26	0.3	0.1	19.594	C
C-AB	15	4	903	0.016	15	0.0	0.0	4.057	A
C-A	620	155			620				
A-B	49	12			49				
A-C	844	211			844				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.92	449	0.008	4	0.0	0.0	8.086	A
B-A	21	5	262	0.080	21	0.1	0.1	14.980	B
C-AB	10	2	853	0.011	10	0.0	0.0	4.276	A
C-A	521	130			521				
A-B	41	10			41				
A-C	707	177			707				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.27	0.03	0.27	0.48	0.95			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.28	0.03	0.30	0.96	1.26			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	368	100.000
B - Bell Ln North		ONE HOUR	✓	22	100.000
C - A12 North East		ONE HOUR	✓	456	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	362
	B - Bell Ln North	19	0	2
	C - A12 North East	455	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.93	0.0	0.5	A	2	3
B-A	0.06	11.51	0.1	0.5	B	18	27
C-AB	0.00	4.47	0.0	0.5	A	2	3
C-A						417	625
A-B						6	8
A-C						332	498

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	560	0.003	2	0.0	0.0	6.448	A
B-A	15	4	393	0.037	14	0.0	0.0	9.493	A
C-AB	2	0.40	810	0.002	2	0.0	0.0	4.454	A
C-A	342	86			342				
A-B	5	1			5				
A-C	272	68			272				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.54	544	0.004	2	0.0	0.0	6.641	A
B-A	17	4	369	0.047	17	0.0	0.0	10.251	B
C-AB	2	0.53	842	0.003	2	0.0	0.0	4.280	A
C-A	408	102			408				
A-B	5	1			5				
A-C	325	81			325				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	522	0.005	3	0.0	0.0	6.929	A
B-A	21	5	334	0.064	21	0.0	0.1	11.503	B
C-AB	3	0.77	888	0.003	3	0.0	0.0	4.060	A
C-A	499	125			499				
A-B	7	2			7				
A-C	398	100			398				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	522	0.005	3	0.0	0.0	6.930	A
B-A	21	5	334	0.064	21	0.1	0.1	11.507	B
C-AB	3	0.77	888	0.003	3	0.0	0.0	4.069	A
C-A	499	125			499				
A-B	7	2			7				
A-C	398	100			398				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.54	544	0.004	2	0.0	0.0	6.642	A
B-A	17	4	369	0.047	17	0.1	0.1	10.259	B
C-AB	2	0.53	842	0.003	2	0.0	0.0	4.299	A
C-A	408	102			408				
A-B	5	1			5				
A-C	325	81			325				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	560	0.003	2	0.0	0.0	6.453	A
B-A	15	4	393	0.037	15	0.1	0.0	9.507	A
C-AB	2	0.40	810	0.002	2	0.0	0.0	4.466	A
C-A	342	86			342				
A-B	5	1			5				
A-C	272	68			272				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	814	100.000
B - Bell Ln North		ONE HOUR	✓	46	100.000
C - A12 North East		ONE HOUR	✓	781	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	790
	B - Bell Ln North	45	0	1
	C - A12 North East	776	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	8
	B - Bell Ln North	0	0	0
	C - A12 North East	5	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	10.15	0.0	0.5	B	1	2
B-A	0.31	32.27	0.4	1.6	D	41	62
C-AB	0.03	4.33	0.0	0.5	A	21	32
C-A						695	1043
A-B						22	33
A-C						725	1087

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.91	0.23	460	0.002	0.90	0.0	0.0	7.845	A
B-A	34	8	285	0.118	33	0.0	0.1	14.249	B
C-AB	12	3	843	0.014	12	0.0	0.0	4.329	A
C-A	576	144			576				
A-B	18	5			18				
A-C	594	149			594				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.27	421	0.003	1	0.0	0.0	8.566	A
B-A	40	10	233	0.173	40	0.1	0.2	18.616	C
C-AB	18	5	915	0.020	18	0.0	0.0	4.036	A
C-A	683	171			683				
A-B	22	5			22				
A-C	710	177			710				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.33	357	0.004	1	0.0	0.0	10.117	B
B-A	49	12	161	0.307	48	0.2	0.4	31.814	D
C-AB	33	8	1020	0.032	33	0.0	0.0	3.666	A
C-A	827	207			827				
A-B	27	7			27				
A-C	869	217			869				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.33	356	0.004	1	0.0	0.0	10.149	B
B-A	49	12	161	0.307	49	0.4	0.4	32.271	D
C-AB	33	8	1020	0.032	33	0.0	0.0	3.647	A
C-A	826	207			826				
A-B	27	7			27				
A-C	869	217			869				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	1	0.27	421	0.003	1	0.0	0.0	8.582	A
B-A	40	10	233	0.173	41	0.4	0.2	18.841	C
C-AB	18	5	915	0.020	18	0.0	0.0	3.980	A
C-A	683	171			683				
A-B	22	5			22				
A-C	710	177			710				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0.91	0.23	459	0.002	0.91	0.0	0.0	7.852	A
B-A	34	8	285	0.118	34	0.2	0.1	14.341	B
C-AB	12	3	844	0.014	12	0.0	0.0	4.295	A
C-A	576	144			576				
A-B	18	5			18				
A-C	594	149			594				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.42	0.03	0.27	0.48	1.04			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.43	0.03	0.33	1.36	1.56			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	1.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	699	100.000
B - Bell Ln North		ONE HOUR	✓	67	100.000
C - A12 North East		ONE HOUR	✓	846	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	674
	B - Bell Ln North	67	0	0
	C - A12 North East	846	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	5	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	~1	A	0	0
B-A	0.42	35.44	0.7	3.3	E	61	92
C-AB	0.00	0.00	0.0	~1	A	0	0
C-A						777	1165
A-B						22	33
A-C						619	928

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	475	0.000	0	0.0	0.0	0.000	A
B-A	50	13	286	0.175	49	0.0	0.2	15.173	C
C-AB	0	0	502	0.000	0	0.0	0.0	0.000	A
C-A	637	159			637				
A-B	18	5			18				
A-C	508	127			508				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	440	0.000	0	0.0	0.0	0.000	A
B-A	60	15	239	0.250	59	0.2	0.3	19.981	C
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	761	190			761				
A-B	22	5			22				
A-C	606	152			606				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	386	0.000	0	0.0	0.0	0.000	A
B-A	73	18	175	0.420	72	0.3	0.7	34.581	D
C-AB	0	0	435	0.000	0	0.0	0.0	0.000	A
C-A	932	233			932				
A-B	27	7			27				
A-C	742	186			742				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	385	0.000	0	0.0	0.0	0.000	A
B-A	73	18	175	0.420	73	0.7	0.7	35.437	E
C-AB	0	0	435	0.000	0	0.0	0.0	0.000	A
C-A	932	233			932				
A-B	27	7			27				
A-C	742	186			742				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	439	0.000	0	0.0	0.0	0.000	A
B-A	60	15	239	0.250	61	0.7	0.3	20.401	C
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	761	190			761				
A-B	22	5			22				
A-C	606	152			606				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	475	0.000	0	0.0	0.0	0.000	A
B-A	50	13	286	0.175	51	0.3	0.2	15.343	C
C-AB	0	0	502	0.000	0	0.0	0.0	0.000	A
C-A	637	159			637				
A-B	18	5			18				
A-C	508	127			508				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.68	0.03	0.27	0.68	1.35			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.70	0.03	0.32	1.52	3.30			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.34	0.03	0.29	0.84	1.17			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.22	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	935	100.000
B - Bell Ln North		ONE HOUR	✓	36	100.000
C - A12 North East		ONE HOUR	✓	836	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	40	894
	B - Bell Ln North	34	0	2
	C - A12 North East	832	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	3
	B - Bell Ln North	7	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.82	0.0	0.5	B	2	3
B-A	0.31	43.83	0.4	1.5	E	31	47
C-AB	0.02	3.94	0.0	0.5	A	16	23
C-A						751	1127
A-B						37	55
A-C						821	1231

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	448	0.004	2	0.0	0.0	8.072	A
B-A	26	6	245	0.104	25	0.0	0.1	16.314	C
C-AB	8	2	926	0.009	8	0.0	0.0	3.924	A
C-A	621	155			621				
A-B	30	8			30				
A-C	673	168			673				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	407	0.005	2	0.0	0.0	8.890	A
B-A	31	8	193	0.159	30	0.1	0.2	22.156	C
C-AB	13	3	993	0.013	13	0.0	0.0	3.668	A
C-A	738	185			738				
A-B	36	9			36				
A-C	804	201			804				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	337	0.008	3	0.0	0.0	10.766	B
B-A	37	9	119	0.314	37	0.2	0.4	42.929	E
C-AB	25	6	1094	0.023	25	0.0	0.0	3.359	A
C-A	896	224			896				
A-B	44	11			44				
A-C	985	246			985				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	335	0.008	3	0.0	0.0	10.819	B
B-A	37	9	119	0.314	37	0.4	0.4	43.833	E
C-AB	25	6	1094	0.023	25	0.0	0.0	3.367	A
C-A	895	224			895				
A-B	44	11			44				
A-C	985	246			985				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.55	406	0.005	2	0.0	0.0	8.911	A
B-A	31	8	193	0.159	32	0.4	0.2	22.500	C
C-AB	13	3	993	0.013	13	0.0	0.0	3.686	A
C-A	738	185			738				
A-B	36	9			36				
A-C	804	201			804				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.46	447	0.004	2	0.0	0.0	8.080	A
B-A	26	6	245	0.104	26	0.2	0.1	16.426	C
C-AB	9	2	926	0.009	9	0.0	0.0	3.937	A
C-A	621	155			621				
A-B	30	8			30				
A-C	673	168			673				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.43	0.03	0.27	0.49	1.45			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.44	0.03	0.34	1.37	1.53			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way	0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	999	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	709	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	55	945
	B - Bell Ln North	28	0	5
	C - A12 North East	704	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	10.63	0.0	0.5	B	4	7
B-A	0.23	34.22	0.3	1.3	D	26	39
C-AB	0.03	4.27	0.0	0.5	A	17	25
C-A						634	951
A-B						50	75
A-C						867	1300

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.92	448	0.008	4	0.0	0.0	8.097	A
B-A	21	5	260	0.081	21	0.0	0.1	15.013	C
C-AB	10	2	854	0.011	10	0.0	0.0	4.262	A
C-A	524	131			524				
A-B	41	10			41				
A-C	711	178			711				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	407	0.011	4	0.0	0.0	8.932	A
B-A	25	6	208	0.121	25	0.1	0.1	19.644	C
C-AB	15	4	905	0.016	15	0.0	0.0	4.039	A
C-A	623	156			623				
A-B	49	12			49				
A-C	849	212			849				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	345	0.016	5	0.0	0.0	10.602	B
B-A	31	8	136	0.227	30	0.1	0.3	33.878	D
C-AB	25	6	983	0.026	25	0.0	0.0	3.755	A
C-A	756	189			756				
A-B	60	15			60				
A-C	1040	260			1040				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	344	0.016	5	0.0	0.0	10.626	B
B-A	31	8	136	0.227	31	0.3	0.3	34.216	D
C-AB	25	6	983	0.026	25	0.0	0.0	3.761	A
C-A	756	189			756				
A-B	60	15			60				
A-C	1040	260			1040				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	1	407	0.011	4	0.0	0.0	8.951	A
B-A	25	6	208	0.121	26	0.3	0.1	19.802	C
C-AB	15	4	905	0.016	15	0.0	0.0	4.049	A
C-A	623	156			623				
A-B	49	12			49				
A-C	849	212			849				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	4	0.92	448	0.008	4	0.0	0.0	8.106	A
B-A	21	5	260	0.081	21	0.1	0.1	15.081	C
C-AB	10	2	854	0.011	10	0.0	0.0	4.269	A
C-A	524	131			524				
A-B	41	10			41				
A-C	711	178			711				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.28	0.03	0.27	0.48	0.98			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	0.29	0.03	0.31	0.99	1.28			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 200923 J41_Model_CV_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\J41\Model
Report generation date: 18/12/2020 12:13:39

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
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»2023 Early Years , 3-4 PM
»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
»2028 Reference Case , 7-8 AM
»2028 Reference Case , 8-9 AM
»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C	0.1	0.5	6.06	0.07	A	0.2	1.1	8.12	0.19	A	0.3	1.2	8.66	0.21	A	0.2	0.7	8.36	0.17	A	0.4	1.2	9.72	0.26	A
Stream B-A	0.0	0.5	9.62	0.03	A	0.1	0.5	13.71	0.10	B	0.2	0.5	18.60	0.16	C	0.2	1.2	16.03	0.20	C	0.4	1.4	19.14	0.28	C
Stream C-AB	0.0	0.5	5.66	0.02	A	0.2	0.5	8.30	0.13	A	0.2	0.5	8.67	0.14	A	0.1	0.5	8.07	0.13	A	0.2	1.1	8.62	0.19	A
2023 Reference Case																									
Stream B-C	0.1	0.5	6.13	0.08	A	0.3	1.3	8.37	0.21	A	0.3	1.4	9.01	0.24	A	0.3	1.2	9.18	0.20	A	0.5	1.9	11.07	0.31	B
Stream B-A	0.0	0.5	9.72	0.04	A	0.1	0.5	14.25	0.12	B	0.2	1.1	20.22	0.18	C	0.3	1.4	18.92	0.24	C	0.5	2.3	24.21	0.35	C
Stream C-AB	0.0	0.5	5.70	0.03	A	0.2	0.5	8.45	0.15	A	0.2	0.5	8.86	0.16	A	0.2	0.5	8.63	0.15	A	0.3	1.3	9.32	0.22	A
2023 Early Years																									
Stream B-C	0.1	0.5	6.13	0.08	A	0.3	1.3	8.36	0.21	A	0.3	1.4	9.06	0.24	A	0.3	1.2	9.18	0.20	A	0.5	2.0	11.33	0.32	B
Stream B-A	0.0	0.5	9.72	0.04	A	0.1	0.5	14.33	0.12	B	0.2	1.1	20.74	0.19	C	0.3	1.4	18.92	0.24	C	0.5	2.5	25.18	0.36	D
Stream C-AB	0.0	0.5	5.70	0.03	A	0.2	0.5	8.44	0.15	A	0.2	0.5	8.89	0.16	A	0.2	0.5	8.63	0.15	A	0.3	1.3	9.48	0.22	A
2028 Reference Case																									
Stream B-C	0.1	0.5	6.21	0.08	A	0.3	1.3	8.59	0.23	A	0.4	1.2	10.11	0.27	B	0.3	1.3	9.98	0.23	A	0.5	2.5	12.40	0.35	B
Stream B-A	0.0	0.5	9.29	0.04	A	0.1	0.5	13.98	0.12	B	0.3	1.2	22.04	0.21	C	0.4	1.3	20.66	0.27	C	0.6	3.0	28.23	0.40	D
Stream C-AB	0.0	0.5	5.75	0.03	A	0.2	0.5	8.63	0.16	A	0.2	0.9	9.75	0.18	A	0.2	0.5	9.22	0.16	A	0.3	1.4	10.01	0.24	B
2028 Peak Construction																									
Stream B-C	0.1	0.5	6.21	0.08	A	0.3	1.3	8.59	0.23	A	0.4	1.2	9.94	0.26	A	0.3	1.3	9.93	0.23	A	0.5	2.4	12.35	0.35	B
Stream B-A	0.0	0.5	9.29	0.04	A	0.1	0.5	13.90	0.12	B	0.2	1.2	20.84	0.20	C	0.4	1.2	20.55	0.27	C	0.6	3.0	28.29	0.40	D
Stream C-AB	0.0	0.5	5.75	0.03	A	0.2	0.5	8.63	0.16	A	0.2	0.8	9.63	0.18	A	0.2	0.5	9.18	0.16	A	0.3	1.4	9.97	0.24	A
2034 Reference Case																									
Stream B-C	0.1	0.5	6.22	0.08	A	0.3	1.4	8.86	0.24	A	0.4	1.7	11.38	0.30	B	0.4	1.1	11.62	0.26	B	0.6	3.1	14.57	0.40	B
Stream B-A	0.0	0.5	9.29	0.04	A	0.1	0.5	14.67	0.13	B	0.3	1.4	27.16	0.25	D	0.5	2.2	28.39	0.35	D	0.9	4.3	37.64	0.48	E
Stream C-AB	0.0	0.5	5.75	0.03	A	0.2	0.5	8.83	0.17	A	0.2	1.1	10.66	0.20	B	0.2	1.0	10.27	0.18	B	0.4	1.2	10.89	0.27	B
2034 Operational Led																									
Stream B-C	0.1	0.5	6.22	0.08	A	0.3	1.4	8.88	0.24	A	0.4	1.8	11.58	0.30	B	0.4	1.1	11.65	0.26	B	0.6	3.0	14.44	0.39	B
Stream B-A	0.0	0.5	9.29	0.04	A	0.1	0.5	14.76	0.13	B	0.3	1.5	28.03	0.26	D	0.5	2.2	28.61	0.35	D	0.9	4.2	36.81	0.47	E
Stream C-AB	0.0	0.5	5.75	0.03	A	0.2	0.5	8.85	0.17	A	0.2	1.2	10.81	0.20	B	0.2	1.0	10.29	0.18	B	0.4	1.2	10.85	0.26	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

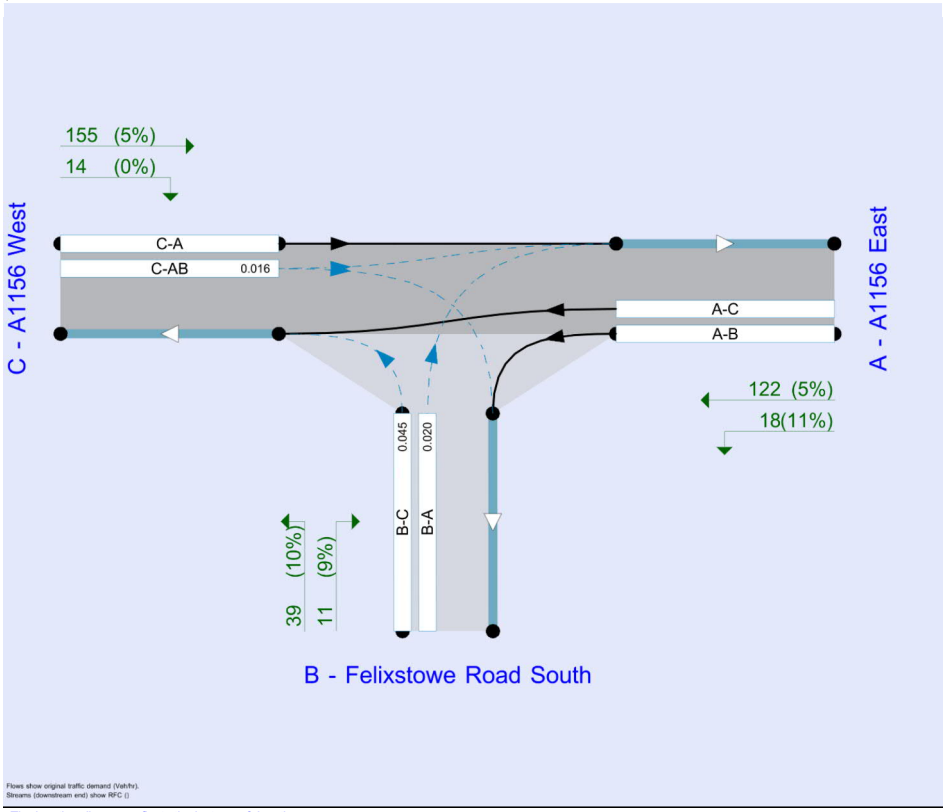
File summary

File Description

Title	A1156 / Felixstowe Road
Location	52.023204°,1.247082°
Site number	41
Date	14/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A1156 East		Major
B	Felixstowe Road South		Minor
C	A1156 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A1156 West	6.05		✓	3.20	91.0	✓	13.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Felixstowe Road South	One lane plus flare	10.00	8.80	6.20	5.10	4.60	✓	3.00	36	48

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J41	B-A	485	0.088	0.223	0.140	0.318
J41	B-C	751	0.115	0.291	-	-
J41	C-B	695	0.269	0.269	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	140	100.000
B - Felixstowe Road South		ONE HOUR	✓	50	100.000
C - A1156 West		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	18	122
	B - Felixstowe Road South	11	0	39
	C - A1156 West	155	14	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.92	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.049

	B - Felixstowe Road South	9	0	10
	C - A1156 West	5	0	0

	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.052	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	105	111
	06:00-06:15	126	133
	06:15-06:30	154	163
	06:30-06:45	154	163
	06:45-07:00	126	133
	07:00-07:15	105	111
B - Felixstowe Road South	05:45-06:00	38	41
	06:00-06:15	45	49
	06:15-06:30	55	61
	06:30-06:45	55	61
	06:45-07:00	45	49
	07:00-07:15	38	41
C - A1156 West	05:45-06:00	127	133
	06:00-06:15	152	159
	06:15-06:30	186	195
	06:30-06:45	186	195
	06:45-07:00	152	159
	07:00-07:15	127	133

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	6.06	0.1	0.5	A	36	54
B-A	0.03	9.62	0.0	0.5	A	10	15
C-AB	0.02	5.66	0.0	0.5	A	13	19
C-A						142	213
A-B						17	25
A-C						112	168

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	651	0.045	29	0.0	0.0	5.785	A
B-A	8	2	405	0.020	8	0.0	0.0	9.075	A
C-AB	11	3	665	0.016	10	0.0	0.0	5.500	A
C-A	117	29			117				
A-B	14	3			14				
A-C	92	23			92				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	35	9	645	0.054	35	0.0	0.1	5.899	A
B-A	10	2	397	0.025	10	0.0	0.0	9.296	A
C-AB	13	3	659	0.019	13	0.0	0.0	5.567	A
C-A	139	35			139				
A-B	16	4			16				
A-C	110	27			110				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	43	11	637	0.067	43	0.1	0.1	6.059	A
B-A	12	3	386	0.031	12	0.0	0.0	9.616	A
C-AB	15	4	651	0.024	15	0.0	0.0	5.662	A
C-A	171	43			171				
A-B	20	5			20				
A-C	134	34			134				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	43	11	637	0.067	43	0.1	0.1	6.059	A
B-A	12	3	386	0.031	12	0.0	0.0	9.615	A
C-AB	15	4	651	0.024	15	0.0	0.0	5.662	A
C-A	171	43			171				
A-B	20	5			20				
A-C	134	34			134				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	35	9	645	0.054	35	0.1	0.1	5.903	A
B-A	10	2	397	0.025	10	0.0	0.0	9.298	A

C-AB	13	3	659	0.019	13	0.0	0.0	5.567	A
C-A	139	35			139				
A-B	16	4			16				
A-C	110	27			110				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	29	7	651	0.045	29	0.1	0.0	5.790	A
B-A	8	2	405	0.020	8	0.0	0.0	9.077	A
C-AB	11	3	665	0.016	11	0.0	0.0	5.503	A
C-A	117	29			117				
A-B	14	3			14				
A-C	92	23			92				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	447	100.000
B - Felixstowe Road South		ONE HOUR	✓	123	100.000
C - A1156 West		ONE HOUR	✓	386	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	55	392
	B - Felixstowe Road South	27	0	96
	C - A1156 West	325	61	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.12	0.88
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.84	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	5	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.031
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.046	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	337	347
	07:00-07:15	402	414
	07:15-07:30	492	508
	07:30-07:45	492	508
	07:45-08:00	402	414
	08:00-08:15	337	347
B - Felixstowe Road South	06:45-07:00	93	100
	07:00-07:15	111	120
	07:15-07:30	135	146
	07:30-07:45	135	146
	07:45-08:00	111	120
	08:00-08:15	93	100
C - A1156 West	06:45-07:00	291	307
	07:00-07:15	347	367
	07:15-07:30	425	449
	07:30-07:45	425	449
	07:45-08:00	347	367
	08:00-08:15	291	307

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.19	8.12	0.2	1.1	A	88	132
B-A	0.10	13.71	0.1	0.5	B	25	37
C-AB	0.13	8.30	0.2	0.5	A	56	84
C-A						298	447
A-B						50	76
A-C						360	540

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	594	0.122	72	0.0	0.1	6.882	A
B-A	20	5	347	0.059	20	0.0	0.1	10.990	B
C-AB	46	11	540	0.085	46	0.0	0.1	7.281	A
C-A	245	61			245				
A-B	41	10			41				
A-C	295	74			295				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	575	0.150	86	0.1	0.2	7.358	A
B-A	24	6	324	0.075	24	0.1	0.1	11.995	B
C-AB	55	14	523	0.105	55	0.1	0.1	7.678	A
C-A	292	73			292				
A-B	49	12			49				
A-C	352	88			352				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	549	0.193	105	0.2	0.2	8.114	A
B-A	30	7	292	0.102	30	0.1	0.1	13.699	B
C-AB	67	17	501	0.134	67	0.1	0.2	8.292	A
C-A	358	89			358				
A-B	61	15			61				
A-C	432	108			432				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	549	0.193	106	0.2	0.2	8.124	A
B-A	30	7	292	0.102	30	0.1	0.1	13.713	B
C-AB	67	17	501	0.134	67	0.2	0.2	8.297	A
C-A	358	89			358				
A-B	61	15			61				
A-C	432	108			432				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	575	0.150	87	0.2	0.2	7.371	A
B-A	24	6	324	0.075	24	0.1	0.1	12.010	B
C-AB	55	14	523	0.105	55	0.2	0.1	7.686	A
C-A	292	73			292				
A-B	49	12			49				
A-C	352	88			352				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	594	0.122	72	0.2	0.1	6.907	A
B-A	20	5	347	0.059	20	0.1	0.1	11.011	B
C-AB	46	11	540	0.085	46	0.1	0.1	7.295	A
C-A	245	61			245				
A-B	41	10			41				
A-C	295	74			295				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.11	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.15	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.03	0.28	0.68	1.10			N/A	N/A
B-A	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.15	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	614	100.000
B - Felixstowe Road South		ONE HOUR	✓	134	100.000
C - A1156 West		ONE HOUR	✓	585	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	82	532
	B - Felixstowe Road South	33	0	101
	C - A1156 West	523	62	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.89	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	5	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.034
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.046	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	462	478
	08:00-08:15	552	571
	08:15-08:30	676	699
	08:30-08:45	676	699
	08:45-09:00	552	571
	09:00-09:15	462	478
B - Felixstowe Road South	07:45-08:00	101	103
	08:00-08:15	120	123
	08:15-08:30	148	151
	08:30-08:45	148	151
	08:45-09:00	120	123
	09:00-09:15	101	103
C - A1156 West	07:45-08:00	440	461
	08:00-08:15	526	550
	08:15-08:30	644	674
	08:30-08:45	644	674
	08:45-09:00	526	550
	09:00-09:15	440	461

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.21	8.66	0.3	1.2	A	93	139
B-A	0.16	18.60	0.2	0.5	C	30	45
C-AB	0.14	8.67	0.2	0.5	A	57	85
C-A						480	720
A-B						75	113
A-C						488	732

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	76	19	594	0.128	75	0.0	0.1	6.930	A
B-A	25	6	308	0.081	24	0.0	0.1	12.700	B
C-AB	47	12	540	0.086	46	0.0	0.1	7.283	A
C-A	394	98			394				
A-B	62	15			62				
A-C	401	100			401				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	566	0.160	91	0.1	0.2	7.564	A
B-A	30	7	275	0.108	30	0.1	0.1	14.659	B
C-AB	56	14	517	0.108	56	0.1	0.1	7.809	A
C-A	470	118			470				
A-B	74	18			74				
A-C	478	120			478				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	111	28	527	0.211	111	0.2	0.3	8.645	A
B-A	36	9	230	0.158	36	0.1	0.2	18.550	C
C-AB	68	17	484	0.141	68	0.1	0.2	8.659	A
C-A	576	144			576				
A-B	90	23			90				
A-C	586	146			586				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	111	28	527	0.211	111	0.3	0.3	8.662	A
B-A	36	9	230	0.158	36	0.2	0.2	18.597	C
C-AB	68	17	484	0.141	68	0.2	0.2	8.666	A
C-A	576	144			576				
A-B	90	23			90				
A-C	586	146			586				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	566	0.160	91	0.3	0.2	7.583	A
B-A	30	7	275	0.108	30	0.2	0.1	14.703	B
C-AB	56	14	517	0.108	56	0.2	0.1	7.818	A
C-A	470	118			470				
A-B	74	18			74				
A-C	478	120			478				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	76	19	594	0.128	76	0.2	0.1	6.956	A
B-A	25	6	308	0.081	25	0.1	0.1	12.741	B
C-AB	47	12	540	0.086	47	0.1	0.1	7.295	A
C-A	394	98			394				
A-B	62	15			62				
A-C	401	100			401				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.26	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.18	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.16	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.91	1.23			N/A	N/A
B-A	0.19	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.16	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	483	100.000
B - Felixstowe Road South		ONE HOUR	✓	132	100.000
C - A1156 West		ONE HOUR	✓	450	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	27	456
	B - Felixstowe Road South	50	0	82
	C - A1156 West	391	59	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	4
	B - Felixstowe Road South	6	0	4
	C - A1156 West	4	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.039
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.043	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	364	379
	15:00-15:15	434	453
	15:15-15:30	532	555
	15:30-15:45	532	555
	15:45-16:00	434	453
	16:00-16:15	364	379
B - Felixstowe Road South	14:45-15:00	99	104
	15:00-15:15	119	124
	15:15-15:30	145	152
	15:30-15:45	145	152
	15:45-16:00	119	124
	16:00-16:15	99	104
C - A1156 West	14:45-15:00	339	355
	15:00-15:15	405	423
	15:15-15:30	495	519
	15:30-15:45	495	519
	15:45-16:00	405	423
	16:00-16:15	339	355

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.17	8.36	0.2	0.7	A	75	113
B-A	0.20	16.03	0.2	1.2	C	46	69
C-AB	0.13	8.07	0.1	0.5	A	54	81
C-A						359	538
A-B						25	37
A-C						418	628

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	62	15	578	0.107	61	0.0	0.1	6.967	A
B-A	38	9	344	0.109	37	0.0	0.1	11.734	B
C-AB	44	11	555	0.080	44	0.0	0.1	7.037	A
C-A	294	74			294				
A-B	20	5			20				
A-C	343	86			343				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	74	18	554	0.133	74	0.1	0.2	7.490	A
B-A	45	11	317	0.142	45	0.1	0.2	13.219	B
C-AB	53	13	537	0.099	53	0.1	0.1	7.441	A
C-A	352	88			352				
A-B	24	6			24				
A-C	410	102			410				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	23	521	0.173	90	0.2	0.2	8.350	A
B-A	55	14	280	0.197	55	0.2	0.2	15.990	C
C-AB	65	16	511	0.127	65	0.1	0.1	8.063	A
C-A	430	108			430				
A-B	30	7			30				
A-C	502	126			502				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	23	521	0.173	90	0.2	0.2	8.363	A
B-A	55	14	280	0.197	55	0.2	0.2	16.031	C
C-AB	65	16	511	0.127	65	0.1	0.1	8.068	A
C-A	430	108			430				
A-B	30	7			30				
A-C	502	126			502				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	74	18	554	0.133	74	0.2	0.2	7.507	A
B-A	45	11	317	0.142	45	0.2	0.2	13.261	B
C-AB	53	13	537	0.099	53	0.1	0.1	7.448	A
C-A	352	88			352				
A-B	24	6			24				
A-C	410	102			410				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	62	15	577	0.107	62	0.2	0.1	6.992	A
B-A	38	9	344	0.109	38	0.2	0.1	11.765	B
C-AB	44	11	555	0.080	45	0.1	0.1	7.051	A
C-A	294	74			294				
A-B	20	5			20				
A-C	343	86			343				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.24	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.14	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.03	0.27	0.48	0.70			N/A	N/A
B-A	0.24	0.03	0.29	0.81	1.18			N/A	N/A
C-AB	0.14	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	558	100.000
B - Felixstowe Road South		ONE HOUR	✓	186	100.000
C - A1156 West		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	33	525
	B - Felixstowe Road South	65	0	121
	C - A1156 West	424	89	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.013
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.012	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	420	427
	17:00-17:15	502	510
	17:15-17:30	614	624
	17:30-17:45	614	624
	17:45-18:00	502	510
	18:00-18:15	420	427
B - Felixstowe Road South	16:45-17:00	140	143
	17:00-17:15	167	171
	17:15-17:30	205	209
	17:30-17:45	205	209
	17:45-18:00	167	171
	18:00-18:15	140	143
C - A1156 West	16:45-17:00	386	391
	17:00-17:15	461	467
	17:15-17:30	565	573
	17:30-17:45	565	573
	17:45-18:00	461	467
	18:00-18:15	386	391

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.26	9.72	0.4	1.2	A	111	167
B-A	0.28	19.14	0.4	1.4	C	60	89
C-AB	0.19	8.62	0.2	1.1	A	82	123
C-A						389	584
A-B						30	45
A-C						482	723

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	573	0.159	90	0.0	0.2	7.449	A
B-A	49	12	335	0.146	48	0.0	0.2	12.512	B
C-AB	67	17	567	0.118	66	0.0	0.1	7.178	A
C-A	319	80			319				
A-B	25	6			25				
A-C	395	99			395				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	545	0.200	109	0.2	0.2	8.248	A
B-A	58	15	304	0.192	58	0.2	0.2	14.652	B
C-AB	80	20	546	0.147	80	0.1	0.2	7.726	A
C-A	381	95			381				
A-B	30	7			30				
A-C	472	118			472				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	504	0.264	133	0.2	0.4	9.679	A
B-A	72	18	260	0.276	71	0.2	0.4	19.028	C
C-AB	98	24	516	0.190	98	0.2	0.2	8.610	A
C-A	467	117			467				
A-B	36	9			36				
A-C	578	145			578				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	133	33	504	0.264	133	0.4	0.4	9.716	A
B-A	72	18	260	0.276	72	0.4	0.4	19.136	C
C-AB	98	24	516	0.190	98	0.2	0.2	8.620	A
C-A	467	117			467				
A-B	36	9			36				
A-C	578	145			578				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	544	0.200	109	0.4	0.3	8.285	A
B-A	58	15	304	0.192	59	0.4	0.2	14.748	B
C-AB	80	20	546	0.147	80	0.2	0.2	7.740	A
C-A	381	95			381				
A-B	30	7			30				
A-C	472	118			472				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	91	23	572	0.159	91	0.3	0.2	7.491	A
B-A	49	12	335	0.146	49	0.2	0.2	12.596	B
C-AB	67	17	567	0.118	67	0.2	0.1	7.200	A
C-A	319	80			319				
A-B	25	6			25				
A-C	395	99			395				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.37	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.23	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.36	0.03	0.31	1.20	1.20			N/A	N/A
B-A	0.38	0.03	0.32	1.25	1.36			N/A	N/A
C-AB	0.23	0.03	0.28	0.64	1.08			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	147	100.000
B - Felixstowe Road South		ONE HOUR	✓	56	100.000
C - A1156 West		ONE HOUR	✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	20	127
	B - Felixstowe Road South	12	0	43
	C - A1156 West	162	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.91	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	5	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.045
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.048	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	111	117
	06:00-06:15	132	139
	06:15-06:30	162	171
	06:30-06:45	162	171
	06:45-07:00	132	139
	07:00-07:15	111	117
B - Felixstowe Road South	05:45-06:00	42	46
	06:00-06:15	50	55
	06:15-06:30	61	67
	06:30-06:45	61	67
	06:45-07:00	50	55
	07:00-07:15	42	46
C - A1156 West	05:45-06:00	133	139
	06:00-06:15	159	166
	06:15-06:30	195	204
	06:30-06:45	195	204
	06:45-07:00	159	166
	07:00-07:15	133	139

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.08	6.13	0.1	0.5	A	40	60
B-A	0.04	9.72	0.0	0.5	A	11	17
C-AB	0.03	5.70	0.0	0.5	A	14	21
C-A						148	223
A-B						18	28
A-C						117	175

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	33	8	650	0.050	32	0.0	0.1	5.830	A
B-A	9	2	403	0.023	9	0.0	0.0	9.138	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.522	A
C-A	122	30			122				
A-B	15	4			15				
A-C	96	24			96				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	39	10	643	0.061	39	0.1	0.1	5.955	A
B-A	11	3	395	0.028	11	0.0	0.0	9.375	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	145	36			145				
A-B	18	4			18				
A-C	114	29			114				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	48	12	635	0.075	48	0.1	0.1	6.131	A
B-A	13	3	384	0.035	13	0.0	0.0	9.721	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	178	45			178				
A-B	22	6			22				
A-C	140	35			140				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	48	12	635	0.075	48	0.1	0.1	6.132	A
B-A	13	3	384	0.035	13	0.0	0.0	9.720	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	178	45			178				
A-B	22	6			22				
A-C	140	35			140				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	39	10	643	0.061	39	0.1	0.1	5.957	A
B-A	11	3	395	0.028	11	0.0	0.0	9.378	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	145	36			145				
A-B	18	4			18				
A-C	114	29			114				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	33	8	650	0.050	33	0.1	0.1	5.837	A
B-A	9	2	403	0.023	9	0.0	0.0	9.143	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.525	A
C-A	122	30			122				
A-B	15	4			15				
A-C	96	24			96				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A

C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	448	100.000
B - Felixstowe Road South		ONE HOUR	✓	137	100.000
C - A1156 West		ONE HOUR	✓	424	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	61	387
	B - Felixstowe Road South	30	0	107
	C - A1156 West	356	68	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.84	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.032
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.039	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	337	348
	07:00-07:15	403	416
	07:15-07:30	493	509
	07:30-07:45	493	509
	07:45-08:00	403	416
	08:00-08:15	337	348
B - Felixstowe Road South	06:45-07:00	103	111
	07:00-07:15	123	133
	07:15-07:30	150	163
	07:30-07:45	150	163
	07:45-08:00	123	133
	08:00-08:15	103	111
C - A1156 West	06:45-07:00	319	336
	07:00-07:15	381	401
	07:15-07:30	467	491
	07:30-07:45	467	491
	07:45-08:00	381	401
	08:00-08:15	319	336

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.21	8.37	0.3	1.3	A	98	147
B-A	0.12	14.25	0.1	0.5	B	28	41
C-AB	0.15	8.45	0.2	0.5	A	62	93
C-A						327	490
A-B						56	84
A-C						355	532

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	594	0.135	80	0.0	0.2	6.995	A
B-A	23	6	343	0.066	22	0.0	0.1	11.216	B
C-AB	51	13	539	0.095	51	0.0	0.1	7.357	A
C-A	268	67			268				
A-B	46	11			46				
A-C	291	73			291				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	96	24	574	0.167	96	0.2	0.2	7.518	A
B-A	27	7	319	0.085	27	0.1	0.1	12.320	B
C-AB	61	15	523	0.116	61	0.1	0.1	7.784	A
C-A	320	80			320				
A-B	55	14			55				
A-C	348	87			348				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	117	29	548	0.214	117	0.2	0.3	8.357	A
B-A	33	8	286	0.116	33	0.1	0.1	14.228	B
C-AB	75	19	501	0.149	74	0.1	0.2	8.442	A
C-A	392	98			392				
A-B	67	17			67				
A-C	426	106			426				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	117	29	547	0.214	117	0.3	0.3	8.369	A
B-A	33	8	286	0.116	33	0.1	0.1	14.246	B
C-AB	75	19	501	0.149	75	0.2	0.2	8.449	A
C-A	392	98			392				
A-B	67	17			67				
A-C	426	106			426				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	96	24	574	0.167	96	0.3	0.2	7.533	A
B-A	27	7	319	0.085	27	0.1	0.1	12.343	B
C-AB	61	15	523	0.116	61	0.2	0.1	7.793	A
C-A	320	80			320				
A-B	55	14			55				
A-C	348	87			348				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	593	0.135	80	0.2	0.2	7.024	A
B-A	23	6	343	0.066	23	0.1	0.1	11.244	B
C-AB	51	13	539	0.095	51	0.1	0.1	7.375	A
C-A	268	67			268				
A-B	46	11			46				
A-C	291	73			291				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.13	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.17	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.95	1.26			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	623	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	91	532
	B - Felixstowe Road South	37	0	112
	C - A1156 West	585	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.15	0.85
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.89	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.026
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.039	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	469	482
	08:00-08:15	560	575
	08:15-08:30	686	705
	08:30-08:45	686	705
	08:45-09:00	560	575
	09:00-09:15	469	482
B - Felixstowe Road South	07:45-08:00	112	115
	08:00-08:15	134	137
	08:15-08:30	164	167
	08:30-08:45	164	167
	08:45-09:00	134	137
	09:00-09:15	112	115
C - A1156 West	07:45-08:00	492	512
	08:00-08:15	587	611
	08:15-08:30	719	748
	08:30-08:45	719	748
	08:45-09:00	587	611
	09:00-09:15	492	512

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.24	9.01	0.3	1.4	A	103	154
B-A	0.18	20.22	0.2	1.1	C	34	50
C-AB	0.16	8.86	0.2	0.5	A	63	95
C-A						536	805
A-B						84	125
A-C						488	732

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	593	0.142	84	0.0	0.2	7.064	A
B-A	28	7	300	0.092	27	0.0	0.1	13.190	B
C-AB	52	13	539	0.096	51	0.0	0.1	7.372	A
C-A	440	110			440				
A-B	69	17			69				
A-C	401	100			401				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	564	0.179	101	0.2	0.2	7.762	A
B-A	33	8	266	0.124	33	0.1	0.1	15.452	C
C-AB	62	15	515	0.120	62	0.1	0.1	7.935	A
C-A	526	131			526				
A-B	82	20			82				
A-C	478	120			478				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	523	0.236	123	0.2	0.3	8.985	A
B-A	40	10	218	0.185	40	0.1	0.2	20.150	C
C-AB	76	19	482	0.157	76	0.1	0.2	8.849	A
C-A	644	161			644				
A-B	100	25			100				
A-C	586	146			586				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	523	0.236	123	0.3	0.3	9.009	A
B-A	40	10	218	0.185	40	0.2	0.2	20.221	C
C-AB	76	19	482	0.157	76	0.2	0.2	8.857	A
C-A	644	161			644				
A-B	100	25			100				
A-C	586	146			586				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	564	0.179	101	0.3	0.2	7.790	A
B-A	33	8	266	0.124	33	0.2	0.1	15.513	C
C-AB	62	15	515	0.120	62	0.2	0.1	7.945	A
C-A	526	131			526				
A-B	82	20			82				
A-C	478	120			478				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	592	0.143	85	0.2	0.2	7.097	A
B-A	28	7	300	0.092	28	0.1	0.1	13.242	B
C-AB	52	13	539	0.096	52	0.1	0.1	7.387	A
C-A	440	110			440				
A-B	69	17			69				
A-C	401	100			401				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.30	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.22	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.18	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.31	1.08	1.38			N/A	N/A
B-A	0.22	0.03	0.28	0.62	1.07			N/A	N/A
C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	564	100.000
B - Felixstowe Road South		ONE HOUR	✓	147	100.000
C - A1156 West		ONE HOUR	✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	30	533
	B - Felixstowe Road South	56	0	91
	C - A1156 West	438	66	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	3
	B - Felixstowe Road South	6	0	4
	C - A1156 West	3	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.029
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.035	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	424	438
	15:00-15:15	507	523
	15:15-15:30	620	641
	15:30-15:45	620	641
	15:45-16:00	507	523
	16:00-16:15	424	438
B - Felixstowe Road South	14:45-15:00	111	116
	15:00-15:15	132	138
	15:15-15:30	162	169
	15:30-15:45	162	169
	15:45-16:00	132	138
	16:00-16:15	111	116
C - A1156 West	14:45-15:00	379	394
	15:00-15:15	453	471
	15:15-15:30	555	577
	15:30-15:45	555	577
	15:45-16:00	453	471
	16:00-16:15	379	394

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.20	9.18	0.3	1.2	A	84	126
B-A	0.24	18.92	0.3	1.4	C	51	77
C-AB	0.15	8.63	0.2	0.5	A	60	90
C-A						402	603
A-B						28	41
A-C						490	734

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	69	17	560	0.123	68	0.0	0.1	7.315	A
B-A	42	10	325	0.129	41	0.0	0.1	12.677	B
C-AB	49	12	540	0.091	49	0.0	0.1	7.319	A
C-A	330	82			330				
A-B	23	6			23				
A-C	402	100			402				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	82	21	532	0.154	82	0.1	0.2	7.989	A
B-A	50	13	294	0.170	50	0.1	0.2	14.730	B
C-AB	59	15	519	0.114	59	0.1	0.1	7.822	A
C-A	394	98			394				
A-B	27	7			27				
A-C	480	120			480				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	100	25	493	0.204	100	0.2	0.3	9.154	A
B-A	61	15	251	0.244	61	0.2	0.3	18.842	C
C-AB	72	18	489	0.148	72	0.1	0.2	8.622	A
C-A	482	121			482				
A-B	33	8			33				
A-C	587	147			587				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	100	25	493	0.204	100	0.3	0.3	9.175	A
B-A	61	15	251	0.244	61	0.3	0.3	18.925	C
C-AB	72	18	489	0.148	72	0.2	0.2	8.629	A
C-A	482	121			482				
A-B	33	8			33				
A-C	587	147			587				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	82	21	532	0.154	82	0.3	0.2	8.016	A
B-A	50	13	294	0.170	50	0.3	0.2	14.803	B
C-AB	59	15	519	0.114	59	0.2	0.1	7.831	A
C-A	394	98			394				
A-B	27	7			27				
A-C	480	120			480				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	69	17	559	0.123	69	0.2	0.1	7.348	A
B-A	42	10	325	0.129	42	0.2	0.2	12.748	B
C-AB	49	12	540	0.091	50	0.1	0.1	7.336	A
C-A	330	82			330				
A-B	23	6			23				
A-C	402	100			402				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.31	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.17	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.29	0.85	1.19			N/A	N/A
B-A	0.32	0.03	0.31	1.12	1.43			N/A	N/A
C-AB	0.17	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	631	100.000
B - Felixstowe Road South		ONE HOUR	✓	207	100.000
C - A1156 West		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	37	594
	B - Felixstowe Road South	72	0	135
	C - A1156 West	489	99	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.010	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	475	480
	17:00-17:15	567	573
	17:15-17:30	695	702
	17:30-17:45	695	702
	17:45-18:00	567	573
	18:00-18:15	475	480
B - Felixstowe Road South	16:45-17:00	156	159
	17:00-17:15	186	190
	17:15-17:30	228	233
	17:30-17:45	228	233
	17:45-18:00	186	190
	18:00-18:15	156	159
C - A1156 West	16:45-17:00	442	448
	17:00-17:15	528	535
	17:15-17:30	647	655
	17:30-17:45	647	655
	17:45-18:00	528	535
	18:00-18:15	442	448

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.31	11.07	0.5	1.9	B	124	185
B-A	0.35	24.21	0.5	2.3	C	66	100
C-AB	0.22	9.32	0.3	1.3	A	91	136
C-A						448	673
A-B						34	51
A-C						545	818

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	555	0.183	100	0.0	0.2	7.898	A
B-A	54	14	314	0.173	54	0.0	0.2	13.784	B
C-AB	75	19	553	0.135	74	0.0	0.2	7.498	A
C-A	368	92			368				
A-B	28	7			28				
A-C	447	112			447				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	523	0.232	121	0.2	0.3	8.955	A
B-A	65	16	278	0.234	65	0.2	0.3	16.839	C
C-AB	89	22	529	0.168	89	0.2	0.2	8.176	A
C-A	439	110			439				
A-B	33	8			33				
A-C	534	134			534				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	474	0.313	148	0.3	0.4	11.004	B
B-A	80	20	228	0.349	79	0.3	0.5	23.963	C
C-AB	109	27	495	0.220	109	0.2	0.3	9.309	A
C-A	538	134			538				
A-B	40	10			40				
A-C	654	164			654				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	473	0.313	148	0.4	0.5	11.069	B
B-A	80	20	228	0.349	80	0.5	0.5	24.214	C
C-AB	109	27	495	0.220	109	0.3	0.3	9.324	A
C-A	538	134			538				
A-B	40	10			40				
A-C	654	164			654				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	522	0.232	122	0.5	0.3	9.012	A
B-A	65	16	278	0.234	66	0.5	0.3	17.029	C
C-AB	89	22	529	0.168	89	0.3	0.2	8.195	A
C-A	439	110			439				
A-B	33	8			33				
A-C	534	134			534				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	554	0.183	102	0.3	0.2	7.956	A
B-A	54	14	314	0.173	55	0.3	0.2	13.912	B
C-AB	75	19	553	0.135	75	0.2	0.2	7.522	A
C-A	368	92			368				
A-B	28	7			28				
A-C	447	112			447				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.45	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.52	0.03	0.26	0.52	0.52			N/A	N/A

C-AB	0.28	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.45	0.03	0.31	1.37	1.90			N/A	N/A
B-A	0.53	0.03	0.31	1.49	2.34			N/A	N/A
C-AB	0.28	0.03	0.30	0.99	1.30			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B-A	0.31	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	147	100.000
B - Felixstowe Road South		ONE HOUR	✓	56	100.000
C - A1156 West		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	20	127
	B - Felixstowe Road South	12	0	43
	C - A1156 West	163	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.91	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	5	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.045
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.047	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	111	117
	06:00-06:15	132	139
	06:15-06:30	162	171
	06:30-06:45	162	171
	06:45-07:00	132	139
	07:00-07:15	111	117
B - Felixstowe Road South	05:45-06:00	42	46
	06:00-06:15	50	55
	06:15-06:30	61	67
	06:30-06:45	61	67
	06:45-07:00	50	55
	07:00-07:15	42	46
C - A1156 West	05:45-06:00	134	140
	06:00-06:15	160	167
	06:15-06:30	196	205
	06:30-06:45	196	205
	06:45-07:00	160	167
	07:00-07:15	134	140

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.08	6.13	0.1	0.5	A	40	60
B-A	0.04	9.72	0.0	0.5	A	11	17
C-AB	0.03	5.70	0.0	0.5	A	14	21
C-A						149	224
A-B						18	28
A-C						117	175

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	33	8	650	0.050	32	0.0	0.1	5.830	A
B-A	9	2	403	0.023	9	0.0	0.0	9.141	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.522	A
C-A	122	31			122				
A-B	15	4			15				
A-C	96	24			96				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	39	10	643	0.061	39	0.1	0.1	5.955	A
B-A	11	3	395	0.028	11	0.0	0.0	9.378	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	146	37			146				
A-B	18	4			18				
A-C	114	29			114				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	48	12	635	0.075	48	0.1	0.1	6.131	A
B-A	13	3	384	0.035	13	0.0	0.0	9.724	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	179	45			179				
A-B	22	6			22				
A-C	140	35			140				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	48	12	635	0.075	48	0.1	0.1	6.132	A
B-A	13	3	384	0.035	13	0.0	0.0	9.724	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	179	45			179				
A-B	22	6			22				
A-C	140	35			140				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	39	10	643	0.061	39	0.1	0.1	5.959	A
B-A	11	3	395	0.028	11	0.0	0.0	9.379	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	146	37			146				
A-B	18	4			18				
A-C	114	29			114				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	33	8	650	0.050	33	0.1	0.1	5.837	A
B-A	9	2	403	0.023	9	0.0	0.0	9.143	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.525	A
C-A	122	31			122				
A-B	15	4			15				
A-C	96	24			96				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A

C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.08	0.00	0.00	0.08	0.08			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.05	0.00	0.00	0.05	0.05			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	446	100.000
B - Felixstowe Road South		ONE HOUR	✓	137	100.000
C - A1156 West		ONE HOUR	✓	438	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	61	385
	B - Felixstowe Road South	30	0	107
	C - A1156 West	370	68	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.85	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.031
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.038	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	336	346
	07:00-07:15	401	414
	07:15-07:30	491	507
	07:30-07:45	491	507
	07:45-08:00	401	414
	08:00-08:15	336	346
B - Felixstowe Road South	06:45-07:00	103	111
	07:00-07:15	123	133
	07:15-07:30	150	163
	07:30-07:45	150	163
	07:45-08:00	123	133
	08:00-08:15	103	111
C - A1156 West	06:45-07:00	330	346
	07:00-07:15	394	413
	07:15-07:30	482	506
	07:30-07:45	482	506
	07:45-08:00	394	413
	08:00-08:15	330	346

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.21	8.36	0.3	1.3	A	98	147
B-A	0.12	14.33	0.1	0.5	B	28	41
C-AB	0.15	8.44	0.2	0.5	A	62	93
C-A						340	510
A-B						56	84
A-C						353	530

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	594	0.135	80	0.0	0.2	6.989	A
B-A	23	6	342	0.066	22	0.0	0.1	11.254	B
C-AB	51	13	540	0.094	51	0.0	0.1	7.351	A
C-A	279	70			279				
A-B	46	11			46				
A-C	290	72			290				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	96	24	575	0.167	96	0.2	0.2	7.511	A
B-A	27	7	318	0.085	27	0.1	0.1	12.374	B
C-AB	61	15	524	0.116	61	0.1	0.1	7.776	A
C-A	333	83			333				
A-B	55	14			55				
A-C	346	86			346				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	117	29	548	0.214	117	0.2	0.3	8.346	A
B-A	33	8	284	0.116	33	0.1	0.1	14.316	B
C-AB	75	19	501	0.149	74	0.1	0.2	8.430	A
C-A	408	102			408				
A-B	67	17			67				
A-C	424	106			424				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	117	29	548	0.214	117	0.3	0.3	8.358	A
B-A	33	8	284	0.116	33	0.1	0.1	14.334	B
C-AB	75	19	501	0.149	75	0.2	0.2	8.437	A
C-A	408	102			408				
A-B	67	17			67				
A-C	424	106			424				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	96	24	575	0.167	96	0.3	0.2	7.529	A
B-A	27	7	318	0.085	27	0.1	0.1	12.395	B
C-AB	61	15	524	0.116	61	0.2	0.1	7.786	A
C-A	333	83			333				
A-B	55	14			55				
A-C	346	86			346				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	80	20	594	0.135	80	0.2	0.2	7.018	A
B-A	23	6	342	0.066	23	0.1	0.1	11.280	B
C-AB	51	13	540	0.094	51	0.1	0.1	7.369	A
C-A	279	70			279				
A-B	46	11			46				
A-C	290	72			290				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.13	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.17	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.30	0.95	1.26			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	628	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	673	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	91	537
	B - Felixstowe Road South	37	0	112
	C - A1156 West	605	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.90	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.027
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.039	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	473	486
	08:00-08:15	565	580
	08:15-08:30	691	711
	08:30-08:45	691	711
	08:45-09:00	565	580
	09:00-09:15	473	486
B - Felixstowe Road South	07:45-08:00	112	115
	08:00-08:15	134	137
	08:15-08:30	164	167
	08:30-08:45	164	167
	08:45-09:00	134	137
	09:00-09:15	112	115
C - A1156 West	07:45-08:00	507	527
	08:00-08:15	605	630
	08:15-08:30	741	771
	08:30-08:45	741	771
	08:45-09:00	605	630
	09:00-09:15	507	527

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.24	9.06	0.3	1.4	A	103	154
B-A	0.19	20.74	0.2	1.1	C	34	50
C-AB	0.16	8.89	0.2	0.5	A	63	95
C-A						555	832
A-B						84	125
A-C						493	739

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	591	0.143	84	0.0	0.2	7.082	A
B-A	28	7	297	0.093	27	0.0	0.1	13.337	B
C-AB	52	13	538	0.096	51	0.0	0.1	7.388	A
C-A	455	114			455				
A-B	69	17			69				
A-C	404	101			404				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	563	0.179	101	0.2	0.2	7.789	A
B-A	33	8	262	0.126	33	0.1	0.1	15.699	C
C-AB	62	15	514	0.120	62	0.1	0.1	7.958	A
C-A	543	136			543				
A-B	82	20			82				
A-C	483	121			483				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	521	0.237	123	0.2	0.3	9.035	A
B-A	40	10	214	0.189	40	0.1	0.2	20.666	C
C-AB	76	19	481	0.158	76	0.1	0.2	8.883	A
C-A	666	166			666				
A-B	100	25			100				
A-C	591	148			591				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	521	0.237	123	0.3	0.3	9.059	A
B-A	40	10	214	0.189	40	0.2	0.2	20.742	C
C-AB	76	19	481	0.158	76	0.2	0.2	8.892	A
C-A	666	166			666				
A-B	100	25			100				
A-C	591	148			591				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	562	0.179	101	0.3	0.2	7.817	A
B-A	33	8	262	0.126	33	0.2	0.1	15.764	C
C-AB	62	15	514	0.120	62	0.2	0.1	7.968	A
C-A	543	136			543				
A-B	82	20			82				
A-C	483	121			483				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	591	0.143	85	0.2	0.2	7.116	A
B-A	28	7	297	0.093	28	0.1	0.1	13.395	B
C-AB	52	13	538	0.096	52	0.1	0.1	7.403	A
C-A	455	114			455				
A-B	69	17			69				
A-C	404	101			404				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.23	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.31	1.09	1.38			N/A	N/A
B-A	0.23	0.03	0.28	0.68	1.10			N/A	N/A
C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	564	100.000
B - Felixstowe Road South		ONE HOUR	✓	147	100.000
C - A1156 West		ONE HOUR	✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	30	533
	B - Felixstowe Road South	56	0	91
	C - A1156 West	438	66	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	3
	B - Felixstowe Road South	6	0	4
	C - A1156 West	3	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.029
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.035	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	424	438
	15:00-15:15	507	523
	15:15-15:30	620	641
	15:30-15:45	620	641
	15:45-16:00	507	523
	16:00-16:15	424	438
B - Felixstowe Road South	14:45-15:00	111	116
	15:00-15:15	132	138
	15:15-15:30	162	169
	15:30-15:45	162	169
	15:45-16:00	132	138
	16:00-16:15	111	116
C - A1156 West	14:45-15:00	379	394
	15:00-15:15	453	471
	15:15-15:30	555	576
	15:30-15:45	555	576
	15:45-16:00	453	471
	16:00-16:15	379	394

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.20	9.18	0.3	1.2	A	84	126
B-A	0.24	18.92	0.3	1.4	C	51	77
C-AB	0.15	8.63	0.2	0.5	A	60	90
C-A						402	603
A-B						28	41
A-C						490	734

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	69	17	560	0.123	68	0.0	0.1	7.315	A
B-A	42	10	325	0.129	41	0.0	0.1	12.676	B
C-AB	49	12	540	0.091	49	0.0	0.1	7.319	A
C-A	330	82			330				
A-B	23	6			23				
A-C	402	100			402				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	82	21	532	0.154	82	0.1	0.2	7.989	A
B-A	50	13	294	0.170	50	0.1	0.2	14.728	B
C-AB	59	15	519	0.114	59	0.1	0.1	7.822	A
C-A	394	98			394				
A-B	27	7			27				
A-C	480	120			480				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	100	25	493	0.204	100	0.2	0.3	9.154	A
B-A	61	15	251	0.244	61	0.2	0.3	18.839	C
C-AB	72	18	489	0.148	72	0.1	0.2	8.622	A
C-A	482	121			482				
A-B	33	8			33				
A-C	587	147			587				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	100	25	493	0.204	100	0.3	0.3	9.175	A
B-A	61	15	251	0.244	61	0.3	0.3	18.921	C
C-AB	72	18	489	0.148	72	0.2	0.2	8.629	A
C-A	482	121			482				
A-B	33	8			33				
A-C	587	147			587				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	82	21	532	0.154	82	0.3	0.2	8.015	A
B-A	50	13	294	0.170	50	0.3	0.2	14.802	B
C-AB	59	15	519	0.114	59	0.2	0.1	7.831	A
C-A	394	98			394				
A-B	27	7			27				
A-C	480	120			480				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	69	17	559	0.123	69	0.2	0.1	7.345	A
B-A	42	10	325	0.129	42	0.2	0.2	12.744	B
C-AB	49	12	540	0.091	50	0.1	0.1	7.336	A
C-A	330	82			330				
A-B	23	6			23				
A-C	402	100			402				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.31	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.17	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.03	0.29	0.85	1.19			N/A	N/A
B-A	0.32	0.03	0.31	1.12	1.43			N/A	N/A
C-AB	0.17	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.14	0.00	0.00	0.14	0.14			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	653	100.000
B - Felixstowe Road South		ONE HOUR	✓	207	100.000
C - A1156 West		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	37	616
	B - Felixstowe Road South	72	0	135
	C - A1156 West	489	99	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.010	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	492	497
	17:00-17:15	587	593
	17:15-17:30	719	727
	17:30-17:45	719	727
	17:45-18:00	587	593
	18:00-18:15	492	497
B - Felixstowe Road South	16:45-17:00	156	159
	17:00-17:15	186	190
	17:15-17:30	228	233
	17:30-17:45	228	233
	17:45-18:00	186	190
	18:00-18:15	156	159
C - A1156 West	16:45-17:00	442	448
	17:00-17:15	528	535
	17:15-17:30	647	655
	17:30-17:45	647	655
	17:45-18:00	528	535
	18:00-18:15	442	448

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.32	11.33	0.5	2.0	B	124	185
B-A	0.36	25.18	0.5	2.5	D	66	100
C-AB	0.22	9.48	0.3	1.3	A	91	136
C-A						448	673
A-B						34	51
A-C						565	848

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	551	0.184	100	0.0	0.2	7.978	A
B-A	54	14	310	0.176	54	0.0	0.2	13.990	B
C-AB	75	19	549	0.136	74	0.0	0.2	7.568	A
C-A	368	92			368				
A-B	28	7			28				
A-C	464	116			464				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	517	0.234	121	0.2	0.3	9.077	A
B-A	65	16	273	0.238	65	0.2	0.3	17.209	C
C-AB	89	22	524	0.170	89	0.2	0.2	8.275	A
C-A	439	110			439				
A-B	33	8			33				
A-C	554	138			554				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	467	0.318	148	0.3	0.5	11.261	B
B-A	80	20	222	0.358	79	0.3	0.5	24.879	C
C-AB	109	27	489	0.223	109	0.2	0.3	9.468	A
C-A	538	134			538				
A-B	40	10			40				
A-C	679	170			679				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	466	0.318	148	0.5	0.5	11.333	B
B-A	80	20	222	0.358	80	0.5	0.5	25.176	D
C-AB	109	27	489	0.223	109	0.3	0.3	9.483	A
C-A	538	134			538				
A-B	40	10			40				
A-C	679	170			679				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	121	30	516	0.235	122	0.5	0.3	9.146	A
B-A	65	16	274	0.238	66	0.5	0.3	17.416	C
C-AB	89	22	524	0.170	89	0.3	0.2	8.296	A
C-A	439	110			439				
A-B	33	8			33				
A-C	554	138			554				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	550	0.184	102	0.3	0.2	8.041	A
B-A	54	14	310	0.176	55	0.3	0.2	14.125	B
C-AB	75	19	549	0.136	75	0.2	0.2	7.592	A
C-A	368	92			368				
A-B	28	7			28				
A-C	464	116			464				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B-A	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.46	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.54	0.03	0.26	0.54	0.65			N/A	N/A

C-AB	0.28	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.46	0.03	0.31	1.38	1.95			N/A	N/A
B-A	0.55	0.03	0.31	1.03	2.47			N/A	N/A
C-AB	0.29	0.03	0.31	1.01	1.31			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B-A	0.32	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	164	100.000
B - Felixstowe Road South		ONE HOUR	✓	58	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	21	143
	B - Felixstowe Road South	13	0	46
	C - A1156 West	9	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.35	0.65	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	4
	B - Felixstowe Road South	9	0	10
	C - A1156 West	89	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.036
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.888	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	124	129
	06:00-06:15	148	154
	06:15-06:30	181	189
	06:30-06:45	181	189
	06:45-07:00	148	154
	07:00-07:15	124	129
B - Felixstowe Road South	05:45-06:00	44	48
	06:00-06:15	52	58
	06:15-06:30	64	71
	06:30-06:45	64	71
	06:45-07:00	52	58
	07:00-07:15	44	48
C - A1156 West	05:45-06:00	19	25
	06:00-06:15	22	29
	06:15-06:30	28	36
	06:30-06:45	28	36
	06:45-07:00	22	29
	07:00-07:15	19	25

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.08	6.21	0.1	0.5	A	42	63
B-A	0.04	9.29	0.0	0.5	A	12	18
C-AB	0.03	5.75	0.0	0.5	A	15	22
C-A						8	12
A-B						19	29
A-C						131	197

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	34	9	647	0.053	34	0.0	0.1	5.876	A
B-A	10	2	415	0.023	10	0.0	0.0	8.874	A
C-AB	12	3	660	0.019	12	0.0	0.0	5.556	A
C-A	7	2			7				
A-B	16	4			16				
A-C	108	27			108				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	640	0.064	41	0.1	0.1	6.012	A
B-A	12	3	409	0.028	12	0.0	0.0	9.046	A
C-AB	15	4	653	0.022	15	0.0	0.0	5.635	A
C-A	8	2			8				
A-B	19	5			19				
A-C	129	32			129				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	50	13	630	0.080	50	0.1	0.1	6.205	A
B-A	14	4	402	0.035	14	0.0	0.0	9.291	A
C-AB	18	4	644	0.028	18	0.0	0.0	5.749	A
C-A	10	2			10				
A-B	23	6			23				
A-C	158	39			158				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	50	13	630	0.080	50	0.1	0.1	6.206	A
B-A	14	4	402	0.035	14	0.0	0.0	9.291	A
C-AB	18	4	644	0.028	18	0.0	0.0	5.749	A
C-A	10	2			10				
A-B	23	6			23				
A-C	158	39			158				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	640	0.064	41	0.1	0.1	6.014	A
B-A	12	3	409	0.028	12	0.0	0.0	9.049	A
C-AB	15	4	653	0.022	15	0.0	0.0	5.638	A
C-A	8	2			8				
A-B	19	5			19				
A-C	129	32			129				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	34	9	646	0.053	34	0.1	0.1	5.881	A
B-A	10	2	415	0.023	10	0.0	0.0	8.877	A
C-AB	12	3	660	0.019	12	0.0	0.0	5.558	A
C-A	7	2			7				
A-B	16	4			16				
A-C	108	27			108				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A

C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	467	100.000
B - Felixstowe Road South		ONE HOUR	✓	144	100.000
C - A1156 West		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	64	403
	B - Felixstowe Road South	32	0	112
	C - A1156 West	275	71	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.79	0.21	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	5	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.030
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.051	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	352	363
	07:00-07:15	420	433
	07:15-07:30	514	530
	07:30-07:45	514	530
	07:45-08:00	420	433
	08:00-08:15	352	363
B - Felixstowe Road South	06:45-07:00	108	117
	07:00-07:15	129	140
	07:15-07:30	158	171
	07:30-07:45	158	171
	07:45-08:00	129	140
	08:00-08:15	108	117
C - A1156 West	06:45-07:00	261	278
	07:00-07:15	311	332
	07:15-07:30	381	406
	07:30-07:45	381	406
	07:45-08:00	311	332
	08:00-08:15	261	278

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.23	8.59	0.3	1.3	A	103	154
B-A	0.12	13.98	0.1	0.5	B	29	43
C-AB	0.16	8.63	0.2	0.5	A	65	98
C-A						253	379
A-B						59	88
A-C						370	555

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	590	0.143	84	0.0	0.2	7.104	A
B-A	24	6	348	0.068	23	0.0	0.1	11.097	B
C-AB	54	13	536	0.100	53	0.0	0.1	7.450	A
C-A	207	52			207				
A-B	48	12			48				
A-C	303	76			303				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	570	0.177	101	0.2	0.2	7.665	A
B-A	28	7	324	0.087	28	0.1	0.1	12.153	B
C-AB	64	16	519	0.123	64	0.1	0.1	7.908	A
C-A	247	62			247				
A-B	58	14			58				
A-C	362	91			362				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	542	0.227	123	0.2	0.3	8.581	A
B-A	35	9	292	0.119	35	0.1	0.1	13.957	B
C-AB	78	20	496	0.158	78	0.1	0.2	8.622	A
C-A	303	76			303				
A-B	71	18			71				
A-C	444	111			444				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	542	0.228	123	0.3	0.3	8.595	A
B-A	35	9	292	0.119	35	0.1	0.1	13.976	B
C-AB	78	20	496	0.158	78	0.2	0.2	8.629	A
C-A	303	76			303				
A-B	71	18			71				
A-C	444	111			444				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	570	0.177	101	0.3	0.2	7.685	A
B-A	28	7	324	0.087	28	0.1	0.1	12.177	B
C-AB	64	16	519	0.123	64	0.2	0.1	7.919	A
C-A	247	62			247				
A-B	58	14			58				
A-C	362	91			362				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	589	0.143	85	0.2	0.2	7.133	A
B-A	24	6	347	0.068	24	0.1	0.1	11.128	B
C-AB	54	13	536	0.100	54	0.1	0.1	7.468	A
C-A	207	52			207				
A-B	48	12			48				
A-C	303	76			303				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.13	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.31	1.04	1.34			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	738	100.000
B - Felixstowe Road South		ONE HOUR	✓	156	100.000
C - A1156 West		ONE HOUR	✓	547	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	96	642
	B - Felixstowe Road South	39	0	118
	C - A1156 West	475	72	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	5	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.027
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.051	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	555	571
	08:00-08:15	663	682
	08:15-08:30	812	835
	08:30-08:45	812	835
	08:45-09:00	663	682
	09:00-09:15	555	571
B - Felixstowe Road South	07:45-08:00	118	120
	08:00-08:15	141	144
	08:15-08:30	172	176
	08:30-08:45	172	176
	08:45-09:00	141	144
	09:00-09:15	118	120
C - A1156 West	07:45-08:00	412	433
	08:00-08:15	492	517
	08:15-08:30	602	633
	08:30-08:45	602	633
	08:45-09:00	492	517
	09:00-09:15	412	433

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.27	10.11	0.4	1.2	B	108	162
B-A	0.21	22.04	0.3	1.2	C	35	53
C-AB	0.18	9.75	0.2	0.9	A	66	100
C-A						435	653
A-B						88	132
A-C						589	884

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	568	0.156	88	0.0	0.2	7.494	A
B-A	29	7	291	0.100	29	0.0	0.1	13.687	B
C-AB	54	14	516	0.105	54	0.0	0.1	7.776	A
C-A	357	89			357				
A-B	72	18			72				
A-C	483	121			483				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	534	0.198	106	0.2	0.2	8.398	A
B-A	35	9	255	0.136	34	0.1	0.2	16.285	C
C-AB	65	16	488	0.133	65	0.1	0.2	8.504	A
C-A	427	107			427				
A-B	86	22			86				
A-C	577	144			577				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	32	486	0.267	129	0.2	0.4	10.069	B
B-A	42	11	206	0.206	42	0.2	0.3	21.940	C
C-AB	80	20	449	0.177	79	0.2	0.2	9.739	A
C-A	522	131			522				
A-B	105	26			105				
A-C	707	177			707				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	32	486	0.267	130	0.4	0.4	10.106	B
B-A	42	11	206	0.206	42	0.3	0.3	22.041	C
C-AB	80	20	449	0.177	80	0.2	0.2	9.750	A
C-A	522	131			522				
A-B	105	26			105				
A-C	707	177			707				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	534	0.199	106	0.4	0.3	8.436	A
B-A	35	9	255	0.136	35	0.3	0.2	16.368	C
C-AB	65	16	488	0.133	65	0.2	0.2	8.520	A
C-A	427	107			427				
A-B	86	22			86				
A-C	577	144			577				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	567	0.156	89	0.3	0.2	7.535	A
B-A	29	7	291	0.100	29	0.2	0.1	13.751	B
C-AB	54	14	516	0.105	55	0.2	0.1	7.796	A
C-A	357	89			357				
A-B	72	18			72				
A-C	483	121			483				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.36	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.25	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.21	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.36	0.03	0.32	1.22	1.23			N/A	N/A
B-A	0.26	0.03	0.30	0.88	1.22			N/A	N/A
C-AB	0.21	0.03	0.27	0.49	0.88			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	646	100.000
B - Felixstowe Road South		ONE HOUR	✓	155	100.000
C - A1156 West		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	32	614
	B - Felixstowe Road South	59	0	96
	C - A1156 West	382	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.85	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	3
	B - Felixstowe Road South	6	0	4
	C - A1156 West	4	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.025
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.042	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	486	501
	15:00-15:15	581	598
	15:15-15:30	711	732
	15:30-15:45	711	732
	15:45-16:00	581	598
	16:00-16:15	486	501
B - Felixstowe Road South	14:45-15:00	116	122
	15:00-15:15	139	145
	15:15-15:30	170	178
	15:30-15:45	170	178
	15:45-16:00	139	145
	16:00-16:15	116	122
C - A1156 West	14:45-15:00	340	355
	15:00-15:15	406	424
	15:15-15:30	497	520
	15:30-15:45	497	520
	15:45-16:00	406	424
	16:00-16:15	340	355

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.23	9.98	0.3	1.3	A	88	132
B-A	0.27	20.66	0.4	1.3	C	54	81
C-AB	0.16	9.22	0.2	0.5	A	63	95
C-A						351	526
A-B						29	44
A-C						564	846

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	542	0.133	72	0.0	0.2	7.638	A
B-A	44	11	316	0.139	43	0.0	0.2	13.177	B
C-AB	52	13	525	0.099	52	0.0	0.1	7.601	A
C-A	288	72			288				
A-B	24	6			24				
A-C	463	116			463				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	511	0.169	86	0.2	0.2	8.462	A
B-A	53	13	284	0.186	52	0.2	0.2	15.554	C
C-AB	62	16	500	0.124	62	0.1	0.1	8.211	A
C-A	344	86			344				
A-B	28	7			28				
A-C	552	138			552				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	467	0.226	105	0.2	0.3	9.943	A
B-A	64	16	239	0.270	64	0.2	0.4	20.541	C
C-AB	76	19	467	0.163	76	0.1	0.2	9.210	A
C-A	421	105			421				
A-B	35	9			35				
A-C	677	169			677				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	467	0.227	106	0.3	0.3	9.975	A
B-A	64	16	239	0.270	64	0.4	0.4	20.661	C
C-AB	76	19	467	0.163	76	0.2	0.2	9.219	A
C-A	421	105			421				
A-B	35	9			35				
A-C	677	169			677				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	511	0.169	87	0.3	0.2	8.498	A
B-A	53	13	284	0.186	53	0.4	0.2	15.655	C
C-AB	62	16	500	0.124	62	0.2	0.1	8.223	A
C-A	344	86			344				
A-B	28	7			28				
A-C	552	138			552				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	542	0.133	72	0.2	0.2	7.678	A
B-A	44	11	316	0.139	44	0.2	0.2	13.264	B
C-AB	52	13	525	0.099	52	0.1	0.1	7.617	A
C-A	288	72			288				
A-B	24	6			24				
A-C	463	116			463				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.36	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.31	1.03	1.33			N/A	N/A
B-A	0.36	0.03	0.32	1.23	1.26			N/A	N/A
C-AB	0.19	0.03	0.26	0.47	0.49			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	3.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	702	100.000
B - Felixstowe Road South		ONE HOUR	✓	218	100.000
C - A1156 West		ONE HOUR	✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	39	663
	B - Felixstowe Road South	76	0	142
	C - A1156 West	469	104	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.82	0.18	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.012	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	528	534
	17:00-17:15	631	638
	17:15-17:30	773	782
	17:30-17:45	773	782
	17:45-18:00	631	638
	18:00-18:15	528	534
B - Felixstowe Road South	16:45-17:00	164	168
	17:00-17:15	196	200
	17:15-17:30	240	245
	17:30-17:45	240	245
	17:45-18:00	196	200
	18:00-18:15	164	168
C - A1156 West	16:45-17:00	431	437
	17:00-17:15	515	522
	17:15-17:30	631	639
	17:30-17:45	631	639
	17:45-18:00	515	522
	18:00-18:15	431	437

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.35	12.40	0.5	2.5	B	130	195
B-A	0.40	28.23	0.6	3.0	D	70	105
C-AB	0.24	10.01	0.3	1.4	B	96	143
C-A						430	645
A-B						35	53
A-C						609	913

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	107	27	539	0.198	106	0.0	0.2	8.287	A
B-A	57	14	303	0.189	56	0.0	0.2	14.569	B
C-AB	78	20	539	0.146	78	0.0	0.2	7.792	A
C-A	353	88			353				
A-B	29	7			29				
A-C	499	125			499				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	503	0.253	127	0.2	0.3	9.570	A
B-A	68	17	264	0.259	68	0.2	0.3	18.290	C
C-AB	94	23	512	0.183	93	0.2	0.2	8.598	A
C-A	421	105			421				
A-B	35	9			35				
A-C	596	149			596				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	156	39	447	0.349	155	0.3	0.5	12.292	B
B-A	84	21	211	0.397	83	0.3	0.6	27.765	D
C-AB	115	29	474	0.242	114	0.2	0.3	9.994	A
C-A	516	129			516				
A-B	43	11			43				
A-C	730	183			730				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	156	39	446	0.350	156	0.5	0.5	12.400	B
B-A	84	21	211	0.397	84	0.6	0.6	28.227	D
C-AB	115	29	474	0.242	115	0.3	0.3	10.013	B
C-A	516	129			516				
A-B	43	11			43				
A-C	730	183			730				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	501	0.254	128	0.5	0.3	9.662	A
B-A	68	17	264	0.259	70	0.6	0.4	18.579	C
C-AB	94	23	512	0.183	94	0.3	0.2	8.622	A
C-A	421	105			421				
A-B	35	9			35				
A-C	596	149			596				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	107	27	538	0.198	107	0.3	0.3	8.361	A
B-A	57	14	303	0.189	58	0.4	0.2	14.736	B
C-AB	78	20	539	0.146	79	0.2	0.2	7.822	A
C-A	353	88			353				
A-B	29	7			29				
A-C	499	125			499				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B-A	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.52	0.03	0.26	0.52	0.52			N/A	N/A
B-A	0.63	0.03	0.27	0.63	1.14			N/A	N/A

C-AB	0.31	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.53	0.03	0.30	1.43	2.45			N/A	N/A
B-A	0.64	0.03	0.31	1.27	2.99			N/A	N/A
C-AB	0.32	0.03	0.31	1.11	1.42			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.00	0.00	0.35	0.35			N/A	N/A
B-A	0.36	0.03	0.29	0.78	1.14			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	164	100.000
B - Felixstowe Road South		ONE HOUR	✓	58	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	21	143
	B - Felixstowe Road South	13	0	46
	C - A1156 West	9	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.35	0.65	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	4
	B - Felixstowe Road South	9	0	10
	C - A1156 West	89	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.039
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.888	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	124	129
	06:00-06:15	148	155
	06:15-06:30	181	189
	06:30-06:45	181	189
	06:45-07:00	148	155
	07:00-07:15	124	129
B - Felixstowe Road South	05:45-06:00	44	48
	06:00-06:15	52	58
	06:15-06:30	64	71
	06:30-06:45	64	71
	06:45-07:00	52	58
	07:00-07:15	44	48
C - A1156 West	05:45-06:00	19	25
	06:00-06:15	22	29
	06:15-06:30	28	36
	06:30-06:45	28	36
	06:45-07:00	22	29
	07:00-07:15	19	25

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.08	6.21	0.1	0.5	A	42	63
B-A	0.04	9.29	0.0	0.5	A	12	18
C-AB	0.03	5.75	0.0	0.5	A	15	22
C-A						8	12
A-B						19	29
A-C						131	197

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	34	9	646	0.053	34	0.0	0.1	5.877	A
B-A	10	2	415	0.023	10	0.0	0.0	8.875	A
C-AB	12	3	660	0.019	12	0.0	0.0	5.556	A
C-A	7	2			7				
A-B	16	4			16				
A-C	108	27			108				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	640	0.064	41	0.1	0.1	6.013	A
B-A	12	3	409	0.028	12	0.0	0.0	9.047	A
C-AB	15	4	653	0.022	15	0.0	0.0	5.636	A
C-A	8	2			8				
A-B	19	5			19				
A-C	129	32			129				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	50	13	630	0.080	50	0.1	0.1	6.206	A
B-A	14	4	401	0.035	14	0.0	0.0	9.293	A
C-AB	18	4	644	0.028	18	0.0	0.0	5.750	A
C-A	10	2			10				
A-B	23	6			23				
A-C	158	39			158				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	50	13	630	0.080	50	0.1	0.1	6.207	A
B-A	14	4	402	0.035	14	0.0	0.0	9.293	A
C-AB	18	4	644	0.028	18	0.0	0.0	5.750	A
C-A	10	2			10				
A-B	23	6			23				
A-C	158	39			158				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	41	10	639	0.064	41	0.1	0.1	6.015	A
B-A	12	3	409	0.028	12	0.0	0.0	9.048	A
C-AB	15	4	653	0.022	15	0.0	0.0	5.636	A
C-A	8	2			8				
A-B	19	5			19				
A-C	129	32			129				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	34	9	646	0.053	34	0.1	0.1	5.882	A
B-A	10	2	415	0.023	10	0.0	0.0	8.878	A
C-AB	12	3	660	0.019	12	0.0	0.0	5.557	A
C-A	7	2			7				
A-B	16	4			16				
A-C	108	27			108				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A

C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	467	100.000
B - Felixstowe Road South		ONE HOUR	✓	144	100.000
C - A1156 West		ONE HOUR	✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	64	403
	B - Felixstowe Road South	32	0	112
	C - A1156 West	266	71	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.79	0.21	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	5	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.031
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.051	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	352	363
	07:00-07:15	420	433
	07:15-07:30	514	530
	07:30-07:45	514	530
	07:45-08:00	420	433
	08:00-08:15	352	363
B - Felixstowe Road South	06:45-07:00	108	117
	07:00-07:15	129	140
	07:15-07:30	158	171
	07:30-07:45	158	171
	07:45-08:00	129	140
	08:00-08:15	108	117
C - A1156 West	06:45-07:00	254	270
	07:00-07:15	303	323
	07:15-07:30	372	395
	07:30-07:45	372	395
	07:45-08:00	303	323
	08:00-08:15	254	270

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.23	8.59	0.3	1.3	A	103	154
B-A	0.12	13.90	0.1	0.5	B	29	43
C-AB	0.16	8.63	0.2	0.5	A	65	98
C-A						244	367
A-B						59	88
A-C						370	555

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	590	0.143	84	0.0	0.2	7.104	A
B-A	24	6	348	0.068	23	0.0	0.1	11.067	B
C-AB	54	13	536	0.100	53	0.0	0.1	7.451	A
C-A	200	50			200				
A-B	48	12			48				
A-C	303	76			303				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	570	0.177	101	0.2	0.2	7.664	A
B-A	28	7	325	0.087	28	0.1	0.1	12.107	B
C-AB	64	16	519	0.123	64	0.1	0.1	7.909	A
C-A	239	60			239				
A-B	58	14			58				
A-C	362	91			362				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	542	0.227	123	0.2	0.3	8.580	A
B-A	35	9	294	0.118	35	0.1	0.1	13.882	B
C-AB	78	20	496	0.158	78	0.1	0.2	8.623	A
C-A	293	73			293				
A-B	71	18			71				
A-C	444	111			444				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	123	31	542	0.227	123	0.3	0.3	8.594	A
B-A	35	9	294	0.118	35	0.1	0.1	13.901	B
C-AB	78	20	496	0.158	78	0.2	0.2	8.630	A
C-A	293	73			293				
A-B	71	18			71				
A-C	444	111			444				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	101	25	570	0.177	101	0.3	0.2	7.686	A
B-A	28	7	325	0.087	28	0.1	0.1	12.128	B
C-AB	64	16	519	0.123	64	0.2	0.1	7.920	A
C-A	239	60			239				
A-B	58	14			58				
A-C	362	91			362				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	84	21	589	0.143	85	0.2	0.2	7.131	A
B-A	24	6	348	0.068	24	0.1	0.1	11.093	B
C-AB	54	13	536	0.100	54	0.1	0.1	7.469	A
C-A	200	50			200				
A-B	48	12			48				
A-C	303	76			303				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.13	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.31	1.04	1.34			N/A	N/A
B-A	0.13	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.22	0.00	0.00	0.22	0.22			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	1.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	722	100.000
B - Felixstowe Road South		ONE HOUR	✓	156	100.000
C - A1156 West		ONE HOUR	✓	511	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	96	626
	B - Felixstowe Road South	39	0	118
	C - A1156 West	439	72	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.86	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	5	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.028
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.053	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	543	559
	08:00-08:15	649	667
	08:15-08:30	795	817
	08:30-08:45	795	817
	08:45-09:00	649	667
	09:00-09:15	543	559
B - Felixstowe Road South	07:45-08:00	118	120
	08:00-08:15	141	144
	08:15-08:30	172	176
	08:30-08:45	172	176
	08:45-09:00	141	144
	09:00-09:15	118	120
C - A1156 West	07:45-08:00	385	405
	08:00-08:15	459	483
	08:15-08:30	563	592
	08:30-08:45	563	592
	08:45-09:00	459	483
	09:00-09:15	385	405

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.26	9.94	0.4	1.2	A	108	162
B-A	0.20	20.84	0.2	1.2	C	35	53
C-AB	0.18	9.63	0.2	0.8	A	66	100
C-A						402	604
A-B						88	132
A-C						574	862

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	571	0.155	88	0.0	0.2	7.438	A
B-A	29	7	298	0.097	29	0.0	0.1	13.361	B
C-AB	54	14	520	0.105	54	0.0	0.1	7.724	A
C-A	330	83			330				
A-B	72	18			72				
A-C	471	118			471				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	539	0.197	106	0.2	0.2	8.310	A
B-A	35	9	263	0.132	34	0.1	0.1	15.739	C
C-AB	65	16	492	0.132	65	0.1	0.2	8.431	A
C-A	394	99			394				
A-B	86	22			86				
A-C	563	141			563				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	32	492	0.264	129	0.2	0.4	9.906	A
B-A	42	11	215	0.197	42	0.1	0.2	20.755	C
C-AB	80	20	453	0.176	79	0.2	0.2	9.622	A
C-A	483	121			483				
A-B	105	26			105				
A-C	689	172			689				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	32	492	0.264	130	0.4	0.4	9.939	A
B-A	42	11	215	0.197	42	0.2	0.2	20.840	C
C-AB	80	20	453	0.176	80	0.2	0.2	9.633	A
C-A	483	121			483				
A-B	105	26			105				
A-C	689	172			689				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	538	0.197	106	0.4	0.2	8.347	A
B-A	35	9	263	0.132	35	0.2	0.2	15.811	C
C-AB	65	16	492	0.132	65	0.2	0.2	8.446	A
C-A	394	99			394				
A-B	86	22			86				
A-C	563	141			563				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	571	0.155	89	0.2	0.2	7.475	A
B-A	29	7	298	0.097	29	0.2	0.1	13.422	B
C-AB	54	14	520	0.105	55	0.2	0.1	7.744	A
C-A	330	83			330				
A-B	72	18			72				
A-C	471	118			471				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.24	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.21	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.36	0.03	0.32	1.16	1.16			N/A	N/A
B-A	0.24	0.03	0.29	0.80	1.17			N/A	N/A
C-AB	0.21	0.03	0.27	0.49	0.84			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.19	0.00	0.00	0.19	0.19			N/A	N/A
B-A	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	640	100.000
B - Felixstowe Road South		ONE HOUR	✓	155	100.000
C - A1156 West		ONE HOUR	✓	454	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	32	608
	B - Felixstowe Road South	59	0	96
	C - A1156 West	385	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.85	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	3
	B - Felixstowe Road South	6	0	4
	C - A1156 West	4	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.025
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.042	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	482	496
	15:00-15:15	575	592
	15:15-15:30	705	726
	15:30-15:45	705	726
	15:45-16:00	575	592
	16:00-16:15	482	496
B - Felixstowe Road South	14:45-15:00	116	122
	15:00-15:15	139	145
	15:15-15:30	170	178
	15:30-15:45	170	178
	15:45-16:00	139	145
	16:00-16:15	116	122
C - A1156 West	14:45-15:00	342	358
	15:00-15:15	408	427
	15:15-15:30	500	523
	15:30-15:45	500	523
	15:45-16:00	408	427
	16:00-16:15	342	358

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.23	9.93	0.3	1.3	A	88	132
B-A	0.27	20.55	0.4	1.2	C	54	81
C-AB	0.16	9.18	0.2	0.5	A	63	95
C-A						353	530
A-B						29	44
A-C						558	838

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	544	0.133	72	0.0	0.2	7.619	A
B-A	44	11	317	0.139	43	0.0	0.2	13.146	B
C-AB	52	13	526	0.099	52	0.0	0.1	7.583	A
C-A	290	72			290				
A-B	24	6			24				
A-C	458	115			458				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	513	0.168	86	0.2	0.2	8.433	A
B-A	53	13	284	0.185	52	0.2	0.2	15.502	C
C-AB	62	16	502	0.124	62	0.1	0.1	8.186	A
C-A	346	87			346				
A-B	28	7			28				
A-C	547	137			547				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	469	0.226	105	0.2	0.3	9.897	A
B-A	64	16	240	0.269	64	0.2	0.4	20.433	C
C-AB	76	19	468	0.162	76	0.1	0.2	9.171	A
C-A	424	106			424				
A-B	35	9			35				
A-C	670	167			670				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	106	26	468	0.226	106	0.3	0.3	9.926	A
B-A	64	16	240	0.269	64	0.4	0.4	20.549	C
C-AB	76	19	468	0.162	76	0.2	0.2	9.180	A
C-A	424	106			424				
A-B	35	9			35				
A-C	670	167			670				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	86	22	512	0.169	87	0.3	0.2	8.469	A
B-A	53	13	284	0.185	53	0.4	0.2	15.603	C
C-AB	62	16	502	0.124	62	0.2	0.1	8.198	A
C-A	346	87			346				
A-B	28	7			28				
A-C	547	137			547				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	72	18	543	0.133	72	0.2	0.2	7.656	A
B-A	44	11	317	0.139	44	0.2	0.2	13.232	B
C-AB	52	13	526	0.099	52	0.1	0.1	7.599	A
C-A	290	72			290				
A-B	24	6			24				
A-C	458	115			458				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.36	0.03	0.26	0.47	0.50			N/A	N/A

C-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.29	0.03	0.31	1.02	1.32			N/A	N/A
B-A	0.36	0.03	0.32	1.23	1.24			N/A	N/A
C-AB	0.19	0.03	0.26	0.47	0.49			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.16	0.00	0.00	0.16	0.16			N/A	N/A
B-A	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	697	100.000
B - Felixstowe Road South		ONE HOUR	✓	218	100.000
C - A1156 West		ONE HOUR	✓	583	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	39	658
	B - Felixstowe Road South	76	0	142
	C - A1156 West	479	104	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.82	0.18	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.011	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	525	531
	17:00-17:15	626	634
	17:15-17:30	767	776
	17:30-17:45	767	776
	17:45-18:00	626	634
	18:00-18:15	525	531
B - Felixstowe Road South	16:45-17:00	164	168
	17:00-17:15	196	200
	17:15-17:30	240	245
	17:30-17:45	240	245
	17:45-18:00	196	200
	18:00-18:15	164	168
C - A1156 West	16:45-17:00	439	445
	17:00-17:15	524	531
	17:15-17:30	642	650
	17:30-17:45	642	650
	17:45-18:00	524	531
	18:00-18:15	439	445

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.35	12.35	0.5	2.4	B	130	195
B-A	0.40	28.29	0.6	3.0	D	70	105
C-AB	0.24	9.97	0.3	1.4	A	96	143
C-A						439	659
A-B						35	53
A-C						604	906

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	107	27	540	0.198	106	0.0	0.2	8.269	A
B-A	57	14	302	0.190	56	0.0	0.2	14.582	B
C-AB	78	20	540	0.145	78	0.0	0.2	7.775	A
C-A	360	90			360				
A-B	29	7			29				
A-C	496	124			496				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	504	0.253	127	0.2	0.3	9.540	A
B-A	68	17	264	0.259	68	0.2	0.3	18.314	C
C-AB	94	23	513	0.183	93	0.2	0.2	8.574	A
C-A	430	108			430				
A-B	35	9			35				
A-C	592	148			592				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	156	39	449	0.348	155	0.3	0.5	12.239	B
B-A	84	21	211	0.397	83	0.3	0.6	27.830	D
C-AB	115	29	476	0.241	114	0.2	0.3	9.953	A
C-A	527	132			527				
A-B	43	11			43				
A-C	725	181			725				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	156	39	448	0.349	156	0.5	0.5	12.347	B
B-A	84	21	211	0.398	84	0.6	0.6	28.290	D
C-AB	115	29	476	0.241	115	0.3	0.3	9.972	A
C-A	527	132			527				
A-B	43	11			43				
A-C	725	181			725				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	127	32	503	0.253	128	0.5	0.3	9.633	A
B-A	68	17	264	0.259	70	0.6	0.4	18.604	C
C-AB	94	23	513	0.183	94	0.3	0.2	8.599	A
C-A	430	108			430				
A-B	35	9			35				
A-C	592	148			592				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	107	27	539	0.198	107	0.3	0.2	8.342	A
B-A	57	14	302	0.190	58	0.4	0.2	14.749	B
C-AB	78	20	540	0.145	79	0.2	0.2	7.805	A
C-A	360	90			360				
A-B	29	7			29				
A-C	496	124			496				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B-A	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B-A	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.52	0.03	0.26	0.52	0.52			N/A	N/A
B-A	0.63	0.03	0.27	0.63	1.15			N/A	N/A

C-AB	0.31	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.53	0.03	0.30	1.43	2.44			N/A	N/A
B-A	0.64	0.03	0.31	1.27	3.00			N/A	N/A
C-AB	0.32	0.03	0.31	1.11	1.42			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B-A	0.36	0.03	0.29	0.79	1.15			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.25	0.00	0.00	0.25	0.25			N/A	N/A
B-A	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	161	100.000
B - Felixstowe Road South		ONE HOUR	✓	61	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	22	139
	B - Felixstowe Road South	13	0	47
	C - A1156 West	8	17	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.31	0.69	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	87	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.049
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.873	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	121	128
	06:00-06:15	145	153
	06:15-06:30	177	187
	06:30-06:45	177	187
	06:45-07:00	145	153
	07:00-07:15	121	128
B - Felixstowe Road South	05:45-06:00	46	50
	06:00-06:15	54	60
	06:15-06:30	67	73
	06:30-06:45	67	73
	06:45-07:00	54	60
	07:00-07:15	46	50
C - A1156 West	05:45-06:00	19	24
	06:00-06:15	22	28
	06:15-06:30	27	34
	06:30-06:45	27	34
	06:45-07:00	22	28
	07:00-07:15	19	24

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.08	6.22	0.1	0.5	A	43	65
B-A	0.04	9.29	0.0	0.5	A	12	18
C-AB	0.03	5.75	0.0	0.5	A	16	23
C-A						7	11
A-B						20	30
A-C						128	192

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	647	0.055	35	0.0	0.1	5.886	A
B-A	10	3	416	0.024	10	0.0	0.0	8.874	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	42	11	640	0.066	42	0.1	0.1	6.024	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	42	11	640	0.066	43	0.1	0.1	6.026	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	647	0.055	36	0.1	0.1	5.893	A
B-A	10	3	416	0.024	10	0.0	0.0	8.879	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A

C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	492	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	380	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	67	426
	B - Felixstowe Road South	33	0	116
	C - A1156 West	306	74	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.026
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.042	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	371	381
	07:00-07:15	443	455
	07:15-07:30	542	557
	07:30-07:45	542	557
	07:45-08:00	443	455
	08:00-08:15	371	381
B - Felixstowe Road South	06:45-07:00	112	121
	07:00-07:15	134	145
	07:15-07:30	164	177
	07:30-07:45	164	177
	07:45-08:00	134	145
	08:00-08:15	112	121
C - A1156 West	06:45-07:00	286	302
	07:00-07:15	342	361
	07:15-07:30	419	442
	07:30-07:45	419	442
	07:45-08:00	342	361
	08:00-08:15	286	302

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.24	8.86	0.3	1.4	A	107	160
B-A	0.13	14.67	0.1	0.5	B	30	45
C-AB	0.17	8.83	0.2	0.5	A	68	102
C-A						281	422
A-B						61	92
A-C						391	586

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	88	22	585	0.150	87	0.0	0.2	7.220	A
B-A	25	6	340	0.072	24	0.0	0.1	11.389	B
C-AB	56	14	532	0.105	55	0.0	0.1	7.551	A
C-A	231	58			231				
A-B	50	13			50				
A-C	321	80			321				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	564	0.185	104	0.2	0.2	7.833	A
B-A	29	7	315	0.093	29	0.1	0.1	12.575	B
C-AB	66	17	514	0.129	66	0.1	0.1	8.045	A
C-A	275	69			275				
A-B	60	15			60				
A-C	383	96			383				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	534	0.239	128	0.2	0.3	8.842	A
B-A	36	9	281	0.128	36	0.1	0.1	14.647	B
C-AB	81	20	489	0.166	81	0.1	0.2	8.820	A
C-A	337	84			337				
A-B	73	18			73				
A-C	469	117			469				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	534	0.240	128	0.3	0.3	8.859	A
B-A	36	9	281	0.128	36	0.1	0.1	14.670	B
C-AB	81	20	489	0.166	81	0.2	0.2	8.829	A
C-A	337	84			337				
A-B	73	18			73				
A-C	469	117			469				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	563	0.185	105	0.3	0.2	7.854	A
B-A	29	7	315	0.093	30	0.1	0.1	12.601	B
C-AB	66	17	514	0.129	67	0.2	0.1	8.055	A
C-A	275	69			275				
A-B	60	15			60				
A-C	383	96			383				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	88	22	584	0.150	88	0.2	0.2	7.254	A
B-A	25	6	340	0.072	25	0.1	0.1	11.422	B
C-AB	56	14	532	0.105	56	0.1	0.1	7.567	A
C-A	231	58			231				
A-B	50	13			50				
A-C	321	80			321				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.14	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.20	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.31	1.10	1.41			N/A	N/A
B-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.20	0.03	0.26	0.47	0.50			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	837	100.000
B - Felixstowe Road South		ONE HOUR	✓	162	100.000
C - A1156 West		ONE HOUR	✓	581	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	99	738
	B - Felixstowe Road South	40	0	122
	C - A1156 West	506	75	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.12	0.88
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.026
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.042	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	630	647
	08:00-08:15	753	773
	08:15-08:30	922	947
	08:30-08:45	922	947
	08:45-09:00	753	773
	09:00-09:15	630	647
B - Felixstowe Road South	07:45-08:00	122	125
	08:00-08:15	146	149
	08:15-08:30	179	183
	08:30-08:45	179	183
	08:45-09:00	146	149
	09:00-09:15	122	125
C - A1156 West	07:45-08:00	437	456
	08:00-08:15	522	544
	08:15-08:30	639	667
	08:30-08:45	639	667
	08:45-09:00	522	544
	09:00-09:15	437	456

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.30	11.38	0.4	1.7	B	112	168
B-A	0.25	27.16	0.3	1.4	D	37	55
C-AB	0.20	10.66	0.2	1.1	B	69	103
C-A						464	696
A-B						91	137
A-C						677	1016

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	546	0.169	91	0.0	0.2	7.912	A
B-A	30	8	271	0.111	30	0.0	0.1	14.867	B
C-AB	57	14	497	0.114	56	0.0	0.1	8.156	A
C-A	381	95			381				
A-B	75	19			75				
A-C	556	139			556				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	507	0.217	110	0.2	0.3	9.049	A
B-A	36	9	232	0.155	36	0.1	0.2	18.362	C
C-AB	67	17	465	0.145	67	0.1	0.2	9.055	A
C-A	454	114			454				
A-B	89	22			89				
A-C	663	166			663				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	452	0.298	134	0.3	0.4	11.318	B
B-A	44	11	176	0.249	43	0.2	0.3	26.944	D
C-AB	83	21	420	0.197	82	0.2	0.2	10.646	B
C-A	557	139			557				
A-B	109	27			109				
A-C	813	203			813				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	451	0.299	135	0.4	0.4	11.377	B
B-A	44	11	176	0.249	44	0.3	0.3	27.156	D
C-AB	83	21	420	0.197	83	0.2	0.2	10.664	B
C-A	557	139			557				
A-B	109	27			109				
A-C	813	203			813				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	506	0.217	110	0.4	0.3	9.108	A
B-A	36	9	232	0.155	36	0.3	0.2	18.503	C
C-AB	67	17	465	0.145	68	0.2	0.2	9.075	A
C-A	454	114			454				
A-B	89	22			89				
A-C	663	166			663				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	545	0.169	92	0.3	0.2	7.962	A
B-A	30	8	271	0.111	30	0.2	0.1	14.959	B
C-AB	57	14	497	0.114	57	0.2	0.1	8.182	A
C-A	381	95			381				
A-B	75	19			75				
A-C	556	139			556				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.32	0.03	0.26	0.47	0.58			N/A	N/A

C-AB	0.24	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.03	0.31	1.34	1.71			N/A	N/A
B-A	0.33	0.03	0.32	1.13	1.42			N/A	N/A
C-AB	0.24	0.03	0.29	0.76	1.14			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.00	0.00	0.28	0.28			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	780	100.000
B - Felixstowe Road South		ONE HOUR	✓	161	100.000
C - A1156 West		ONE HOUR	✓	530	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	33	747
	B - Felixstowe Road South	61	0	100
	C - A1156 West	458	72	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.04	0.96
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.86	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	3	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.020
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.031	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	587	602
	15:00-15:15	701	718
	15:15-15:30	859	880
	15:30-15:45	859	880
	15:45-16:00	701	718
	16:00-16:15	587	602
B - Felixstowe Road South	14:45-15:00	121	126
	15:00-15:15	144	151
	15:15-15:30	177	185
	15:30-15:45	177	185
	15:45-16:00	144	151
	16:00-16:15	121	126
C - A1156 West	14:45-15:00	399	413
	15:00-15:15	476	493
	15:15-15:30	583	604
	15:30-15:45	583	604
	15:45-16:00	476	493
	16:00-16:15	399	413

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.26	11.62	0.4	1.1	B	92	137
B-A	0.35	28.39	0.5	2.2	D	56	84
C-AB	0.18	10.27	0.2	1.0	B	66	99
C-A						420	631
A-B						30	45
A-C						686	1029

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	514	0.146	74	0.0	0.2	8.183	A
B-A	46	11	285	0.160	45	0.0	0.2	14.937	B
C-AB	54	14	499	0.108	54	0.0	0.1	8.066	A
C-A	345	86			345				
A-B	25	6			25				
A-C	563	141			563				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	22	476	0.188	89	0.2	0.2	9.303	A
B-A	55	14	247	0.221	54	0.2	0.3	18.661	C
C-AB	65	16	470	0.137	64	0.1	0.2	8.871	A
C-A	412	103			412				
A-B	30	7			30				
A-C	672	168			672				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	421	0.261	109	0.2	0.3	11.550	B
B-A	67	17	194	0.346	66	0.3	0.5	28.026	D
C-AB	79	20	429	0.184	79	0.2	0.2	10.259	B
C-A	504	126			504				
A-B	36	9			36				
A-C	823	206			823				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	420	0.262	110	0.3	0.4	11.617	B
B-A	67	17	194	0.346	67	0.5	0.5	28.387	D
C-AB	79	20	429	0.184	79	0.2	0.2	10.273	B
C-A	504	126			504				
A-B	36	9			36				
A-C	823	206			823				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	22	475	0.189	90	0.4	0.2	9.367	A
B-A	55	14	247	0.221	56	0.5	0.3	18.893	C
C-AB	65	16	470	0.137	65	0.2	0.2	8.889	A
C-A	412	103			412				
A-B	30	7			30				
A-C	672	168			672				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	513	0.146	75	0.2	0.2	8.235	A
B-A	46	11	285	0.160	46	0.3	0.2	15.077	C
C-AB	54	14	499	0.108	54	0.2	0.1	8.089	A
C-A	345	86			345				
A-B	25	6			25				
A-C	563	141			563				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.51	0.03	0.26	0.51	0.88			N/A	N/A

C-AB	0.22	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.32	1.07	1.07			N/A	N/A
B-A	0.52	0.03	0.32	1.49	2.20			N/A	N/A
C-AB	0.22	0.03	0.28	0.51	1.01			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B-A	0.29	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	786	100.000
B - Felixstowe Road South		ONE HOUR	✓	226	100.000
C - A1156 West		ONE HOUR	✓	614	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	40	746
	B - Felixstowe Road South	79	0	147
	C - A1156 West	506	108	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.82	0.18	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.008	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	592	598
	17:00-17:15	707	715
	17:15-17:30	866	875
	17:30-17:45	866	875
	17:45-18:00	707	715
	18:00-18:15	592	598
B - Felixstowe Road South	16:45-17:00	170	174
	17:00-17:15	203	208
	17:15-17:30	249	254
	17:30-17:45	249	254
	17:45-18:00	203	208
	18:00-18:15	170	174
C - A1156 West	16:45-17:00	462	467
	17:00-17:15	552	558
	17:15-17:30	676	683
	17:30-17:45	676	683
	17:45-18:00	552	558
	18:00-18:15	462	467

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.40	14.57	0.6	3.1	B	135	203
B-A	0.48	37.64	0.9	4.3	E	73	109
C-AB	0.27	10.89	0.4	1.2	B	99	149
C-A						464	696
A-B						37	55
A-C						685	1027

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	111	28	520	0.213	110	0.0	0.3	8.756	A
B-A	60	15	283	0.210	58	0.0	0.3	15.950	C
C-AB	81	20	522	0.156	81	0.0	0.2	8.139	A
C-A	381	95			381				
A-B	30	8			30				
A-C	562	140			562				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	132	33	478	0.277	132	0.3	0.4	10.374	B
B-A	71	18	241	0.295	70	0.3	0.4	21.027	C
C-AB	97	24	492	0.198	97	0.2	0.2	9.113	A
C-A	455	114			455				
A-B	36	9			36				
A-C	671	168			671				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	41	411	0.394	161	0.4	0.6	14.329	B
B-A	87	22	182	0.477	85	0.4	0.9	36.446	E
C-AB	119	30	450	0.265	119	0.2	0.4	10.862	B
C-A	557	139			557				
A-B	44	11			44				
A-C	822	205			822				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	41	409	0.396	162	0.6	0.6	14.565	B
B-A	87	22	182	0.478	87	0.9	0.9	37.639	E
C-AB	119	30	450	0.265	119	0.4	0.4	10.892	B
C-A	557	139			557				
A-B	44	11			44				
A-C	822	205			822				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	132	33	476	0.278	133	0.6	0.4	10.529	B
B-A	71	18	241	0.295	73	0.9	0.4	21.594	C
C-AB	97	24	492	0.198	98	0.4	0.2	9.146	A
C-A	455	114			455				
A-B	36	9			36				
A-C	671	168			671				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	111	28	518	0.214	111	0.4	0.3	8.852	A
B-A	60	15	283	0.210	60	0.4	0.3	16.191	C
C-AB	81	20	522	0.156	82	0.2	0.2	8.176	A
C-A	381	95			381				
A-B	30	8			30				
A-C	562	140			562				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B-A	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B-A	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.63	0.03	0.26	0.63	0.63			N/A	N/A
B-A	0.85	0.03	0.28	0.85	2.68			N/A	N/A

C-AB	0.36	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.65	0.03	0.30	1.49	3.06			N/A	N/A
B-A	0.88	0.03	0.32	1.78	4.34			N/A	N/A
C-AB	0.36	0.03	0.31	1.21	1.21			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.39	0.03	0.28	0.50	0.96			N/A	N/A
B-A	0.43	0.04	0.37	1.20	1.36			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.27	0.03	0.29	0.83	1.17			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	161	100.000
B - Felixstowe Road South		ONE HOUR	✓	61	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	22	139
	B - Felixstowe Road South	13	0	47
	C - A1156 West	8	17	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.31	0.69	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	87	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.049
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.873	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	121	128
	06:00-06:15	145	153
	06:15-06:30	177	187
	06:30-06:45	177	187
	06:45-07:00	145	153
	07:00-07:15	121	128
B - Felixstowe Road South	05:45-06:00	46	50
	06:00-06:15	54	60
	06:15-06:30	67	73
	06:30-06:45	67	73
	06:45-07:00	54	60
	07:00-07:15	46	50
C - A1156 West	05:45-06:00	19	24
	06:00-06:15	22	28
	06:15-06:30	27	34
	06:30-06:45	27	34
	06:45-07:00	22	28
	07:00-07:15	19	24

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.08	6.22	0.1	0.5	A	43	65
B-A	0.04	9.29	0.0	0.5	A	12	18
C-AB	0.03	5.75	0.0	0.5	A	16	23
C-A						7	11
A-B						20	30
A-C						128	192

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	647	0.055	35	0.0	0.1	5.886	A
B-A	10	3	416	0.024	10	0.0	0.0	8.874	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	42	11	640	0.066	42	0.1	0.1	6.024	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	42	11	640	0.066	43	0.1	0.1	6.026	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	36	9	647	0.055	36	0.1	0.1	5.893	A
B-A	10	3	416	0.024	10	0.0	0.0	8.879	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.03	0.26	0.47	0.49			N/A	N/A
B-A	0.04	0.03	0.25	0.45	0.48			N/A	N/A

C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.09	0.00	0.00	0.09	0.09			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.07	0.00	0.00	0.07	0.07			N/A	N/A
B-A	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.06	0.00	0.00	0.06	0.06			N/A	N/A
B-A	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	495	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	385	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	67	429
	B - Felixstowe Road South	33	0	116
	C - A1156 West	311	74	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.026
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.041	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	373	383
	07:00-07:15	445	458
	07:15-07:30	546	561
	07:30-07:45	546	561
	07:45-08:00	445	458
	08:00-08:15	373	383
B - Felixstowe Road South	06:45-07:00	112	121
	07:00-07:15	134	145
	07:15-07:30	164	177
	07:30-07:45	164	177
	07:45-08:00	134	145
	08:00-08:15	112	121
C - A1156 West	06:45-07:00	290	306
	07:00-07:15	346	365
	07:15-07:30	424	447
	07:30-07:45	424	447
	07:45-08:00	346	365
	08:00-08:15	290	306

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.24	8.88	0.3	1.4	A	107	160
B-A	0.13	14.76	0.1	0.5	B	30	45
C-AB	0.17	8.85	0.2	0.5	A	68	102
C-A						286	428
A-B						61	92
A-C						394	590

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	88	22	584	0.150	87	0.0	0.2	7.229	A
B-A	25	6	339	0.073	24	0.0	0.1	11.426	B
C-AB	56	14	531	0.105	55	0.0	0.1	7.560	A
C-A	234	59			234				
A-B	50	13			50				
A-C	323	81			323				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	563	0.186	104	0.2	0.2	7.846	A
B-A	29	7	314	0.094	29	0.1	0.1	12.628	B
C-AB	66	17	513	0.129	66	0.1	0.1	8.057	A
C-A	280	70			280				
A-B	60	15			60				
A-C	386	96			386				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	533	0.240	128	0.2	0.3	8.863	A
B-A	36	9	280	0.129	36	0.1	0.1	14.735	B
C-AB	81	20	488	0.167	81	0.1	0.2	8.838	A
C-A	343	86			343				
A-B	73	18			73				
A-C	472	118			472				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	533	0.240	128	0.3	0.3	8.880	A
B-A	36	9	280	0.129	36	0.1	0.1	14.758	B
C-AB	81	20	488	0.167	81	0.2	0.2	8.846	A
C-A	343	86			343				
A-B	73	18			73				
A-C	472	118			472				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	563	0.186	105	0.3	0.2	7.867	A
B-A	29	7	314	0.094	30	0.1	0.1	12.654	B
C-AB	66	17	513	0.129	67	0.2	0.2	8.067	A
C-A	280	70			280				
A-B	60	15			60				
A-C	386	96			386				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	88	22	584	0.150	88	0.2	0.2	7.260	A
B-A	25	6	339	0.073	25	0.1	0.1	11.456	B
C-AB	56	14	531	0.105	56	0.2	0.1	7.579	A
C-A	234	59			234				
A-B	50	13			50				
A-C	323	81			323				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.14	0.03	0.26	0.47	0.49			N/A	N/A

C-AB	0.20	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.31	0.03	0.31	1.10	1.41			N/A	N/A
B-A	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.20	0.03	0.26	0.47	0.50			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.18	0.00	0.00	0.18	0.18			N/A	N/A
B-A	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	853	100.000
B - Felixstowe Road South		ONE HOUR	✓	162	100.000
C - A1156 West		ONE HOUR	✓	582	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	99	754
	B - Felixstowe Road South	40	0	122
	C - A1156 West	507	75	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.12	0.88
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.025
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.043	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	642	659
	08:00-08:15	767	787
	08:15-08:30	939	964
	08:30-08:45	939	964
	08:45-09:00	767	787
	09:00-09:15	642	659
B - Felixstowe Road South	07:45-08:00	122	125
	08:00-08:15	146	149
	08:15-08:30	179	183
	08:30-08:45	179	183
	08:45-09:00	146	149
	09:00-09:15	122	125
C - A1156 West	07:45-08:00	438	457
	08:00-08:15	523	546
	08:15-08:30	640	669
	08:30-08:45	640	669
	08:45-09:00	523	546
	09:00-09:15	438	457

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.30	11.58	0.4	1.8	B	112	168
B-A	0.26	28.03	0.3	1.5	D	37	55
C-AB	0.20	10.81	0.2	1.2	B	69	103
C-A						465	697
A-B						91	137
A-C						692	1038

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	542	0.170	91	0.0	0.2	7.971	A
B-A	30	8	268	0.112	30	0.0	0.1	15.042	C
C-AB	57	14	494	0.114	56	0.0	0.1	8.214	A
C-A	381	95			381				
A-B	75	19			75				
A-C	568	142			568				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	503	0.219	110	0.2	0.3	9.146	A
B-A	36	9	228	0.157	36	0.1	0.2	18.680	C
C-AB	67	17	461	0.146	67	0.1	0.2	9.140	A
C-A	455	114			455				
A-B	89	22			89				
A-C	678	169			678				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	446	0.302	134	0.3	0.4	11.513	B
B-A	44	11	172	0.255	43	0.2	0.3	27.789	D
C-AB	83	21	416	0.199	82	0.2	0.2	10.790	B
C-A	558	139			558				
A-B	109	27			109				
A-C	830	208			830				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	135	34	446	0.302	135	0.4	0.4	11.577	B
B-A	44	11	172	0.255	44	0.3	0.3	28.027	D
C-AB	83	21	416	0.199	83	0.2	0.2	10.809	B
C-A	558	139			558				
A-B	109	27			109				
A-C	830	208			830				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	502	0.219	111	0.4	0.3	9.206	A
B-A	36	9	228	0.157	36	0.3	0.2	18.832	C
C-AB	67	17	461	0.146	68	0.2	0.2	9.162	A
C-A	455	114			455				
A-B	89	22			89				
A-C	678	169			678				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	92	23	541	0.170	92	0.3	0.2	8.025	A
B-A	30	8	268	0.112	30	0.2	0.1	15.137	C
C-AB	57	14	494	0.114	57	0.2	0.1	8.238	A
C-A	381	95			381				
A-B	75	19			75				
A-C	568	142			568				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.20	0.00	0.00	0.20	0.20			N/A	N/A
B-A	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.00	0.00	0.28	0.28			N/A	N/A
B-A	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.33	0.03	0.26	0.47	0.65			N/A	N/A

C-AB	0.24	0.03	0.26	0.46	0.49			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.43	0.03	0.31	1.35	1.75			N/A	N/A
B-A	0.34	0.03	0.32	1.16	1.45			N/A	N/A
C-AB	0.25	0.03	0.29	0.79	1.16			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.28	0.00	0.00	0.28	0.28			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.21	0.00	0.00	0.21	0.21			N/A	N/A
B-A	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	2.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	782	100.000
B - Felixstowe Road South		ONE HOUR	✓	161	100.000
C - A1156 West		ONE HOUR	✓	533	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	33	749
	B - Felixstowe Road South	61	0	100
	C - A1156 West	461	72	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.04	0.96
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	3	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.020
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.031	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	589	603
	15:00-15:15	703	720
	15:15-15:30	861	882
	15:30-15:45	861	882
	15:45-16:00	703	720
	16:00-16:15	589	603
B - Felixstowe Road South	14:45-15:00	121	126
	15:00-15:15	144	151
	15:15-15:30	177	185
	15:30-15:45	177	185
	15:45-16:00	144	151
	16:00-16:15	121	126
C - A1156 West	14:45-15:00	401	416
	15:00-15:15	479	496
	15:15-15:30	587	608
	15:30-15:45	587	608
	15:45-16:00	479	496
	16:00-16:15	401	416

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.26	11.65	0.4	1.1	B	92	137
B-A	0.35	28.61	0.5	2.2	D	56	84
C-AB	0.18	10.29	0.2	1.0	B	66	99
C-A						423	635
A-B						30	45
A-C						688	1032

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	513	0.146	74	0.0	0.2	8.191	A
B-A	46	11	285	0.161	45	0.0	0.2	14.979	B
C-AB	54	14	499	0.108	54	0.0	0.1	8.074	A
C-A	347	87			347				
A-B	25	6			25				
A-C	564	141			564				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	22	476	0.189	89	0.2	0.2	9.317	A
B-A	55	14	246	0.222	54	0.2	0.3	18.739	C
C-AB	65	16	470	0.137	64	0.1	0.2	8.882	A
C-A	415	104			415				
A-B	30	7			30				
A-C	674	168			674				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	420	0.262	109	0.2	0.3	11.580	B
B-A	67	17	193	0.348	66	0.3	0.5	28.236	D
C-AB	79	20	429	0.184	79	0.2	0.2	10.276	B
C-A	508	127			508				
A-B	36	9			36				
A-C	825	206			825				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	110	27	419	0.262	110	0.3	0.4	11.648	B
B-A	67	17	193	0.348	67	0.5	0.5	28.608	D
C-AB	79	20	429	0.184	79	0.2	0.2	10.290	B
C-A	508	127			508				
A-B	36	9			36				
A-C	825	206			825				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	90	22	474	0.189	90	0.4	0.2	9.379	A
B-A	55	14	246	0.222	56	0.5	0.3	18.974	C
C-AB	65	16	470	0.137	65	0.2	0.2	8.900	A
C-A	415	104			415				
A-B	30	7			30				
A-C	674	168			674				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	512	0.147	75	0.2	0.2	8.245	A
B-A	46	11	285	0.161	46	0.3	0.2	15.116	C
C-AB	54	14	499	0.108	54	0.2	0.1	8.097	A
C-A	347	87			347				
A-B	25	6			25				
A-C	564	141			564				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.23	0.00	0.00	0.23	0.23			N/A	N/A
B-A	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.26	0.46	0.49			N/A	N/A
B-A	0.51	0.03	0.27	0.51	0.91			N/A	N/A

C-AB	0.22	0.03	0.26	0.46	0.49			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.32	1.08	1.08			N/A	N/A
B-A	0.52	0.03	0.32	1.50	2.23			N/A	N/A
C-AB	0.22	0.03	0.28	0.52	1.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.24	0.00	0.00	0.24	0.24			N/A	N/A
B-A	0.29	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.17	0.00	0.00	0.17	0.17			N/A	N/A
B-A	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way	3.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	782	100.000
B - Felixstowe Road South		ONE HOUR	✓	226	100.000
C - A1156 West		ONE HOUR	✓	607	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	40	742
	B - Felixstowe Road South	79	0	147
	C - A1156 West	499	108	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.82	0.18	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.008	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	589	595
	17:00-17:15	703	711
	17:15-17:30	861	871
	17:30-17:45	861	871
	17:45-18:00	703	711
	18:00-18:15	589	595
B - Felixstowe Road South	16:45-17:00	170	174
	17:00-17:15	203	208
	17:15-17:30	249	254
	17:30-17:45	249	254
	17:45-18:00	203	208
	18:00-18:15	170	174
C - A1156 West	16:45-17:00	457	462
	17:00-17:15	546	551
	17:15-17:30	668	675
	17:30-17:45	668	675
	17:45-18:00	546	551
	18:00-18:15	457	462

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

				(Veh)			
B-C	0.39	14.44	0.6	3.0	B	135	203
B-A	0.47	36.81	0.9	4.2	E	73	109
C-AB	0.26	10.85	0.4	1.2	B	99	149
C-A						458	686
A-B						37	55
A-C						681	1022

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	111	28	521	0.213	110	0.0	0.3	8.736	A
B-A	60	15	285	0.209	58	0.0	0.3	15.848	C
C-AB	81	20	523	0.156	81	0.0	0.2	8.125	A
C-A	375	94			375				
A-B	30	8			30				
A-C	559	140			559				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	132	33	480	0.276	132	0.3	0.4	10.340	B
B-A	71	18	243	0.293	71	0.3	0.4	20.817	C
C-AB	97	24	493	0.197	97	0.2	0.2	9.091	A
C-A	448	112			448				
A-B	36	9			36				
A-C	667	167			667				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	41	413	0.392	161	0.4	0.6	14.213	B
B-A	87	22	184	0.472	85	0.4	0.8	35.699	E
C-AB	119	30	451	0.264	119	0.2	0.4	10.826	B
C-A	549	137			549				
A-B	44	11			44				
A-C	817	204			817				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	41	411	0.394	162	0.6	0.6	14.437	B
B-A	87	22	184	0.472	87	0.8	0.9	36.812	E
C-AB	119	30	451	0.264	119	0.4	0.4	10.854	B
C-A	549	137			549				
A-B	44	11			44				
A-C	817	204			817				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	132	33	478	0.277	133	0.6	0.4	10.486	B
B-A	71	18	243	0.293	73	0.9	0.4	21.359	C
C-AB	97	24	493	0.197	98	0.4	0.2	9.122	A
C-A	448	112			448				
A-B	36	9			36				
A-C	667	167			667				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	111	28	519	0.213	111	0.4	0.3	8.830	A
B-A	60	15	285	0.209	60	0.4	0.3	16.082	C
C-AB	81	20	523	0.156	82	0.2	0.2	8.161	A
C-A	375	94			375				
A-B	30	8			30				
A-C	559	140			559				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.00	0.00	0.27	0.27			N/A	N/A
B-A	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B-A	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.63	0.03	0.26	0.63	0.63			N/A	N/A
B-A	0.83	0.03	0.28	0.83	2.48			N/A	N/A

C-AB	0.35	0.03	0.26	0.46	0.49			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.64	0.03	0.30	1.49	3.03			N/A	N/A
B-A	0.86	0.03	0.32	1.74	4.23			N/A	N/A
C-AB	0.36	0.03	0.31	1.20	1.20			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.39	0.03	0.27	0.49	0.91			N/A	N/A
B-A	0.43	0.04	0.37	1.20	1.35			N/A	N/A
C-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.27	0.03	0.25	0.45	0.48			N/A	N/A
B-A	0.27	0.03	0.29	0.80	1.15			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 200924 J42_Model_Miti_Adjusted_PC & OP.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\Mitigation Models\J42_miti\Model
Report generation date: 18/12/2020 12:48:48

«2028 Peak Construction, 7-8 AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Detailed Demand Data
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2028 Peak Construction																								
A - A12 North	0.3	1.2	3.83	0.21	A	0.7	2.6	5.36	0.42	A	1.0	1.6	6.24	0.51	A	0.9	1.8	5.87	0.48	A	0.6	2.6	4.57	0.36	A
B - Sizewell Link Road	0.0	0.5	4.76	0.04	A	0.1	0.5	5.55	0.08	A	0.1	0.5	6.28	0.09	A	0.2	0.6	6.84	0.17	A	0.2	1.0	6.26	0.19	A
C - A12 South	0.3	1.5	4.60	0.26	A	1.3	1.5	7.69	0.56	A	1.2	1.5	7.37	0.55	A	1.7	2.1	8.72	0.63	A	1.3	1.5	6.94	0.56	A
	2034 Operational Led																								
A - A12 North	0.3	1.2	3.72	0.22	A	0.7	2.6	4.82	0.40	A	1.0	1.7	5.84	0.49	A	1.0	1.6	5.66	0.49	A	0.6	2.6	4.71	0.39	A
B - Sizewell Link Road	0.0	0.5	3.48	0.02	A	0.0	0.5	3.93	0.03	A	0.0	0.5	4.30	0.04	A	0.1	0.5	4.40	0.06	A	0.1	0.5	4.02	0.06	A
C - A12 South	0.2	0.5	3.78	0.18	A	0.8	2.0	5.62	0.46	A	1.1	1.5	6.31	0.53	A	1.3	1.5	6.98	0.57	A	1.1	1.5	6.10	0.52	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

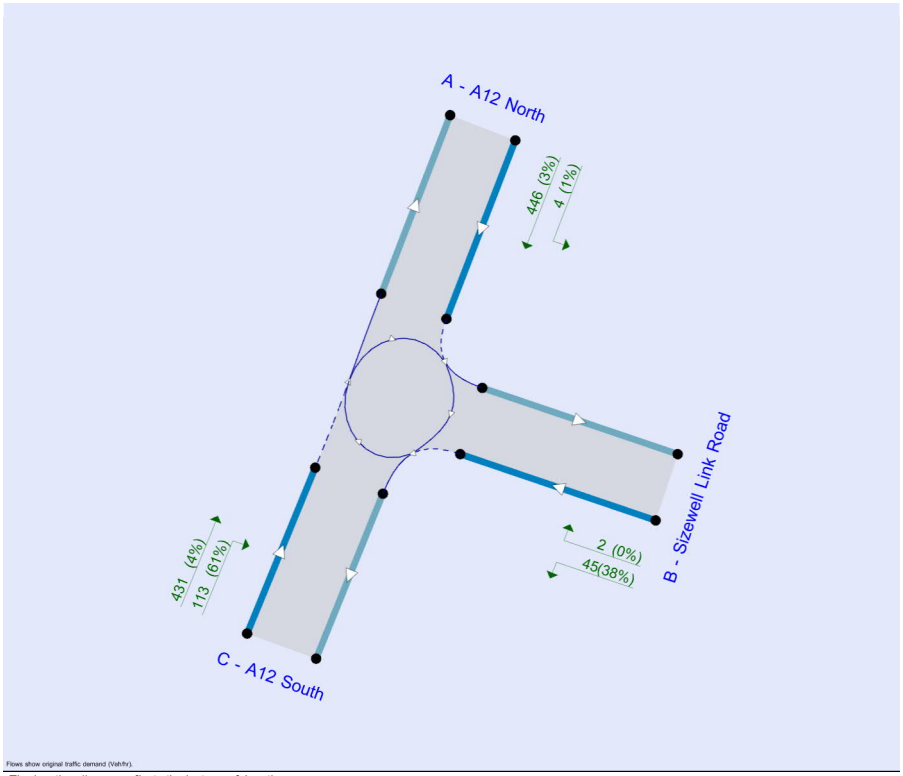
File summary

File Description

Title	A12 / Sizewell Link Road
Location	52.251658°, 1.495587°
Site number	42
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	D16,D17,D18,D19,D20,D26,D27,D28,D29,D30	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J42	A12 / Sizewell Link Road	Standard Roundabout	A, B, C	6.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Sizewell Link Road	
C	A12 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	3.60	4.00	10.0	34.3	60.0	11.5	
B - Sizewell Link Road	3.60	4.00	10.0	28.6	60.0	36.0	
C - A12 South	3.70	4.00	10.0	41.7	60.0	29.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.510	1300
B - Sizewell Link Road	0.467	1191
C - A12 South	0.485	1239

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	450	100.000
B - Sizewell Link Road		ONE HOUR	✓	48	100.000
C - A12 South		ONE HOUR	✓	543	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Sizewell Link Road	C - A12 South
From	A - A12 North	0	4	446
	B - Sizewell Link Road	2	0	45
	C - A12 South	431	113	0

Proportions

		To		
		A - A12 North	B - Sizewell Link Road	C - A12 South
From	A - A12 North	0.00	0.01	0.99
	B - Sizewell Link Road	0.05	0.00	0.95
	C - A12 South	0.79	0.21	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Sizewell Link Road	C - A12 South
From	A - A12 North	0	1	3
	B - Sizewell Link Road	0	0	38
	C - A12 South	4	61	0

Average PCU Per Veh

		To		
		A - A12 North	B - Sizewell Link Road	C - A12 South
From	A - A12 North	1.000	1.009	1.026
	B - Sizewell Link Road	1.002	1.000	1.382
	C - A12 South	1.043	1.609	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
06:45-07:00	A - A12 North	339	348
	B - Sizewell Link Road	36	49
	C - A12 South	409	475
07:00-07:15	A - A12 North	405	415
	B - Sizewell Link Road	43	59
	C - A12 South	488	567
07:15-07:30	A - A12 North	495	508
	B - Sizewell Link Road	53	72
	C - A12 South	598	694
	A - A12 North	495	508

07:30-07:45	B - Sizewell Link Road	53	72
	C - A12 South	598	694
07:45-08:00	A - A12 North	405	415
	B - Sizewell Link Road	43	59
	C - A12 South	488	567
08:00-08:15	A - A12 North	339	348
	B - Sizewell Link Road	36	49
	C - A12 South	409	475

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	5.36	0.7	2.6	A	413	619
B - Sizewell Link Road	0.08	5.55	0.1	0.5	A	44	66
C - A12 South	0.56	7.69	1.3	1.5	A	499	748

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	339	85	84	1199	0.283	337	324	0.0	0.4	4.169	A
B - Sizewell Link Road	36	9	334	757	0.048	36	88	0.0	0.0	4.993	A
C - A12 South	409	102	2	1067	0.383	407	368	0.0	0.6	5.434	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	405	101	101	1186	0.341	404	389	0.4	0.5	4.602	A
B - Sizewell Link Road	43	11	400	733	0.059	43	105	0.0	0.1	5.214	A
C - A12 South	488	122	2	1067	0.458	488	441	0.6	0.8	6.208	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	495	124	124	1168	0.424	495	476	0.5	0.7	5.342	A
B - Sizewell Link Road	53	13	490	702	0.075	53	128	0.1	0.1	5.545	A
C - A12 South	598	150	3	1066	0.561	597	540	0.8	1.3	7.632	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	495	124	124	1167	0.424	495	477	0.7	0.7	5.357	A
B - Sizewell Link Road	53	13	491	701	0.075	53	129	0.1	0.1	5.547	A
C - A12 South	598	150	3	1066	0.561	598	541	1.3	1.3	7.687	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	405	101	102	1185	0.341	405	391	0.7	0.5	4.620	A
B - Sizewell Link Road	43	11	401	733	0.059	43	105	0.1	0.1	5.218	A
C - A12 South	488	122	2	1067	0.458	490	442	1.3	0.9	6.263	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	339	85	85	1199	0.283	339	327	0.5	0.4	4.193	A
B - Sizewell Link Road	36	9	336	756	0.048	36	88	0.1	0.1	5.002	A
C - A12 South	409	102	2	1067	0.383	410	370	0.9	0.6	5.487	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Sizewell Link Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.62	0.55	1.00	1.40	1.45			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.51	1.00	1.40	1.45			N/A	N/A
B - Sizewell Link Road	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.83	0.12	0.90	1.27	1.27			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.73	0.03	0.25	0.73	0.73			N/A	N/A
B - Sizewell Link Road	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	1.25	0.03	0.26	1.25	1.25			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.73	0.03	0.28	0.73	2.56			N/A	N/A
B - Sizewell Link Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A

C - A12 South	1.27	0.03	0.27	1.27	1.30			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - Sizewell Link Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.86	0.14	0.93	1.25	1.25			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Sizewell Link Road	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.63	0.06	0.65	1.36	1.45			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 200924 J43_Model_Miti_Adjusted_EY_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\Mitigation Models\J43_miti\Model
Report generation date: 18/12/2020 13:19:48

«2034 Operational Led, 5-6 PM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Detailed Demand Data
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2023 Early Years																								
A - B1122 North	0.4	1.3	4.37	0.28	A	1.4	1.6	8.10	0.58	A	0.7	2.5	6.05	0.42	A	0.2	0.5	4.23	0.15	A	0.4	1.9	4.53	0.31	A
B - East Bridge Road NE	0.0	0.5	3.99	0.02	A	0.1	0.5	5.16	0.11	A	0.1	0.5	4.55	0.08	A	0.0	0.5	3.49	0.02	A	0.1	0.5	4.02	0.07	A
C - SZC (Cars + Buses)	0.0	0.5	2.22	0.01	A	0.0	0.5	2.59	0.03	A	0.0	0.5	2.43	0.01	A	0.0	0.5	2.13	0.01	A	0.1	0.5	2.46	0.07	A
D - SZC (HGV)	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
E - B1122 South	0.1	0.5	3.42	0.12	A	0.4	1.4	4.44	0.28	A	0.3	1.3	4.36	0.23	A	0.2	0.5	4.28	0.16	A	0.6	2.6	5.34	0.38	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

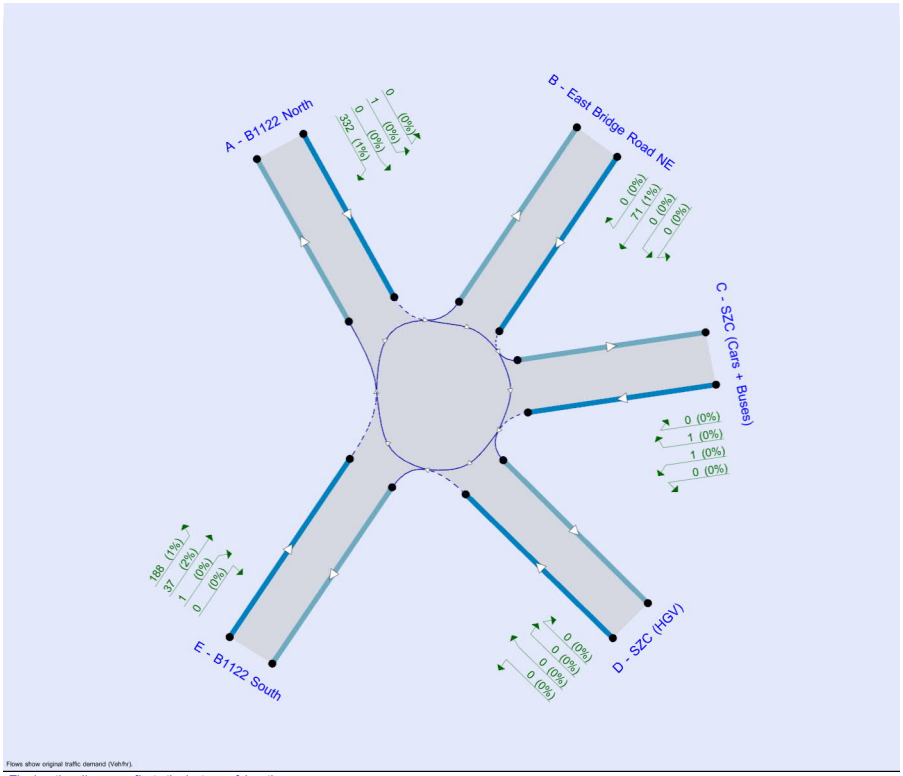
File summary

File Description

Title	B1122 / Site Access
Location	52.223545°, 1.583100°
Site number	43
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	D6,D7,D8,D9,D10	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J43	B1122 / Site Access	Standard Roundabout	A, B, C, D, E	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B1122 North	
B	East Bridge Road NE	
C	SZC (Cars + Buses)	
D	SZC (HGV)	
E	B1122 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - B1122 North	3.30	4.00	10.0	36.2	65.0	21.5	
B - East Bridge Road NE	3.00	4.00	10.0	17.5	65.0	25.5	
C - SZC (Cars + Buses)	5.00	6.00	15.2	23.8	65.0	23.0	
D - SZC (HGV)	5.00	6.00	12.5	19.9	65.0	21.5	
E - B1122 South	3.30	4.00	10.0	35.6	65.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - B1122 North	0.466	1233
B - East Bridge Road NE	0.441	1148
C - SZC (Cars + Buses)	0.558	1822
D - SZC (HGV)	0.555	1808
E - B1122 South	0.456	1206

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1122 North		ONE HOUR	✓	333	100.000
B - East Bridge Road NE		ONE HOUR	✓	71	100.000
C - SZC (Cars + Buses)		ONE HOUR	✓	2	100.000
D - SZC (HGV)		ONE HOUR	✓	0	100.000
E - B1122 South		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0	0	0.58	0	332
	B - East Bridge Road NE	0	0	0	0	71
	C - SZC (Cars + Buses)	0.58	0	0	0	0.96
	D - SZC (HGV)	0	0	0	0	0
	E - B1122 South	188	37	0.96	0	0

Proportions

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0.00	0.00	0.00	0.00	1.00
	B - East Bridge Road NE	0.00	0.00	0.00	0.00	1.00
	C - SZC (Cars + Buses)	0.38	0.00	0.00	0.00	0.62
	D - SZC (HGV)	0.20	0.20	0.20	0.20	0.20
	E - B1122 South	0.83	0.16	0.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0	0	0	0	1
	B - East Bridge Road NE	0	0	0	0	1
	C - SZC (Cars + Buses)	0	0	0	0	0
	D - SZC (HGV)	0	0	0	0	0
	E - B1122 South	1	2	0	0	0

Average PCU Per Veh

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	1.000	1.000	1.000	1.000	1.012
	B - East Bridge Road NE	1.000	1.000	1.000	1.000	1.012
	C - SZC (Cars + Buses)	1.000	1.000	1.000	1.000	1.000
	D - SZC (HGV)	1.000	1.000	1.000	1.000	1.000
	E - B1122 South	1.011	1.017	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - B1122 North	251	254
	B - East Bridge Road NE	53	54
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	170	172
17:00-17:15	A - B1122 North	299	303
	B - East Bridge Road NE	64	65
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	203	205
17:15-17:30	A - B1122 North	367	371
	B - East Bridge Road NE	78	79
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	249	251
17:30-17:45	A - B1122 North	367	371
	B - East Bridge Road NE	78	79
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	249	251
17:45-18:00	A - B1122 North	299	303
	B - East Bridge Road NE	64	65
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	203	205
18:00-18:15	A - B1122 North	251	254
	B - East Bridge Road NE	53	54
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	170	172

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1122 North	0.31	4.32	0.4	1.8	A	306	458
B - East Bridge Road NE	0.08	4.03	0.1	0.5	A	65	98
C - SZC (Cars + Buses)	0.00	0.00	0.0	~1	A	0	0
D - SZC (HGV)	0.00	0.00	0.0	~1	A	0	0
E - B1122 South	0.21	3.81	0.3	1.1	A	207	311

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	251	63	28	1205	0.208	250	141	0.0	0.3	3.765	A
B - East Bridge Road NE	53	13	250	1024	0.052	53	28	0.0	0.1	3.707	A
C - SZC (Cars + Buses)	0	0	302	1651	0.000	0	1	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	302	1638	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	170	42	0	1193	0.143	169	302	0.0	0.2	3.516	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	299	75	34	1202	0.249	299	169	0.3	0.3	3.984	A
B - East Bridge Road NE	64	16	300	1002	0.064	64	33	0.1	0.1	3.835	A
C - SZC (Cars + Buses)	0	0	362	1617	0.000	0	1	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	362	1604	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	203	51	0	1193	0.170	203	362	0.2	0.2	3.636	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	367	92	42	1199	0.306	366	207	0.3	0.4	4.321	A
B - East Bridge Road NE	78	20	367	973	0.080	78	41	0.1	0.1	4.024	A
C - SZC (Cars + Buses)	0	0	444	1571	0.000	0	2	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	444	1558	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	249	62	0	1193	0.208	248	444	0.2	0.3	3.812	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	367	92	42	1199	0.306	367	207	0.4	0.4	4.325	A
B - East Bridge Road NE	78	20	368	972	0.080	78	41	0.1	0.1	4.025	A
C - SZC (Cars + Buses)	0	0	444	1571	0.000	0	2	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	444	1558	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	249	62	0	1193	0.208	249	444	0.3	0.3	3.812	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - B1122 North	299	75	34	1202	0.249	300	169	0.4	0.3	3.989	A
B - East Bridge Road NE	64	16	301	1002	0.064	64	33	0.1	0.1	3.837	A
C - SZC (Cars + Buses)	0	0	363	1617	0.000	0	1	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	363	1604	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	203	51	0	1193	0.170	203	363	0.3	0.2	3.641	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	251	63	29	1205	0.208	251	142	0.3	0.3	3.773	A
B - East Bridge Road NE	53	13	252	1024	0.052	54	28	0.1	0.1	3.713	A
C - SZC (Cars + Buses)	0	0	304	1650	0.000	0	1	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	304	1637	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	170	42	0	1193	0.143	170	304	0.2	0.2	3.523	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.26	0.00	0.00	0.26	0.26			N/A	N/A
B - East Bridge Road NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - East Bridge Road NE	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.44	0.03	0.25	0.46	0.48			N/A	N/A
B - East Bridge Road NE	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.26	0.03	0.25	0.46	0.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.44	0.03	0.31	1.35	1.84			N/A	N/A
B - East Bridge Road NE	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.26	0.03	0.29	0.76	1.14			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - East Bridge Road NE	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.21	0.00	0.00	0.21	0.21			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.26	0.00	0.00	0.26	0.26			N/A	N/A
B - East Bridge Road NE	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.17	0.00	0.00	0.17	0.17			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 200924 J43_Model_Miti_Adjusted OP_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\Mitigation Models\J43_miti\Model
Report generation date: 18/12/2020 13:17:00

«2023 Reference Case , 6-7 AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Detailed Demand Data
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2028 Peak Construction																								
A - B1122 North	0.5	2.4	5.77	0.34	A	1.7	3.4	11.05	0.63	B	1.1	1.8	7.90	0.52	A	0.3	1.5	5.38	0.25	A	0.6	2.6	5.33	0.38	A
B - East Bridge Road NE	0.0	0.5	4.58	0.03	A	0.1	0.5	6.11	0.13	A	0.1	0.5	5.07	0.10	A	0.0	0.5	3.77	0.02	A	0.1	0.5	4.29	0.08	A
C - SZC (Cars + Buses)	0.0	0.5	3.15	0.03	A	0.1	0.5	3.85	0.06	A	0.0	0.5	3.63	0.03	A	0.3	1.0	3.77	0.20	A	0.4	1.4	4.53	0.28	A
D - SZC (HGV)	0.1	0.5	6.88	0.05	A	0.1	0.5	7.91	0.07	A	0.1	0.5	7.79	0.07	A	0.1	0.5	7.79	0.12	A	0.2	0.9	9.83	0.18	A
E - B1122 South	0.4	1.5	3.85	0.28	A	0.8	2.4	5.13	0.43	A	0.4	1.5	3.96	0.26	A	0.2	0.5	3.55	0.14	A	0.4	1.7	4.19	0.30	A
	2034 Operational Led																								
A - B1122 North	0.2	0.8	3.71	0.19	A	0.6	2.7	5.29	0.38	A	1.1	2.1	7.97	0.53	A	0.1	0.5	3.40	0.13	A	0.4	1.8	4.32	0.31	A
B - East Bridge Road NE	0.0	0.5	3.76	0.03	A	0.1	0.5	4.69	0.11	A	0.1	0.5	6.06	0.12	A	0.0	0.5	3.45	0.02	A	0.1	0.5	4.03	0.08	A
C - SZC (Cars + Buses)	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	3.29	0.04	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
D - SZC (HGV)	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
E - B1122 South	0.1	0.5	2.90	0.08	A	0.4	1.3	3.78	0.27	A	1.1	1.5	5.60	0.52	A	0.1	0.5	2.96	0.10	A	0.2	0.5	3.27	0.18	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

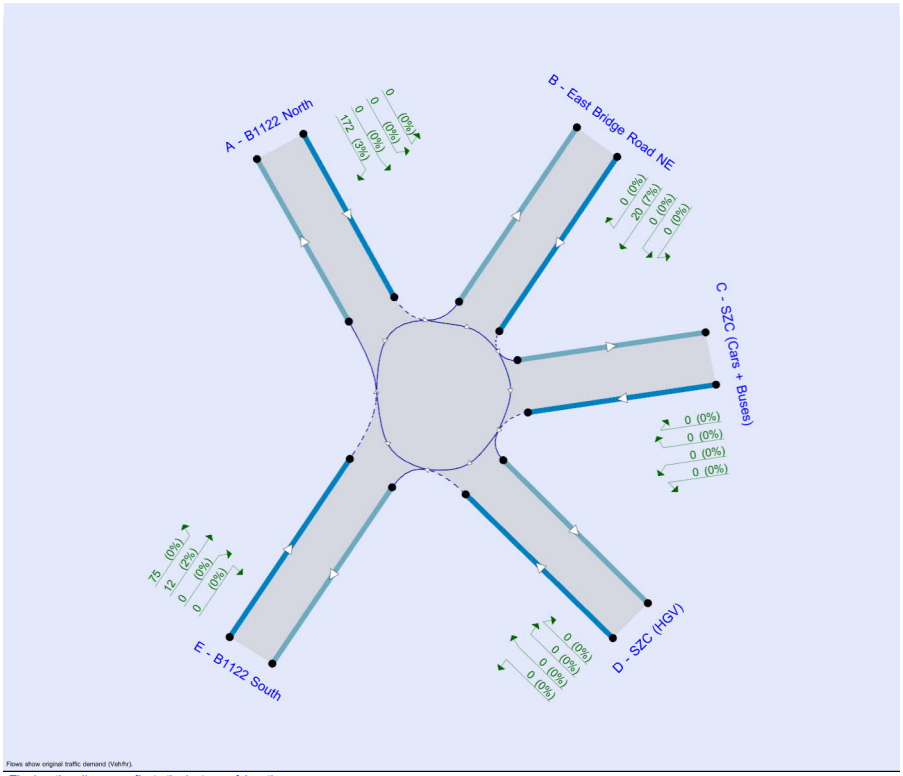
File summary

File Description

Title	B1122 / Site Access
Location	52.223545°, 1.583100°
Site number	43
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	D16,D17,D18,D19,D20,D26,D27,D28,D29,D30	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J43	B1122 / Site Access	Standard Roundabout	A, B, C, D, E	3.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B1122 North	
B	East Bridge Road NE	
C	SZC (Cars + Buses)	
D	SZC (HGV)	
E	B1122 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - B1122 North	3.30	4.00	10.0	36.2	65.0	21.5	
B - East Bridge Road NE	3.00	4.00	10.0	17.5	65.0	25.5	
C - SZC (Cars + Buses)	3.65	4.50	10.0	23.8	65.0	23.0	
D - SZC (HGV)	3.65	4.00	10.0	19.9	65.0	21.5	
E - B1122 South	3.30	4.95	10.0	35.6	65.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - B1122 North	0.466	1233
B - East Bridge Road NE	0.441	1148
C - SZC (Cars + Buses)	0.480	1350
D - SZC (HGV)	0.461	1236
E - B1122 South	0.482	1365

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1122 North		ONE HOUR	✓	172	100.000
B - East Bridge Road NE		ONE HOUR	✓	20	100.000
C - SZC (Cars + Buses)		ONE HOUR	✓	0	100.000
D - SZC (HGV)		ONE HOUR	✓	0	100.000
E - B1122 South		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0	0	0	0	172
	B - East Bridge Road NE	0	0	0	0	20
	C - SZC (Cars + Buses)	0	0	0	0	0
	D - SZC (HGV)	0	0	0	0	0
	E - B1122 South	75	12	0	0	0

Proportions

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0.00	0.00	0.00	0.00	1.00
	B - East Bridge Road NE	0.00	0.00	0.00	0.00	1.00
	C - SZC (Cars + Buses)	0.20	0.20	0.20	0.20	0.20
	D - SZC (HGV)	0.20	0.20	0.20	0.20	0.20
	E - B1122 South	0.86	0.14	0.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0	0	0	0	3
	B - East Bridge Road NE	0	0	0	0	7
	C - SZC (Cars + Buses)	0	0	0	0	0
	D - SZC (HGV)	0	0	0	0	0
	E - B1122 South	0	2	0	0	0

Average PCU Per Veh

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	1.000	1.000	1.000	1.000	1.026
	B - East Bridge Road NE	1.000	1.000	1.000	1.000	1.065
	C - SZC (Cars + Buses)	1.000	1.000	1.000	1.000	1.000
	D - SZC (HGV)	1.000	1.000	1.000	1.000	1.000
	E - B1122 South	1.002	1.019	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - B1122 North	129	132
	B - East Bridge Road NE	15	16
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	65	66
06:00-06:15	A - B1122 North	154	158
	B - East Bridge Road NE	18	20
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	78	78
06:15-06:30	A - B1122 North	189	194
	B - East Bridge Road NE	22	24
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	96	96
06:30-06:45	A - B1122 North	189	194
	B - East Bridge Road NE	22	24
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	96	96
06:45-07:00	A - B1122 North	154	158
	B - East Bridge Road NE	18	20
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	78	78
07:00-07:15	A - B1122 North	129	132
	B - East Bridge Road NE	15	16
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	65	66

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1122 North	0.16	3.57	0.2	0.5	A	157	236
B - East Bridge Road NE	0.02	3.69	0.0	0.5	A	19	28
C - SZC (Cars + Buses)	0.00	0.00	0.0	~1	A	0	0
D - SZC (HGV)	0.00	0.00	0.0	~1	A	0	0
E - B1122 South	0.07	2.85	0.1	0.5	A	80	120

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	129	32	9	1198	0.108	129	56	0.0	0.1	3.363	A
B - East Bridge Road NE	15	4	129	1023	0.015	15	9	0.0	0.0	3.570	A
C - SZC (Cars + Buses)	0	0	144	1279	0.000	0	0	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	144	1168	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	65	16	0	1359	0.048	65	144	0.0	0.1	2.782	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	154	39	11	1197	0.129	154	67	0.1	0.1	3.449	A
B - East Bridge Road NE	18	5	154	1013	0.018	18	11	0.0	0.0	3.619	A
C - SZC (Cars + Buses)	0	0	172	1265	0.000	0	0	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	172	1155	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	78	20	0	1359	0.057	78	172	0.1	0.1	2.809	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	189	47	13	1196	0.158	189	83	0.1	0.2	3.572	A
B - East Bridge Road NE	22	6	189	998	0.023	22	13	0.0	0.0	3.689	A
C - SZC (Cars + Buses)	0	0	211	1246	0.000	0	0	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	211	1136	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	96	24	0	1359	0.070	96	211	0.1	0.1	2.848	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	189	47	13	1196	0.158	189	83	0.2	0.2	3.572	A
B - East Bridge Road NE	22	6	189	998	0.023	22	13	0.0	0.0	3.690	A
C - SZC (Cars + Buses)	0	0	211	1246	0.000	0	0	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	211	1136	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	96	24	0	1359	0.070	96	211	0.1	0.1	2.848	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - B1122 North	154	39	11	1197	0.129	154	68	0.2	0.1	3.451	A
B - East Bridge Road NE	18	5	154	1013	0.018	18	11	0.0	0.0	3.620	A
C - SZC (Cars + Buses)	0	0	173	1265	0.000	0	0	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	173	1154	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	78	20	0	1359	0.057	78	173	0.1	0.1	2.812	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	129	32	9	1198	0.108	129	57	0.1	0.1	3.367	A
B - East Bridge Road NE	15	4	129	1023	0.015	15	9	0.0	0.0	3.571	A
C - SZC (Cars + Buses)	0	0	145	1279	0.000	0	0	0.0	0.0	0.000	A
D - SZC (HGV)	0	0	145	1168	0.000	0	0	0.0	0.0	0.000	A
E - B1122 South	65	16	0	1359	0.048	65	145	0.1	0.1	2.782	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B - East Bridge Road NE	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B - East Bridge Road NE	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.19	0.03	0.25	0.46	0.48			N/A	N/A
B - East Bridge Road NE	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.19	0.03	0.25	0.45	0.48			N/A	N/A
B - East Bridge Road NE	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
B - East Bridge Road NE	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
B - East Bridge Road NE	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - SZC (Cars + Buses)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D - SZC (HGV)	0.00	0.00	0.00	0.00	0.00			N/A	N/A
E - B1122 South	0.05	0.00	0.00	0.05	0.05			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 200924 J43_Model_Miti_Adjusted_PC v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\Mitigation Models\J43_miti\Model
Report generation date: 18/12/2020 13:23:24

«2034 Operational Led, 5-6 PM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Detailed Demand Data
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2028 Peak Construction																								
A - B1122 North	0.4	1.8	4.76	0.30	A	1.2	1.8	7.98	0.55	A	0.9	2.2	6.15	0.46	A	0.3	1.3	4.57	0.22	A	0.5	2.2	4.39	0.33	A
B - East Bridge Road NE	0.0	0.5	4.58	0.03	A	0.1	0.5	6.11	0.13	A	0.1	0.5	5.07	0.10	A	0.0	0.5	3.77	0.02	A	0.1	0.5	4.29	0.08	A
C - SZC (Cars + Buses)	0.0	0.5	3.15	0.03	A	0.1	0.5	3.85	0.06	A	0.0	0.5	3.63	0.03	A	0.3	1.0	3.77	0.20	A	0.4	1.4	4.53	0.28	A
D - SZC (HGV)	0.1	0.5	6.88	0.05	A	0.1	0.5	7.91	0.07	A	0.1	0.5	7.79	0.07	A	0.1	0.5	7.79	0.12	A	0.2	0.9	9.83	0.18	A
E - B1122 South	0.3	1.3	3.12	0.24	A	0.6	2.6	3.97	0.37	A	0.3	1.2	3.23	0.22	A	0.1	0.5	2.96	0.12	A	0.3	1.4	3.37	0.25	A
	2034 Operational Led																								
A - B1122 North	0.2	0.5	3.19	0.17	A	0.5	2.2	4.34	0.33	A	0.8	2.5	6.07	0.46	A	0.1	0.5	2.95	0.11	A	0.4	1.1	3.63	0.27	A
B - East Bridge Road NE	0.0	0.5	3.76	0.03	A	0.1	0.5	4.69	0.11	A	0.1	0.5	6.06	0.12	A	0.0	0.5	3.45	0.02	A	0.1	0.5	4.03	0.08	A
C - SZC (Cars + Buses)	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	0.5	3.29	0.04	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
D - SZC (HGV)	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A	0.0	~1	0.00	0.00	A
E - B1122 South	0.1	0.5	2.46	0.07	A	0.3	1.3	3.08	0.24	A	0.8	2.0	4.17	0.44	A	0.1	0.5	2.51	0.08	A	0.2	0.5	2.72	0.16	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

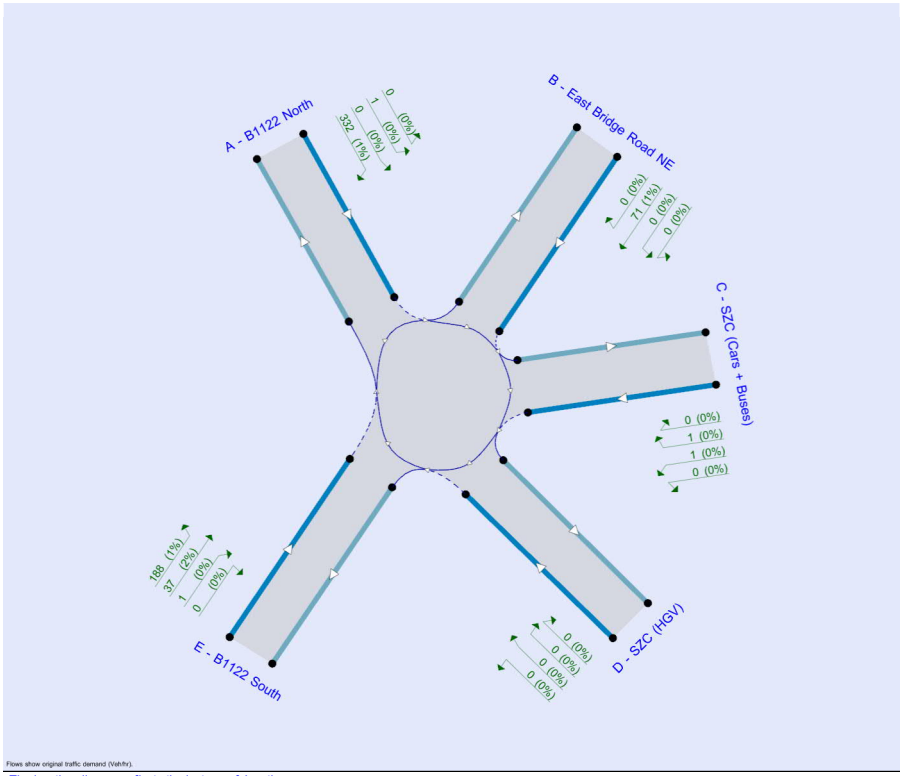
File summary

File Description

Title	B1122 / Site Access
Location	52.223545°, 1.583100°
Site number	43
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	✓	D16,D17,D18,D19,D20,D26,D27,D28,D29,D30	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J43	B1122 / Site Access	Standard Roundabout	A, B, C, D, E	3.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B1122 North	
B	East Bridge Road NE	
C	SZC (Cars + Buses)	
D	SZC (HGV)	
E	B1122 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - B1122 North	3.30	4.95	10.0	36.2	65.0	21.5	
B - East Bridge Road NE	3.00	4.00	10.0	17.5	65.0	25.5	
C - SZC (Cars + Buses)	3.65	4.50	10.0	23.8	65.0	23.0	
D - SZC (HGV)	3.65	4.00	10.0	19.9	65.0	21.5	
E - B1122 South	3.30	6.60	12.7	35.6	65.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - B1122 North	0.492	1395
B - East Bridge Road NE	0.441	1148
C - SZC (Cars + Buses)	0.480	1350
D - SZC (HGV)	0.461	1236
E - B1122 South	0.519	1590

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1122 North		ONE HOUR	✓	333	100.000
B - East Bridge Road NE		ONE HOUR	✓	71	100.000
C - SZC (Cars + Buses)		ONE HOUR	✓	2	100.000
D - SZC (HGV)		ONE HOUR	✓	0	100.000
E - B1122 South		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0	0	0.58	0	332
	B - East Bridge Road NE	0	0	0	0	71
	C - SZC (Cars + Buses)	0.58	0	0	0	0.96
	D - SZC (HGV)	0	0	0	0	0
	E - B1122 South	188	37	0.96	0	0

Proportions

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0.00	0.00	0.00	0.00	1.00
	B - East Bridge Road NE	0.00	0.00	0.00	0.00	1.00
	C - SZC (Cars + Buses)	0.38	0.00	0.00	0.00	0.62
	D - SZC (HGV)	0.20	0.20	0.20	0.20	0.20
	E - B1122 South	0.83	0.16	0.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	0	0	0	0	1
	B - East Bridge Road NE	0	0	0	0	1
	C - SZC (Cars + Buses)	0	0	0	0	0
	D - SZC (HGV)	0	0	0	0	0
	E - B1122 South	1	2	0	0	0

Average PCU Per Veh

		To				
		A - B1122 North	B - East Bridge Road NE	C - SZC (Cars + Buses)	D - SZC (HGV)	E - B1122 South
From	A - B1122 North	1.000	1.000	1.000	1.000	1.012
	B - East Bridge Road NE	1.000	1.000	1.000	1.000	1.012
	C - SZC (Cars + Buses)	1.000	1.000	1.000	1.000	1.000
	D - SZC (HGV)	1.000	1.000	1.000	1.000	1.000
	E - B1122 South	1.011	1.017	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - B1122 North	251	254
	B - East Bridge Road NE	53	54
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	170	172
17:00-17:15	A - B1122 North	299	303
	B - East Bridge Road NE	64	65
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	203	205
17:15-17:30	A - B1122 North	367	371
	B - East Bridge Road NE	78	79
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	249	251
17:30-17:45	A - B1122 North	367	371
	B - East Bridge Road NE	78	79
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	249	251
17:45-18:00	A - B1122 North	299	303
	B - East Bridge Road NE	64	65
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	203	205
18:00-18:15	A - B1122 North	251	254
	B - East Bridge Road NE	53	54
	C - SZC (Cars + Buses)	0	0
	D - SZC (HGV)	0	0
	E - B1122 South	170	172

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1122 North	0.27	3.63	0.4	1.1	A	306	458
B - East Bridge Road NE	0.08	4.03	0.1	0.5	A	65	98
C - SZC (Cars + Buses)	0.00	0.00	0.0	~1	A	0	0
D - SZC (HGV)	0.00	0.00	0.0	~1	A	0	0
E - B1122 South	0.16	2.72	0.2	0.5	A	207	311

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
B - East Bridge Road NE	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
C - SZC (Cars + Buses)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
D - SZC (HGV)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
E - B1122 South	0	0	0	0	0.000	0	0	0.0	0.0	0.000	

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
B - East Bridge Road NE	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
C - SZC (Cars + Buses)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
D - SZC (HGV)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
E - B1122 South	0	0	0	0	0.000	0	0	0.0	0.0	0.000	

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
B - East Bridge Road NE	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
C - SZC (Cars + Buses)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
D - SZC (HGV)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
E - B1122 South	0	0	0	0	0.000	0	0	0.0	0.0	0.000	

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
B - East Bridge Road NE	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
C - SZC (Cars + Buses)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
D - SZC (HGV)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
E - B1122 South	0	0	0	0	0.000	0	0	0.0	0.0	0.000	

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

							(Veh/hr)				
A - B1122 North	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
B - East Bridge Road NE	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
C - SZC (Cars + Buses)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
D - SZC (HGV)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
E - B1122 South	0	0	0	0	0.000	0	0	0.0	0.0	0.000	

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - B1122 North	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
B - East Bridge Road NE	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
C - SZC (Cars + Buses)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
D - SZC (HGV)	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
E - B1122 South	0	0	0	0	0.000	0	0	0.0	0.0	0.000	

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.00	~1	~1	~1	~1			N/A	N/A
B - East Bridge Road NE	0.00	~1	~1	~1	~1			N/A	N/A
C - SZC (Cars + Buses)	0.00	~1	~1	~1	~1			N/A	N/A
D - SZC (HGV)	0.00	~1	~1	~1	~1			N/A	N/A
E - B1122 South	0.00	~1	~1	~1	~1			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.00	~1	~1	~1	~1			N/A	N/A
B - East Bridge Road NE	0.00	~1	~1	~1	~1			N/A	N/A
C - SZC (Cars + Buses)	0.00	~1	~1	~1	~1			N/A	N/A
D - SZC (HGV)	0.00	~1	~1	~1	~1			N/A	N/A
E - B1122 South	0.00	~1	~1	~1	~1			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.00	~1	~1	~1	~1			N/A	N/A
B - East Bridge Road NE	0.00	~1	~1	~1	~1			N/A	N/A
C - SZC (Cars + Buses)	0.00	~1	~1	~1	~1			N/A	N/A
D - SZC (HGV)	0.00	~1	~1	~1	~1			N/A	N/A
E - B1122 South	0.00	~1	~1	~1	~1			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.00	~1	~1	~1	~1			N/A	N/A
B - East Bridge Road NE	0.00	~1	~1	~1	~1			N/A	N/A
C - SZC (Cars + Buses)	0.00	~1	~1	~1	~1			N/A	N/A
D - SZC (HGV)	0.00	~1	~1	~1	~1			N/A	N/A
E - B1122 South	0.00	~1	~1	~1	~1			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.00	~1	~1	~1	~1			N/A	N/A
B - East Bridge Road NE	0.00	~1	~1	~1	~1			N/A	N/A
C - SZC (Cars + Buses)	0.00	~1	~1	~1	~1			N/A	N/A
D - SZC (HGV)	0.00	~1	~1	~1	~1			N/A	N/A
E - B1122 South	0.00	~1	~1	~1	~1			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - B1122 North	0.00	~1	~1	~1	~1			N/A	N/A
B - East Bridge Road NE	0.00	~1	~1	~1	~1			N/A	N/A
C - SZC (Cars + Buses)	0.00	~1	~1	~1	~1			N/A	N/A
D - SZC (HGV)	0.00	~1	~1	~1	~1			N/A	N/A
E - B1122 South	0.00	~1	~1	~1	~1			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 201125_J44_Model_Miti_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\Mitigation Models\J44_miti\Model
Report generation date: 18/12/2020 13:30:55

«2023 Reference Case , 6-7 AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Detailed Demand Data
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2023 Reference Case																								
Stream B-C	0.0	0.5	7.39	0.01	A	0.0	0.5	6.11	0.01	A	0.0	0.5	7.98	0.04	A	0.1	0.5	7.04	0.05	A	0.0	0.5	6.06	0.02	A
Stream B-A	0.1	0.5	6.95	0.06	A	0.2	0.5	9.47	0.14	A	0.1	0.5	10.59	0.08	B	0.3	1.3	9.77	0.22	A	0.3	1.4	9.43	0.23	A
Stream C-AB	0.0	0.5	6.12	0.01	A	0.1	0.5	7.05	0.06	A	0.1	0.7	7.12	0.07	A	0.1	0.5	5.81	0.04	A	0.0	0.5	5.54	0.01	A
	2023 Early Years																								
Stream B-C	0.0	0.5	6.67	0.01	A	0.0	0.5	6.72	0.03	A	0.1	0.5	8.26	0.05	A	0.1	0.5	7.46	0.07	A	0.0	0.5	7.36	0.03	A
Stream B-A	0.1	0.5	7.33	0.09	A	0.3	1.5	11.33	0.25	B	0.2	0.7	12.22	0.16	B	0.6	2.9	14.11	0.39	B	1.3	4.4	18.51	0.56	C
Stream C-AB	0.0	0.5	6.10	0.01	A	0.1	0.9	7.05	0.07	A	0.1	0.8	7.28	0.08	A	0.1	0.5	5.81	0.05	A	0.0	0.5	5.64	0.02	A
	2028 Reference Case																								
Stream B-C	0.0	0.5	7.40	0.01	A	0.0	0.5	6.12	0.01	A	0.0	0.5	7.73	0.04	A	0.1	0.5	7.00	0.06	A	0.0	0.5	6.05	0.02	A
Stream B-A	0.1	0.5	6.96	0.06	A	0.2	0.5	9.54	0.14	A	0.1	0.5	10.97	0.08	B	0.3	1.4	9.94	0.23	A	0.3	1.3	8.76	0.21	A
Stream C-AB	0.0	0.5	6.14	0.01	A	0.1	0.6	7.04	0.07	A	0.1	0.7	7.07	0.08	A	0.1	0.5	5.78	0.05	A	0.0	0.5	5.52	0.01	A
	2028 Peak Construction																								
Stream B-C	0.0	0.5	7.63	0.01	A	0.0	0.5	6.53	0.01	A	0.0	0.5	7.70	0.04	A	0.1	0.5	7.83	0.07	A	0.0	0.5	7.21	0.03	A
Stream B-A	0.1	0.5	8.02	0.09	A	0.4	1.4	14.49	0.27	B	0.1	0.5	11.21	0.10	B	0.4	1.8	12.40	0.30	B	0.5	2.6	13.39	0.36	B
Stream C-AB	0.0	0.5	5.14	0.02	A	0.2	1.1	5.50	0.09	A	0.2	1.1	6.40	0.11	A	0.1	0.5	5.84	0.06	A	0.0	0.5	5.76	0.02	A
	2034 Reference Case																								
Stream B-C	0.0	0.5	7.42	0.01	A	0.0	0.5	6.07	0.01	A	0.0	0.5	7.26	0.04	A	0.1	0.5	7.05	0.06	A	0.0	0.5	5.96	0.02	A
Stream B-A	0.1	0.5	7.00	0.06	A	0.1	0.5	8.41	0.11	A	0.1	0.5	9.04	0.06	A	0.3	1.4	9.76	0.23	A	0.2	0.5	8.09	0.15	A
Stream C-AB	0.0	0.5	6.15	0.01	A	0.1	0.7	6.95	0.07	A	0.1	0.8	6.77	0.08	A	0.2	0.8	5.87	0.11	A	0.0	0.5	5.64	0.01	A
	2034 Operational Led																								
Stream B-C	0.0	0.5	7.48	0.01	A	0.0	0.5	6.15	0.01	A	0.0	0.5	7.90	0.04	A	0.1	0.5	7.11	0.06	A	0.0	0.5	6.00	0.01	A
Stream B-A	0.1	0.5	7.12	0.07	A	0.2	0.5	9.44	0.15	A	0.2	1.0	11.19	0.18	B	0.3	1.5	9.76	0.25	A	0.2	1.0	8.52	0.18	A
Stream C-AB	0.0	0.5	6.22	0.02	A	0.1	1.0	6.03	0.08	A	0.2	1.3	5.01	0.10	A	0.1	0.5	5.74	0.05	A	0.0	0.5	5.61	0.01	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

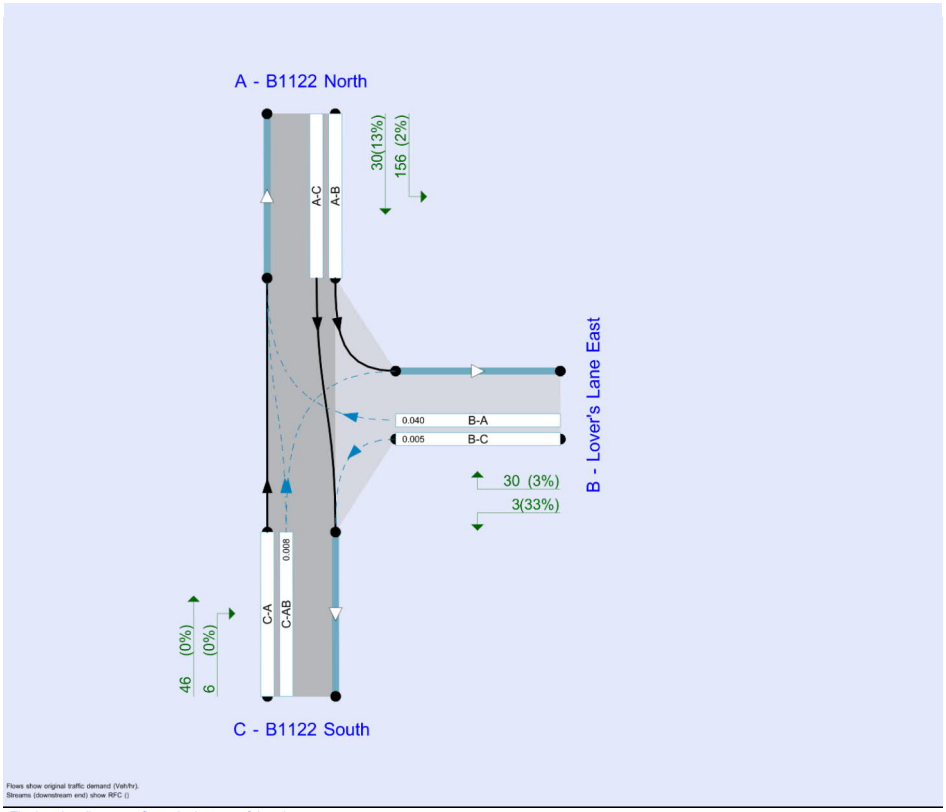
File summary

File Description

Title	B1122 / Lover's Lane
Location	52.218380°, 1.578342°
Site number	44
Date	09/07/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1122 South - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J44	B1122 / Lover's Lane	T-Junction	Two-way	1.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1122 North		Major
B	Lover's Lane East		Minor
C	B1122 South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B1122 South	5.90			64.2	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Lover's Lane East	One lane plus flare	10.00	10.00	8.70	7.70	6.80	✓	3.00	33	43

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J44	B-A	611	0.112	0.283	0.178	0.404
J44	B-C	693	0.107	0.269	-	-
J44	C-B	611	0.238	0.238	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1122 North		ONE HOUR	✓	186	100.000
B - Lover's Lane East		ONE HOUR	✓	33	100.000
C - B1122 South		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1122 North	B - Lover's Lane East	C - B1122 South
From	A - B1122 North	0	156	30
	B - Lover's Lane East	30	0	3
	C - B1122 South	46	6	0

Proportions

		To		
		A - B1122 North	B - Lover's Lane East	C - B1122 South
From	A - B1122 North	0.00	0.84	0.16
	B - Lover's Lane East	0.91	0.00	0.09
	C - B1122 South	0.88	0.12	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1122 North	B - Lover's Lane East	C - B1122 South
From	A - B1122 North	0	2	13
	B - Lover's Lane East	3	0	33
	C - B1122 South	0	0	0

Average PCU Per Veh

		To		
		A - B1122 North	B - Lover's Lane East	C - B1122 South
From	A - B1122 North	1.000	1.019	1.130
	B - Lover's Lane East	1.033	1.000	1.333
	C - B1122 South	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
05:45-06:00	A - B1122 North	140	145
	B - Lover's Lane East	25	26
	C - B1122 South	39	39
06:00-06:15	A - B1122 North	167	173
	B - Lover's Lane East	30	31
	C - B1122 South	47	47
06:15-06:30	A - B1122 North	205	212
	B - Lover's Lane East	36	39
	C - B1122 South	57	57
06:30-06:45	A - B1122 North	205	212
	B - Lover's Lane East	36	39
	C - B1122 South	57	57
06:45-07:00	A - B1122 North	167	173
	B - Lover's Lane East	30	31
	C - B1122 South	47	47
07:00-07:15	A - B1122 North	140	145
	B - Lover's Lane East	25	26
	C - B1122 South	39	39

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.39	0.0	0.5	A	3	4
B-A	0.06	6.95	0.1	0.5	A	28	41
C-AB	0.01	6.12	0.0	0.5	A	6	9
C-A						42	63
A-B						143	215
A-C						28	41

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	500	0.005	2	0.0	0.0	7.237	A
B-A	23	6	564	0.040	22	0.0	0.0	6.647	A
C-AB	5	1	600	0.008	5	0.0	0.0	6.046	A
C-A	34	9			34				
A-B	117	29			117				
A-C	23	6			23				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	496	0.005	3	0.0	0.0	7.301	A
B-A	27	7	559	0.048	27	0.0	0.1	6.771	A
C-AB	6	1	598	0.010	6	0.0	0.0	6.076	A
C-A	41	10			41				
A-B	140	35			140				
A-C	27	7			27				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	490	0.007	3	0.0	0.0	7.390	A
B-A	33	8	551	0.060	33	0.1	0.1	6.948	A
C-AB	7	2	596	0.012	7	0.0	0.0	6.118	A
C-A	50	13			50				
A-B	172	43			172				
A-C	33	8			33				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	1	490	0.007	3	0.0	0.0	7.391	A
B-A	33	8	551	0.060	33	0.1	0.1	6.948	A
C-AB	7	2	596	0.012	7	0.0	0.0	6.121	A
C-A	50	13			50				
A-B	172	43			172				
A-C	33	8			33				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	3	0.67	496	0.005	3	0.0	0.0	7.304	A
B-A	27	7	559	0.048	27	0.1	0.1	6.773	A
C-AB	6	1	598	0.010	6	0.0	0.0	6.076	A
C-A	41	10			41				
A-B	140	35			140				

A-C	27	7			27				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	2	0.56	500	0.005	2	0.0	0.0	7.238	A
B-A	23	6	564	0.040	23	0.1	0.0	6.653	A
C-AB	5	1	600	0.008	5	0.0	0.0	6.048	A
C-A	34	9			34				
A-B	117	29			117				
A-C	23	6			23				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 200923_J45_Model_Miti_Adjusted_2laneexit_PC_OP_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 Core Assessment\Mitigation Models\J45_miti\Model
Report generation date: 18/12/2020 14:37:39

«2028 Peak Construction, 8-9 AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Detailed Demand Data
»Results

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2028 Peak Construction																								
A - A12 East	0.0	0.5	3.56	0.01	A	0.0	0.5	5.01	0.02	A	0.0	0.5	5.19	0.03	A	0.0	0.5	5.15	0.01	A	0.0	0.5	5.26	0.01	A
B - A12 West	0.3	1.4	2.91	0.25	A	1.3	1.6	5.09	0.56	A	1.4	1.8	5.34	0.58	A	1.5	2.0	5.28	0.60	A	1.6	2.4	5.26	0.61	A
C - Tinker Brook South-West	0.0	~1	0.00	0.00	A	0.0	0.5	4.06	0.01	A	0.0	0.5	4.11	0.01	A	0.0	0.5	4.16	0.01	A	0.0	~1	0.00	0.00	A
D - Bypass South-East	0.7	2.6	4.70	0.40	A	2.2	4.9	9.15	0.69	A	2.3	5.7	9.36	0.70	A	2.5	7.8	10.05	0.72	B	1.6	2.1	7.30	0.62	A
	2034 Operational Led																								
A - A12 East	0.0	~1	0.00	0.00	A	0.0	0.5	4.69	0.02	A	0.0	0.5	4.62	0.03	A	0.0	0.5	4.79	0.01	A	0.0	0.5	5.06	0.01	A
B - A12 West	0.3	1.1	2.59	0.21	A	1.0	1.5	4.19	0.51	A	0.9	1.5	4.04	0.49	A	1.2	1.5	4.33	0.54	A	1.4	1.9	4.69	0.58	A
C - Tinker Brook South-West	0.0	~1	0.00	0.00	A	0.0	0.5	4.04	0.01	A	0.0	0.5	4.15	0.01	A	0.0	0.5	4.13	0.01	A	0.0	~1	0.00	0.00	A
D - Bypass South-East	0.7	2.6	4.67	0.40	A	2.1	4.4	8.96	0.68	A	2.4	6.6	9.67	0.71	A	2.4	6.7	9.67	0.71	A	1.3	1.5	6.41	0.56	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

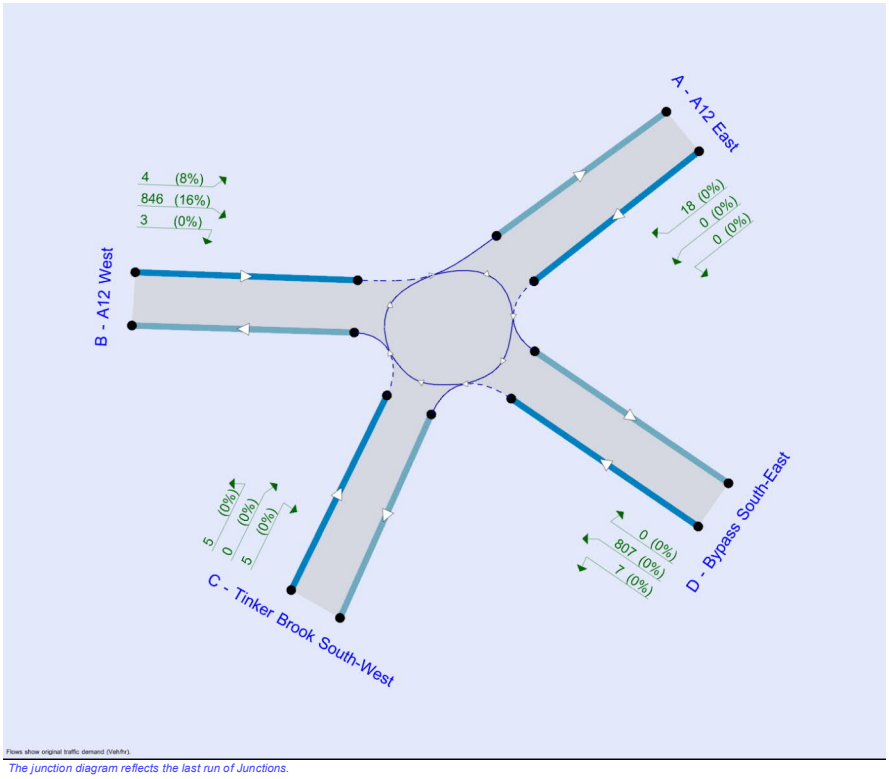
File summary

File Description

Title	A12 / Tinker Brook
Location	52.185676°,1.440916°
Site number	45
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout	A, D, C, B	7.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 East	
B	A12 West	
C	Tinker Brook South-West	
D	Bypass South-East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 East	3.70	4.00	10.0	27.7	60.0	24.0	
B - A12 West	3.60	7.40	17.1	52.4	60.0	20.0	
C - Tinker Brook South-West	3.30	4.50	13.2	20.4	60.0	15.0	
D - Bypass South-East	3.70	4.00	10.0	34.0	60.0	14.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 East	0.487	1245
B - A12 West	0.605	1878
C - Tinker Brook South-West	0.510	1349
D - Bypass South-East	0.506	1293

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	18	100.000
B - A12 West		ONE HOUR	✓	852	100.000
C - Tinker Brook South-West		ONE HOUR	✓	9	100.000
D - Bypass South-East		ONE HOUR	✓	814	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	18	0	0
	B - A12 West	4	0	3	846
	C - Tinker Brook South-West	0	5	0	5
	D - Bypass South-East	0	807	7	0

Proportions

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0.00	1.00	0.00	0.00
	B - A12 West	0.00	0.00	0.00	0.99
	C - Tinker Brook South-West	0.00	0.50	0.00	0.50
	D - Bypass South-East	0.00	0.99	0.01	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	8	0	0	16
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	0	0	0

Average PCU Per Veh

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	1.000	1.000	1.000	1.000
	B - A12 West	1.076	1.000	1.000	1.164
	C - Tinker Brook South-West	1.000	1.000	1.000	1.000
	D - Bypass South-East	1.000	1.001	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:45-08:00	A - A12 East	14	14
	B - A12 West	642	746
	C - Tinker Brook South-West	7	7
	D - Bypass South-East	612	613

08:00-08:15	A - A12 East	17	17
	B - A12 West	766	891
	C - Tinker Brook South-West	8	8
	D - Bypass South-East	731	732
08:15-08:30	A - A12 East	20	20
	B - A12 West	939	1091
	C - Tinker Brook South-West	10	10
	D - Bypass South-East	896	897
08:30-08:45	A - A12 East	20	20
	B - A12 West	939	1091
	C - Tinker Brook South-West	10	10
	D - Bypass South-East	896	897
08:45-09:00	A - A12 East	17	17
	B - A12 West	766	891
	C - Tinker Brook South-West	8	8
	D - Bypass South-East	731	732
09:00-09:15	A - A12 East	14	14
	B - A12 West	642	746
	C - Tinker Brook South-West	7	7
	D - Bypass South-East	612	613

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.03	5.19	0.0	0.5	A	17	25
B - A12 West	0.58	5.34	1.4	1.8	A	782	1173
C - Tinker Brook South-West	0.01	4.11	0.0	0.5	A	9	13
D - Bypass South-East	0.70	9.36	2.3	5.7	A	747	1120

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 East	14	3	640	883	0.016	14	3	0.0	0.0	4.141	A
B - A12 West	642	160	4	1613	0.398	639	621	0.0	0.7	3.687	A
C - Tinker Brook South-West	7	2	617	1034	0.007	7	7	0.0	0.0	3.504	A
D - Bypass South-East	612	153	16	1283	0.477	609	637	0.0	0.9	5.310	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 East	17	4	766	812	0.020	17	4	0.0	0.0	4.528	A
B - A12 West	766	192	4	1613	0.475	765	744	0.7	0.9	4.243	A
C - Tinker Brook South-West	8	2	740	971	0.009	8	9	0.0	0.0	3.737	A
D - Bypass South-East	731	183	19	1282	0.571	730	763	0.9	1.3	6.500	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 East	20	5	937	714	0.028	20	4	0.0	0.0	5.186	A
B - A12 West	939	235	5	1612	0.582	937	910	0.9	1.4	5.312	A
C - Tinker Brook South-West	10	3	905	887	0.012	10	11	0.0	0.0	4.103	A
D - Bypass South-East	896	224	24	1280	0.700	892	934	1.3	2.3	9.192	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 East	20	5	939	713	0.029	20	4	0.0	0.0	5.193	A
B - A12 West	939	235	5	1612	0.582	939	913	1.4	1.4	5.341	A
C - Tinker Brook South-West	10	3	908	886	0.012	10	11	0.0	0.0	4.112	A
D - Bypass South-East	896	224	24	1280	0.700	896	936	2.3	2.3	9.363	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 East	17	4	769	810	0.020	17	4	0.0	0.0	4.537	A
B - A12 West	766	192	4	1613	0.475	768	750	1.4	0.9	4.272	A
C - Tinker Brook South-West	8	2	745	969	0.009	8	9	0.0	0.0	3.750	A
D - Bypass South-East	731	183	19	1282	0.571	735	766	2.3	1.4	6.628	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 East	14	3	643	881	0.016	14	3	0.0	0.0	4.152	A
B - A12 West	642	160	4	1613	0.398	643	626	0.9	0.7	3.715	A
C - Tinker Brook South-West	7	2	623	1031	0.007	7	8	0.0	0.0	3.513	A
D - Bypass South-East	612	153	16	1283	0.477	614	641	1.4	0.9	5.394	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B - A12 West	0.66	0.55	1.00	1.40	1.45			N/A	N/A
C - Tinker Brook South-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A

D - Bypass South-East	0.90	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 East	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B - A12 West	0.90	0.08	0.86	1.42	1.81			N/A	N/A
C - Tinker Brook South-West	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D - Bypass South-East	1.31	0.07	0.88	2.79	3.87			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B - A12 West	1.37	0.03	0.26	1.37	1.37			N/A	N/A
C - Tinker Brook South-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D - Bypass South-East	2.26	0.03	0.28	2.26	5.71			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B - A12 West	1.38	0.03	0.26	1.38	1.38			N/A	N/A
C - Tinker Brook South-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D - Bypass South-East	2.29	0.03	0.27	2.29	2.29			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B - A12 West	0.91	0.28	0.98	1.15	1.15			N/A	N/A
C - Tinker Brook South-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D - Bypass South-East	1.35	0.08	0.99	2.77	3.78			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B - A12 West	0.67	0.07	0.75	1.37	1.45			N/A	N/A
C - Tinker Brook South-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D - Bypass South-East	0.92	0.05	0.48	1.96	2.93			N/A	N/A

Updated Core Assessment results, without Scottish Power

V16 CORE ASSESSMENT, NO SPR

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2020.10.14_J5_Miti_NoSPR_Model_v16.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16 No SPR\Mitigation Models\J5_miti_nospr\Model
Report generation date: 17/12/2020 17:35:35

»2023 Reference Case , 6-7 AM
»2023 Reference Case , 7-8 AM
»2023 Reference Case , 8-9 AM
»2023 Reference Case , 3-4 PM
»2023 Reference Case , 5-6 PM
»2023 Early Years , 6-7 AM
»2023 Early Years , 7-8 AM
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»2023 Early Years , 5-6 PM
»2028 Reference Case , 6-7 AM
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»2028 Reference Case , 3-4 PM
»2028 Reference Case , 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case , 6-7 AM
»2034 Reference Case , 7-8 AM
»2034 Reference Case , 8-9 AM
»2034 Reference Case , 3-4 PM
»2034 Reference Case , 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2023 Reference Case																								
Stream B-AC	0.6	2.6	11.19	0.36	B	2.2	11.1	25.69	0.70	D	1.2	4.3	18.00	0.56	C	1.6	6.9	23.29	0.62	C	0.9	3.6	15.60	0.49	C
Stream C-AB	0.0	0.5	11.86	0.01	B	0.1	0.5	7.39	0.04	A	0.0	0.5	8.53	0.02	A	0.0	0.5	5.92	0.02	A	0.0	0.5	5.75	0.02	A
	2023 Early Years																								
Stream B-AC	0.6	2.8	11.85	0.39	B	3.6	18.7	37.77	0.80	E	1.4	4.8	19.24	0.58	C	1.9	9.2	26.03	0.66	D	1.7	7.2	21.87	0.63	C
Stream C-AB	0.0	0.5	11.03	0.02	B	0.1	0.5	7.48	0.05	A	0.0	0.5	8.51	0.02	A	0.0	0.5	5.92	0.02	A	0.0	0.5	5.77	0.02	A
	2028 Reference Case																								
Stream B-AC	0.6	2.7	11.39	0.37	B	2.5	12.8	28.46	0.73	D	1.3	4.6	18.82	0.57	C	2.0	9.7	27.14	0.67	D	1.0	3.9	16.61	0.51	C
Stream C-AB	0.0	0.5	11.83	0.01	B	0.1	0.5	7.37	0.04	A	0.0	0.5	8.56	0.02	A	0.0	0.5	5.89	0.02	A	0.0	0.5	5.72	0.02	A
	2028 Peak Construction																								
Stream B-AC	0.6	2.8	12.15	0.40	B	3.1	15.7	34.60	0.77	D	1.4	4.9	19.62	0.58	C	3.2	16.6	38.24	0.78	E	1.9	8.9	23.80	0.66	C
Stream C-AB	0.1	0.5	8.16	0.05	A	0.1	0.7	7.56	0.09	A	0.0	0.5	7.75	0.03	A	0.0	0.5	5.90	0.02	A	0.0	0.5	6.27	0.02	A
	2034 Reference Case																								
Stream B-AC	0.6	2.7	11.63	0.38	B	3.0	14.9	32.89	0.76	D	1.5	5.9	21.04	0.61	C	3.0	15.6	37.32	0.77	E	1.3	4.9	19.69	0.58	C
Stream C-AB	0.0	0.5	11.78	0.01	B	0.1	0.5	7.36	0.05	A	0.0	0.5	7.70	0.03	A	0.0	0.5	5.81	0.02	A	0.0	0.5	5.65	0.02	A
	2034 Operational Led																								
Stream B-AC	0.6	2.7	11.58	0.38	B	3.1	15.8	35.15	0.77	E	1.8	8.5	24.39	0.65	C	3.1	16.0	37.76	0.77	E	1.3	4.9	19.51	0.58	C
Stream C-AB	0.0	0.5	11.82	0.01	B	0.1	0.5	7.88	0.06	A	0.1	0.5	7.20	0.06	A	0.0	0.5	5.83	0.02	A	0.0	0.5	6.23	0.02	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

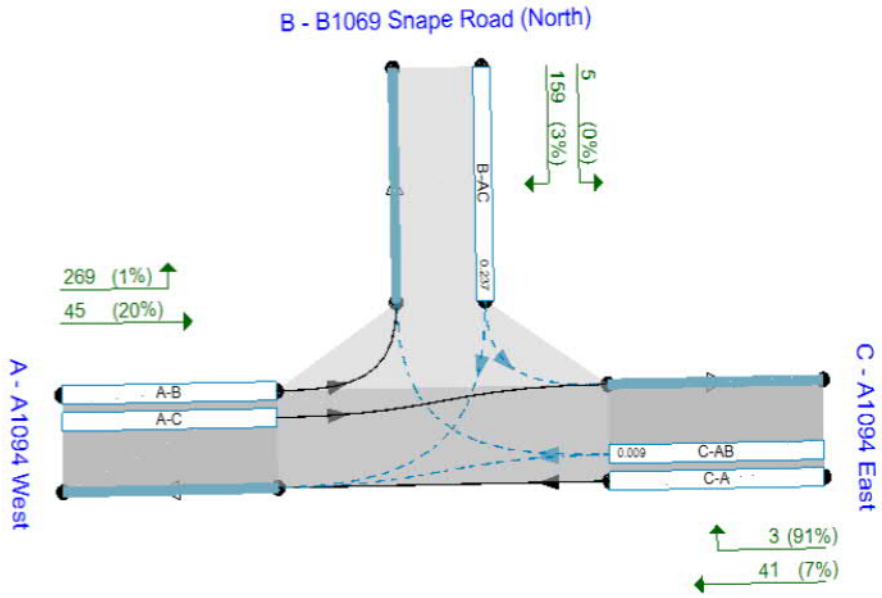
File summary

File Description

Title	B1069 / A1094 (Snape Road, East)
Location	52.178882°, 1.537732°
Site number	5
Date	12/10/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	3.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A1094 West		Major
B	B1069 Snape Road (North)		Minor
C	A1094 East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A1094 East	5.97			51.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - B1069 Snape Road (North)	One lane	4.02	45	51

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J5	B-A	570	0.104	0.263	0.165	0.375
J5	B-C	723	0.111	0.281	-	-
J5	C-B	603	0.234	0.234	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	314	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	164	100.000
C - A1094 East		ONE HOUR	✓	44	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	269	45
	B - B1069 Snape Road (North)	159	0	5
	C - A1094 East	41	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	20
	B - B1069 Snape Road (North)	3	0	0

	C - A1094 East	7	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	11.19	0.6	2.6	B	150	225
C-AB	0.01	11.86	0.0	0.5	B	3	5
C-A						37	56
A-B						247	370
A-C						42	62

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	123	31	520	0.237	122	0.0	0.3	9.028	A
C-AB	3	1	311	0.009	3	0.0	0.0	11.679	B
C-A	31	8			31				
A-B	202	51			202				
A-C	34	9			34				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	147	37	512	0.287	147	0.3	0.4	9.843	A
C-AB	3	1	310	0.011	3	0.0	0.0	11.776	B
C-A	36	9			36				
A-B	242	60			242				
A-C	41	10			41				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	180	45	502	0.359	180	0.4	0.6	11.149	B
C-AB	4	1	309	0.014	4	0.0	0.0	11.859	B
C-A	45	11			45				
A-B	296	74			296				
A-C	50	12			50				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	180	45	502	0.359	180	0.6	0.6	11.188	B
C-AB	4	1	310	0.014	4	0.0	0.0	11.791	B
C-A	45	11			45				
A-B	296	74			296				
A-C	50	12			50				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	147	37	512	0.287	148	0.6	0.4	9.895	A
C-AB	3	1	311	0.011	3	0.0	0.0	11.641	B
C-A	36	9			36				
A-B	242	60			242				
A-C	41	10			41				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	123	31	520	0.237	124	0.4	0.3	9.103	A
C-AB	3	1	311	0.009	3	0.0	0.0	11.614	B
C-A	31	8			31				
A-B	202	51			202				
A-C	34	9			34				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.26	0.55	0.55			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.03	0.29	1.27	2.58			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	9.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	358	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	294	100.000
C - A1094 East		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	222	135
	B - B1069 Snape Road (North)	284	0	10
	C - A1094 East	106	15	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	4	11
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.70	25.69	2.2	11.1	D	270	404
C-AB	0.04	7.39	0.1	0.5	A	17	25
C-A						94	141
A-B						204	306
A-C						124	186

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	221	55	492	0.450	218	0.0	0.8	12.998	B
C-AB	13	3	505	0.026	13	0.0	0.0	7.306	A
C-A	78	19			78				
A-B	167	42			167				
A-C	102	25			102				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	264	66	479	0.551	263	0.8	1.2	16.469	C
C-AB	16	4	507	0.032	16	0.0	0.0	7.351	A
C-A	93	23			93				
A-B	200	50			200				
A-C	122	30			122				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	323	81	462	0.700	320	1.2	2.1	24.543	C
C-AB	21	5	509	0.041	21	0.0	0.1	7.392	A
C-A	112	28			112				
A-B	245	61			245				
A-C	149	37			149				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	323	81	462	0.700	323	2.1	2.2	25.694	D
C-AB	21	5	509	0.041	21	0.1	0.1	7.370	A
C-A	112	28			112				
A-B	245	61			245				
A-C	149	37			149				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	264	66	479	0.551	268	2.2	1.3	17.310	C
C-AB	16	4	507	0.032	16	0.1	0.0	7.308	A
C-A	93	23			93				
A-B	200	50			200				
A-C	122	30			122				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	221	55	492	0.450	223	1.3	0.8	13.473	B
C-AB	13	3	506	0.026	13	0.0	0.0	7.291	A
C-A	78	19			78				
A-B	167	42			167				
A-C	102	25			102				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.80	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.18	0.13	1.08	1.86	2.37			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.15	0.03	0.32	3.78	11.14			N/A	N/A
C-AB	0.06	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.23	0.03	0.29	2.23	9.24			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.27	0.05	0.49	3.05	4.70			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.84	0.04	0.38	1.96	3.37			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	5.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	362	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	226	100.000
C - A1094 East		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	155	207
	B - B1069 Snape Road (North)	212	0	15
	C - A1094 East	123	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	4	5
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	6	52	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.56	18.00	1.2	4.3	C	208	311
C-AB	0.02	8.53	0.0	0.5	A	6	10
C-A						111	167
A-B						142	213
A-C						190	285

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	170	43	482	0.354	168	0.0	0.5	11.415	B
C-AB	5	1	427	0.012	5	0.0	0.0	8.534	A
C-A	92	23			92				
A-B	117	29			117				
A-C	156	39			156				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	203	51	468	0.435	203	0.5	0.8	13.530	B
C-AB	6	2	433	0.014	6	0.0	0.0	8.480	A
C-A	109	27			109				
A-B	139	35			139				
A-C	186	47			186				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	249	62	449	0.555	247	0.8	1.2	17.711	C
C-AB	8	2	442	0.019	8	0.0	0.0	8.356	A
C-A	133	33			133				
A-B	171	43			171				
A-C	228	57			228				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	249	62	449	0.555	249	1.2	1.2	17.996	C
C-AB	8	2	442	0.019	8	0.0	0.0	8.294	A
C-A	133	33			133				
A-B	171	43			171				
A-C	228	57			228				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	203	51	468	0.435	205	1.2	0.8	13.796	B
C-AB	6	2	433	0.014	6	0.0	0.0	8.347	A
C-A	109	27			109				
A-B	139	35			139				
A-C	186	47			186				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	170	43	481	0.354	171	0.8	0.6	11.641	B
C-AB	5	1	427	0.012	5	0.0	0.0	8.471	A
C-A	92	23			92				
A-B	117	29			117				
A-C	156	39			156				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.54	0.54	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.75	0.24	0.94	1.39	1.45			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.20	0.03	0.28	1.20	3.14			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.22	0.03	0.28	1.22	4.30			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.79	0.06	0.72	1.20	1.70			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.04	0.43	1.16	1.16			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	5.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	423	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	231	100.000
C - A1094 East		ONE HOUR	✓	282	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	200	223
	B - B1069 Snape Road (North)	227	0	5
	C - A1094 East	276	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	5	0	0
	C - A1094 East	1	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.62	23.29	1.6	6.9	C	212	318
C-AB	0.02	5.92	0.0	0.5	A	10	15
C-A						249	373
A-B						184	275
A-C						204	307

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	174	44	452	0.386	172	0.0	0.6	12.751	B
C-AB	7	2	616	0.012	7	0.0	0.0	5.917	A
C-A	205	51			205				
A-B	151	38			151				
A-C	168	42			168				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	208	52	434	0.480	207	0.6	0.9	15.794	C
C-AB	10	2	634	0.015	10	0.0	0.0	5.778	A
C-A	244	61			244				
A-B	180	45			180				
A-C	200	50			200				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	255	64	409	0.623	252	0.9	1.6	22.603	C
C-AB	13	3	661	0.020	13	0.0	0.0	5.575	A
C-A	297	74			297				
A-B	220	55			220				
A-C	245	61			245				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	255	64	409	0.623	255	1.6	1.6	23.290	C
C-AB	13	3	661	0.020	13	0.0	0.0	5.558	A
C-A	297	74			297				
A-B	220	55			220				
A-C	245	61			245				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	208	52	434	0.480	211	1.6	1.0	16.325	C
C-AB	10	2	635	0.015	10	0.0	0.0	5.735	A
C-A	244	61			244				
A-B	180	45			180				
A-C	200	50			200				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	174	44	452	0.386	175	1.0	0.6	13.091	B
C-AB	7	2	616	0.012	7	0.0	0.0	5.897	A
C-A	205	51			205				
A-B	151	38			151				
A-C	168	42			168				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.61	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.89	0.18	0.96	1.32	1.32			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.56	0.03	0.29	1.56	6.94			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.60	0.03	0.29	1.60	6.34			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.95	0.05	0.63	1.89	2.73			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.04	0.40	1.31	1.95			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	3.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	417	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	198	100.000
C - A1094 East		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	237	180
	B - B1069 Snape Road (North)	192	0	6
	C - A1094 East	199	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	1
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.49	15.60	0.9	3.6	C	182	273
C-AB	0.02	5.75	0.0	0.5	A	9	13
C-A						180	270
A-B						217	326
A-C						166	248

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	149	37	486	0.307	148	0.0	0.4	10.570	B
C-AB	7	2	633	0.011	7	0.0	0.0	5.743	A
C-A	148	37			148				
A-B	178	45			178				
A-C	136	34			136				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	178	45	471	0.379	178	0.4	0.6	12.254	B
C-AB	8	2	641	0.013	8	0.0	0.0	5.691	A
C-A	176	44			176				
A-B	213	53			213				
A-C	162	41			162				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	218	55	449	0.486	217	0.6	0.9	15.435	C
C-AB	11	3	651	0.017	11	0.0	0.0	5.619	A
C-A	215	54			215				
A-B	261	65			261				
A-C	199	50			199				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	218	55	449	0.486	218	0.9	0.9	15.597	C
C-AB	11	3	651	0.017	11	0.0	0.0	5.624	A
C-A	215	54			215				
A-B	261	65			261				
A-C	199	50			199				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	178	45	471	0.379	179	0.9	0.6	12.414	B
C-AB	8	2	641	0.013	8	0.0	0.0	5.700	A
C-A	176	44			176				
A-B	213	53			213				
A-C	162	41			162				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	149	37	486	0.307	150	0.6	0.5	10.723	B
C-AB	7	2	633	0.011	7	0.0	0.0	5.747	A
C-A	148	37			148				
A-B	178	45			178				
A-C	136	34			136				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.03	0.27	0.92	1.16			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.93	0.03	0.28	0.99	3.61			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.06	0.68	1.35	1.44			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.04	0.39	1.22	1.37			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	3.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	383	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	174	100.000
C - A1094 East		ONE HOUR	✓	46	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	338	45
	B - B1069 Snape Road (North)	168	0	6
	C - A1094 East	42	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	20
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	7	70	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	11.85	0.6	2.8	B	159	239
C-AB	0.02	11.03	0.0	0.5	B	4	7
C-A						38	57
A-B						310	465
A-C						42	62

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	131	33	515	0.254	129	0.0	0.3	9.299	A
C-AB	4	1	340	0.010	4	0.0	0.0	10.706	B
C-A	31	8			31				
A-B	254	64			254				
A-C	34	9			34				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	156	39	507	0.308	156	0.3	0.4	10.245	B
C-AB	4	1	337	0.013	4	0.0	0.0	10.856	B
C-A	37	9			37				
A-B	304	76			304				
A-C	41	10			41				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	191	48	495	0.386	191	0.4	0.6	11.798	B
C-AB	5	1	333	0.016	5	0.0	0.0	11.028	B
C-A	46	11			46				
A-B	372	93			372				
A-C	50	12			50				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	191	48	495	0.386	191	0.6	0.6	11.852	B
C-AB	5	1	333	0.016	5	0.0	0.0	10.978	B
C-A	46	11			46				
A-B	372	93			372				
A-C	50	12			50				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	156	39	507	0.308	157	0.6	0.5	10.312	B
C-AB	4	1	337	0.013	4	0.0	0.0	10.755	B
C-A	37	9			37				
A-B	304	76			304				
A-C	41	10			41				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	131	33	515	0.254	131	0.5	0.3	9.387	A
C-AB	4	1	340	0.010	4	0.0	0.0	10.662	B
C-A	31	8			31				
A-B	254	64			254				
A-C	34	9			34				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.03	0.26	0.62	0.62			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.62	0.03	0.29	1.20	2.79			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.03	0.35	1.14	1.32			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	13.59	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	452	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	326	100.000
C - A1094 East		ONE HOUR	✓	132	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	316	135
	B - B1069 Snape Road (North)	315	0	11
	C - A1094 East	114	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	11
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.80	37.77	3.6	18.7	E	299	448
C-AB	0.05	7.48	0.1	0.5	A	20	31
C-A						101	151
A-B						290	435
A-C						124	186

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	245	61	485	0.506	241	0.0	1.0	14.576	B
C-AB	16	4	509	0.031	16	0.0	0.0	7.294	A
C-A	83	21			83				
A-B	238	60			238				
A-C	102	25			102				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	293	73	470	0.623	291	1.0	1.6	19.760	C
C-AB	20	5	509	0.039	20	0.0	0.1	7.381	A
C-A	99	25			99				
A-B	284	71			284				
A-C	122	30			122				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	359	90	451	0.796	352	1.6	3.3	34.075	D
C-AB	26	6	508	0.051	26	0.1	0.1	7.479	A
C-A	119	30			119				
A-B	348	87			348				
A-C	149	37			149				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	359	90	451	0.796	358	3.3	3.6	37.773	E
C-AB	26	6	508	0.051	26	0.1	0.1	7.462	A
C-A	119	30			119				
A-B	348	87			348				
A-C	149	37			149				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	293	73	470	0.623	300	3.6	1.7	21.965	C
C-AB	20	5	509	0.039	20	0.1	0.1	7.339	A
C-A	99	25			99				
A-B	284	71			284				
A-C	122	30			122				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	245	61	484	0.506	248	1.7	1.1	15.394	C
C-AB	16	4	509	0.031	16	0.1	0.0	7.278	A
C-A	83	21			83				
A-B	238	60			238				
A-C	102	25			102				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.99	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.57	0.10	1.21	2.98	3.96			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.32	0.04	0.40	8.90	17.32			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.56	0.03	0.33	6.33	18.69			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.74	0.04	0.43	4.67	7.90			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.06	0.03	0.34	2.54	5.14			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	6.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	363	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	238	100.000
C - A1094 East		ONE HOUR	✓	130	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	156	207
	B - B1069 Snape Road (North)	224	0	15
	C - A1094 East	125	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	4	5
	B - B1069 Snape Road (North)	4	0	6
	C - A1094 East	6	52	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	19.24	1.4	4.8	C	219	328
C-AB	0.02	8.51	0.0	0.5	A	7	10
C-A						113	170
A-B						143	215
A-C						190	285

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	179	45	482	0.372	177	0.0	0.6	11.728	B
C-AB	5	1	428	0.012	5	0.0	0.0	8.512	A
C-A	93	23			93				
A-B	117	29			117				
A-C	156	39			156				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	214	54	468	0.458	213	0.6	0.8	14.070	B
C-AB	6	2	435	0.014	6	0.0	0.0	8.455	A
C-A	111	28			111				
A-B	140	35			140				
A-C	186	47			186				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	262	66	449	0.584	260	0.8	1.3	18.858	C
C-AB	8	2	444	0.019	8	0.0	0.0	8.326	A
C-A	135	34			135				
A-B	172	43			172				
A-C	228	57			228				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	262	66	449	0.584	262	1.3	1.4	19.239	C
C-AB	8	2	444	0.019	8	0.0	0.0	8.262	A
C-A	135	34			135				
A-B	172	43			172				
A-C	228	57			228				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	214	54	468	0.458	216	1.4	0.9	14.408	B
C-AB	6	2	435	0.014	6	0.0	0.0	8.321	A
C-A	111	28			111				
A-B	140	35			140				
A-C	186	47			186				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	179	45	482	0.372	180	0.9	0.6	11.983	B
C-AB	5	1	428	0.012	5	0.0	0.0	8.447	A
C-A	93	23			93				
A-B	117	29			117				
A-C	156	39			156				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.82	0.21	0.94	1.41	1.47			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.34	0.03	0.28	1.34	4.60			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.37	0.03	0.28	1.37	4.82			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.06	0.72	1.57	1.97			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.04	0.43	1.48	1.60			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	6.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	424	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	247	100.000
C - A1094 East		ONE HOUR	✓	282	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	201	223
	B - B1069 Snape Road (North)	243	0	5
	C - A1094 East	276	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	5	0	0
	C - A1094 East	1	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.66	26.03	1.9	9.2	D	227	341
C-AB	0.02	5.92	0.0	0.5	A	10	15
C-A						249	373
A-B						185	277
A-C						204	307

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	186	47	453	0.411	184	0.0	0.7	13.235	B
C-AB	7	2	616	0.012	7	0.0	0.0	5.919	A
C-A	205	51			205				
A-B	151	38			151				
A-C	168	42			168				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	222	56	435	0.512	221	0.7	1.0	16.737	C
C-AB	10	2	634	0.015	10	0.0	0.0	5.779	A
C-A	244	61			244				
A-B	181	45			181				
A-C	200	50			200				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	272	68	410	0.665	269	1.0	1.8	25.004	D
C-AB	13	3	661	0.020	13	0.0	0.0	5.577	A
C-A	297	74			297				
A-B	221	55			221				
A-C	245	61			245				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	272	68	410	0.665	272	1.8	1.9	26.035	D
C-AB	13	3	661	0.020	13	0.0	0.0	5.557	A
C-A	297	74			297				
A-B	221	55			221				
A-C	245	61			245				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	222	56	435	0.512	226	1.9	1.1	17.475	C
C-AB	10	2	634	0.015	10	0.0	0.0	5.735	A
C-A	244	61			244				
A-B	181	45			181				
A-C	200	50			200				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	186	47	453	0.411	188	1.1	0.7	13.653	B
C-AB	7	2	616	0.012	7	0.0	0.0	5.898	A
C-A	205	51			205				
A-B	151	38			151				
A-C	168	42			168				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.01	0.15	1.00	1.46	1.78			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.84	0.03	0.31	2.78	9.22			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.91	0.03	0.29	1.91	7.99			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.09	0.05	0.53	2.47	3.63			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.72	0.04	0.39	1.63	2.63			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	6.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	431	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	257	100.000
C - A1094 East		ONE HOUR	✓	207	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	244	187
	B - B1069 Snape Road (North)	249	0	8
	C - A1094 East	200	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.63	21.87	1.7	7.2	C	236	354
C-AB	0.02	5.77	0.0	0.5	A	9	13
C-A						181	271
A-B						224	336
A-C						172	258

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	194	48	486	0.399	191	0.0	0.6	12.116	B
C-AB	7	2	632	0.011	7	0.0	0.0	5.759	A
C-A	149	37			149				
A-B	184	46			184				
A-C	141	35			141				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	231	58	470	0.493	230	0.6	0.9	14.957	B
C-AB	8	2	639	0.013	8	0.0	0.0	5.710	A
C-A	177	44			177				
A-B	219	55			219				
A-C	168	42			168				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	283	71	447	0.633	281	0.9	1.6	21.242	C
C-AB	11	3	649	0.017	11	0.0	0.0	5.640	A
C-A	216	54			216				
A-B	269	67			269				
A-C	206	52			206				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	283	71	447	0.633	283	1.6	1.7	21.871	C
C-AB	11	3	649	0.017	11	0.0	0.0	5.643	A
C-A	216	54			216				
A-B	269	67			269				
A-C	206	52			206				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	231	58	470	0.493	234	1.7	1.0	15.453	C
C-AB	8	2	639	0.013	8	0.0	0.0	5.716	A
C-A	177	44			177				
A-B	219	55			219				
A-C	168	42			168				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	194	48	486	0.399	195	1.0	0.7	12.437	B
C-AB	7	2	632	0.011	7	0.0	0.0	5.765	A
C-A	149	37			149				
A-B	184	46			184				
A-C	141	35			141				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.94	0.16	0.97	1.13	1.59			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.63	0.03	0.29	1.63	7.23			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.68	0.03	0.29	1.68	6.26			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.00	0.06	0.65	1.99	2.90			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.04	0.41	1.44	2.12			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	3.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	321	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	168	100.000
C - A1094 East		ONE HOUR	✓	46	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	274	47
	B - B1069 Snape Road (North)	163	0	5
	C - A1094 East	43	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	19
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	7	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	11.39	0.6	2.7	B	154	231
C-AB	0.01	11.83	0.0	0.5	B	3	5
C-A						39	59
A-B						251	377
A-C						43	65

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	126	32	519	0.243	125	0.0	0.3	9.112	A
C-AB	3	1	312	0.009	3	0.0	0.0	11.655	B
C-A	32	8			32				
A-B	206	52			206				
A-C	36	9			36				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	151	38	511	0.295	150	0.3	0.4	9.965	A
C-AB	3	1	311	0.011	3	0.0	0.0	11.749	B
C-A	38	10			38				
A-B	246	62			246				
A-C	43	11			43				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	185	46	501	0.369	184	0.4	0.6	11.342	B
C-AB	4	1	310	0.014	4	0.0	0.0	11.827	B
C-A	47	12			47				
A-B	301	75			301				
A-C	52	13			52				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	185	46	501	0.369	185	0.6	0.6	11.387	B
C-AB	4	1	311	0.014	4	0.0	0.0	11.755	B
C-A	47	12			47				
A-B	301	75			301				
A-C	52	13			52				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	151	38	511	0.295	151	0.6	0.4	10.022	B
C-AB	3	1	311	0.011	3	0.0	0.0	11.606	B
C-A	38	10			38				
A-B	246	62			246				
A-C	43	11			43				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	126	32	519	0.243	127	0.4	0.3	9.191	A
C-AB	3	1	312	0.009	3	0.0	0.0	11.590	B
C-A	32	8			32				
A-B	206	52			206				
A-C	36	9			36				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.57	0.03	0.26	0.57	0.57			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.03	0.29	1.25	2.66			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	10.53	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	390	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	301	100.000
C - A1094 East		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	245	144
	B - B1069 Snape Road (North)	291	0	10
	C - A1094 East	112	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	4	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	19	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.73	28.46	2.5	12.8	D	276	414
C-AB	0.04	7.37	0.1	0.5	A	18	27
C-A						99	149
A-B						225	337
A-C						132	199

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	226	57	488	0.464	223	0.0	0.8	13.439	B
C-AB	14	4	509	0.028	14	0.0	0.0	7.269	A
C-A	82	21			82				
A-B	185	46			185				
A-C	109	27			109				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	270	68	474	0.570	269	0.8	1.3	17.342	C
C-AB	17	4	510	0.034	17	0.0	0.0	7.321	A
C-A	97	24			97				
A-B	220	55			220				
A-C	130	32			130				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	331	83	456	0.726	327	1.3	2.4	26.869	D
C-AB	23	6	512	0.044	23	0.0	0.1	7.375	A
C-A	118	30			118				
A-B	270	67			270				
A-C	159	40			159				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	331	83	456	0.726	331	2.4	2.5	28.459	D
C-AB	23	6	512	0.044	23	0.1	0.1	7.353	A
C-A	118	30			118				
A-B	270	67			270				
A-C	159	40			159				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	270	68	474	0.570	275	2.5	1.4	18.430	C
C-AB	17	4	510	0.034	18	0.1	0.0	7.279	A
C-A	97	24			97				
A-B	220	55			220				
A-C	130	32			130				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	226	57	488	0.464	228	1.4	0.9	13.990	B
C-AB	14	4	509	0.028	14	0.0	0.0	7.251	A
C-A	82	21			82				
A-B	185	46			185				
A-C	109	27			109				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.84	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.27	0.12	1.12	2.06	2.75			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.40	0.03	0.33	5.03	12.82			N/A	N/A
C-AB	0.06	0.03	0.26	0.46	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.51	0.03	0.30	2.51	11.25			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.38	0.05	0.47	3.50	5.47			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.89	0.04	0.37	2.15	3.82			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	5.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	396	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	226	100.000
C - A1094 East		ONE HOUR	✓	132	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	174	222
	B - B1069 Snape Road (North)	212	0	15
	C - A1094 East	127	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	4	5
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	5	52	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.57	18.82	1.3	4.6	C	208	311
C-AB	0.02	8.56	0.0	0.5	A	7	10
C-A						115	172
A-B						160	240
A-C						204	306

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	170	43	475	0.359	168	0.0	0.5	11.662	B
C-AB	5	1	425	0.012	5	0.0	0.0	8.561	A
C-A	95	24			95				
A-B	131	33			131				
A-C	167	42			167				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	203	51	460	0.442	203	0.5	0.8	13.923	B
C-AB	6	2	432	0.015	6	0.0	0.0	8.514	A
C-A	113	28			113				
A-B	156	39			156				
A-C	200	50			200				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	249	62	440	0.566	247	0.8	1.2	18.485	C
C-AB	8	2	441	0.019	8	0.0	0.0	8.394	A
C-A	138	34			138				
A-B	192	48			192				
A-C	245	61			245				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	249	62	440	0.566	249	1.2	1.3	18.823	C
C-AB	8	2	441	0.019	8	0.0	0.0	8.328	A
C-A	138	34			138				
A-B	192	48			192				
A-C	245	61			245				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	203	51	460	0.442	205	1.3	0.8	14.227	B
C-AB	6	2	432	0.015	6	0.0	0.0	8.373	A
C-A	113	28			113				
A-B	156	39			156				
A-C	200	50			200				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	170	43	475	0.359	171	0.8	0.6	11.906	B
C-AB	5	1	426	0.012	5	0.0	0.0	8.493	A
C-A	95	24			95				
A-B	131	33			131				
A-C	167	42			167				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.77	0.23	0.94	1.39	1.45			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.25	0.03	0.28	1.25	3.77			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.28	0.03	0.28	1.28	4.57			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.81	0.06	0.72	1.35	1.81			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.57	0.04	0.43	1.36	1.36			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	6.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	447	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	246	100.000
C - A1094 East		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	211	236
	B - B1069 Snape Road (North)	242	0	5
	C - A1094 East	288	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	5	0	0
	C - A1094 East	1	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.67	27.14	2.0	9.7	D	226	339
C-AB	0.02	5.89	0.0	0.5	A	10	16
C-A						260	389
A-B						194	291
A-C						216	324

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	185	46	448	0.414	183	0.0	0.7	13.428	B
C-AB	8	2	619	0.012	7	0.0	0.0	5.885	A
C-A	214	53			214				
A-B	159	40			159				
A-C	177	44			177				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	221	55	429	0.516	220	0.7	1.0	17.104	C
C-AB	10	2	639	0.015	10	0.0	0.0	5.741	A
C-A	255	64			255				
A-B	190	47			190				
A-C	212	53			212				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	271	68	403	0.673	268	1.0	1.9	25.973	D
C-AB	14	3	667	0.021	14	0.0	0.0	5.531	A
C-A	310	78			310				
A-B	232	58			232				
A-C	260	65			260				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	271	68	403	0.673	271	1.9	2.0	27.142	D
C-AB	14	3	667	0.021	14	0.0	0.0	5.511	A
C-A	310	78			310				
A-B	232	58			232				
A-C	260	65			260				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	221	55	429	0.516	225	2.0	1.1	17.916	C
C-AB	10	2	639	0.015	10	0.0	0.0	5.697	A
C-A	255	64			255				
A-B	190	47			190				
A-C	212	53			212				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	185	46	448	0.414	187	1.1	0.7	13.866	B
C-AB	8	2	619	0.012	8	0.0	0.0	5.864	A
C-A	214	53			214				
A-B	159	40			159				
A-C	177	44			177				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.03	0.15	1.01	1.52	1.83			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.90	0.03	0.31	3.13	9.74			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.98	0.03	0.29	1.98	8.52			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.11	0.05	0.50	2.56	3.79			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.72	0.04	0.38	1.67	2.74			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	4.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	433	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	206	100.000
C - A1094 East		ONE HOUR	✓	218	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	245	188
	B - B1069 Snape Road (North)	200	0	6
	C - A1094 East	211	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.51	16.61	1.0	3.9	C	189	284
C-AB	0.02	5.72	0.0	0.5	A	9	13
C-A						191	286
A-B						225	337
A-C						173	259

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	155	39	483	0.322	153	0.0	0.5	10.870	B
C-AB	7	2	637	0.011	7	0.0	0.0	5.710	A
C-A	157	39			157				
A-B	184	46			184				
A-C	142	35			142				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	185	46	466	0.398	185	0.5	0.6	12.748	B
C-AB	9	2	645	0.013	9	0.0	0.0	5.651	A
C-A	187	47			187				
A-B	220	55			220				
A-C	169	42			169				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	227	57	444	0.512	226	0.6	1.0	16.400	C
C-AB	12	3	657	0.018	12	0.0	0.0	5.570	A
C-A	228	57			228				
A-B	270	67			270				
A-C	207	52			207				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	227	57	444	0.512	227	1.0	1.0	16.609	C
C-AB	12	3	657	0.018	12	0.0	0.0	5.575	A
C-A	228	57			228				
A-B	270	67			270				
A-C	207	52			207				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	185	46	466	0.398	187	1.0	0.7	12.944	B
C-AB	9	2	645	0.013	9	0.0	0.0	5.660	A
C-A	187	47			187				
A-B	220	55			220				
A-C	169	42			169				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	155	39	483	0.322	156	0.7	0.5	11.043	B
C-AB	7	2	637	0.011	7	0.0	0.0	5.715	A
C-A	157	39			157				
A-B	184	46			184				
A-C	142	35			142				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.23	0.94	1.39	1.44			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.01	0.03	0.27	1.01	1.41			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.03	0.03	0.28	1.03	3.86			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.06	0.70	1.40	1.48			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.48	0.04	0.41	1.27	1.40			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	3.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	383	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	176	100.000
C - A1094 East		ONE HOUR	✓	59	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	336	47
	B - B1069 Snape Road (North)	170	0	6
	C - A1094 East	42	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	19
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	5	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	12.15	0.6	2.8	B	161	242
C-AB	0.05	8.16	0.1	0.5	A	17	26
C-A						37	56
A-B						308	462
A-C						43	65

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	132	33	512	0.259	131	0.0	0.3	9.421	A
C-AB	14	3	478	0.029	14	0.0	0.0	7.748	A
C-A	31	8			31				
A-B	253	63			253				
A-C	36	9			36				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	158	39	502	0.314	158	0.3	0.5	10.423	B
C-AB	17	4	472	0.036	17	0.0	0.0	7.921	A
C-A	36	9			36				
A-B	302	75			302				
A-C	43	11			43				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	193	48	490	0.395	193	0.5	0.6	12.090	B
C-AB	21	5	463	0.046	21	0.0	0.1	8.164	A
C-A	44	11			44				
A-B	370	92			370				
A-C	52	13			52				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	193	48	490	0.395	193	0.6	0.6	12.150	B
C-AB	21	5	463	0.046	21	0.1	0.1	8.158	A
C-A	44	11			44				
A-B	370	92			370				
A-C	52	13			52				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	158	39	502	0.314	159	0.6	0.5	10.497	B
C-AB	17	4	472	0.036	17	0.1	0.0	7.907	A
C-A	36	9			36				
A-B	302	75			302				
A-C	43	11			43				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	132	33	512	0.259	133	0.5	0.4	9.514	A
C-AB	14	3	478	0.029	14	0.0	0.0	7.747	A
C-A	31	8			31				
A-B	253	63			253				
A-C	36	9			36				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C-AB	0.05	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.03	0.29	1.17	2.85			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.04	0.38	1.21	1.35			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.26	0.48	0.61			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	12.12	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	449	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	311	100.000
C - A1094 East		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	304	144
	B - B1069 Snape Road (North)	299	0	12
	C - A1094 East	113	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.77	34.60	3.1	15.7	D	285	428
C-AB	0.09	7.56	0.1	0.7	A	36	55
C-A						96	145
A-B						279	419
A-C						132	199

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	234	58	480	0.488	230	0.0	0.9	14.233	B
C-AB	28	7	525	0.054	28	0.0	0.1	7.236	A
C-A	81	20			81				
A-B	229	57			229				
A-C	109	27			109				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	279	70	465	0.601	277	0.9	1.4	19.006	C
C-AB	35	9	524	0.067	35	0.1	0.1	7.373	A
C-A	95	24			95				
A-B	273	68			273				
A-C	130	32			130				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	342	86	444	0.771	336	1.4	2.9	31.763	D
C-AB	46	11	523	0.087	46	0.1	0.1	7.558	A
C-A	114	28			114				
A-B	335	84			335				
A-C	159	40			159				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	342	86	444	0.771	341	2.9	3.1	34.602	D
C-AB	46	11	523	0.087	46	0.1	0.1	7.545	A
C-A	114	28			114				
A-B	335	84			335				
A-C	159	40			159				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	279	70	464	0.601	286	3.1	1.6	20.748	C
C-AB	35	9	524	0.067	35	0.1	0.1	7.348	A
C-A	95	24			95				
A-B	273	68			273				
A-C	130	32			130				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	234	58	480	0.488	236	1.6	1.0	14.948	B
C-AB	28	7	526	0.054	28	0.1	0.1	7.230	A
C-A	81	20			81				
A-B	229	57			229				
A-C	109	27			109				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.44	0.11	1.17	2.67	3.48			N/A	N/A
C-AB	0.09	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.94	0.04	0.37	7.48	15.64			N/A	N/A
C-AB	0.13	0.03	0.26	0.48	0.68			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.13	0.03	0.31	4.66	15.72			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.59	0.04	0.44	4.17	6.89			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.98	0.03	0.35	2.38	4.62			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	5.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	408	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	231	100.000
C - A1094 East		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	186	222
	B - B1069 Snape Road (North)	217	0	15
	C - A1094 East	128	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	5
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	5	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	19.62	1.4	4.9	C	212	318
C-AB	0.03	7.75	0.0	0.5	A	10	15
C-A						115	173
A-B						171	256
A-C						204	306

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	174	44	473	0.368	172	0.0	0.6	11.856	B
C-AB	8	2	472	0.016	8	0.0	0.0	7.753	A
C-A	95	24			95				
A-B	140	35			140				
A-C	167	42			167				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	208	52	458	0.454	207	0.6	0.8	14.266	B
C-AB	10	2	476	0.020	10	0.0	0.0	7.745	A
C-A	113	28			113				
A-B	167	42			167				
A-C	200	50			200				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	255	64	438	0.582	253	0.8	1.3	19.226	C
C-AB	13	3	482	0.026	13	0.0	0.0	7.702	A
C-A	138	34			138				
A-B	205	51			205				
A-C	245	61			245				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	255	64	438	0.582	255	1.3	1.4	19.623	C
C-AB	13	3	483	0.026	13	0.0	0.0	7.663	A
C-A	138	34			138				
A-B	205	51			205				
A-C	245	61			245				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	208	52	458	0.454	210	1.4	0.9	14.608	B
C-AB	10	2	476	0.020	10	0.0	0.0	7.669	A
C-A	113	28			113				
A-B	167	42			167				
A-C	200	50			200				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	174	44	473	0.368	175	0.9	0.6	12.118	B
C-AB	8	2	472	0.016	8	0.0	0.0	7.716	A
C-A	95	24			95				
A-B	140	35			140				
A-C	167	42			167				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.57	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.81	0.21	0.94	1.40	1.46			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.33	0.03	0.28	1.33	4.58			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.36	0.03	0.28	1.36	4.88			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.06	0.71	1.53	1.95			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.04	0.43	1.47	1.56			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	10.87	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	452	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	287	100.000
C - A1094 East		ONE HOUR	✓	293	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	215	237
	B - B1069 Snape Road (North)	276	0	12
	C - A1094 East	287	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	1	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.78	38.24	3.2	16.6	E	264	396
C-AB	0.02	5.90	0.0	0.5	A	10	16
C-A						259	388
A-B						197	296
A-C						217	326

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	216	54	454	0.477	213	0.0	0.9	14.752	B
C-AB	8	2	618	0.012	7	0.0	0.0	5.897	A
C-A	213	53			213				
A-B	162	40			162				
A-C	178	45			178				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	258	65	434	0.595	256	0.9	1.4	19.982	C
C-AB	10	2	637	0.015	10	0.0	0.0	5.754	A
C-A	254	63			254				
A-B	193	48			193				
A-C	213	53			213				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	316	79	408	0.776	310	1.4	3.0	34.738	D
C-AB	14	3	665	0.021	14	0.0	0.0	5.546	A
C-A	309	77			309				
A-B	237	59			237				
A-C	261	65			261				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	316	79	408	0.776	316	3.0	3.2	38.242	E
C-AB	14	3	665	0.021	14	0.0	0.0	5.528	A
C-A	309	77			309				
A-B	237	59			237				
A-C	261	65			261				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	258	65	434	0.595	265	3.2	1.5	21.993	C
C-AB	10	2	637	0.016	10	0.0	0.0	5.708	A
C-A	254	63			254				
A-B	193	48			193				
A-C	213	53			213				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	216	54	453	0.477	219	1.5	0.9	15.492	C
C-AB	8	2	618	0.012	8	0.0	0.0	5.876	A
C-A	213	53			213				
A-B	162	40			162				
A-C	178	45			178				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.88	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.40	0.11	1.16	2.56	3.30			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.98	0.04	0.38	7.84	15.65			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.18	0.03	0.32	5.49	16.58			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.55	0.04	0.43	4.04	6.76			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.94	0.03	0.34	2.21	4.46			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	6.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	445	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	268	100.000
C - A1094 East		ONE HOUR	✓	222	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	252	193
	B - B1069 Snape Road (North)	251	0	17
	C - A1094 East	214	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.66	23.80	1.9	8.9	C	246	369
C-AB	0.02	6.27	0.0	0.5	A	11	16
C-A						193	289
A-B						231	347
A-C						177	266

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	202	50	486	0.416	199	0.0	0.7	12.394	B
C-AB	8	2	583	0.014	8	0.0	0.0	6.266	A
C-A	159	40			159				
A-B	190	47			190				
A-C	146	36			146				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	241	60	469	0.514	240	0.7	1.0	15.605	C
C-AB	10	3	593	0.017	10	0.0	0.0	6.187	A
C-A	189	47			189				
A-B	226	57			226				
A-C	174	43			174				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	295	74	446	0.663	292	1.0	1.8	22.947	C
C-AB	14	3	609	0.023	14	0.0	0.0	6.064	A
C-A	230	58			230				
A-B	277	69			277				
A-C	213	53			213				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	295	74	446	0.663	295	1.8	1.9	23.802	C
C-AB	14	3	609	0.023	14	0.0	0.0	6.050	A
C-A	230	58			230				
A-B	277	69			277				
A-C	213	53			213				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	241	60	469	0.514	244	1.9	1.1	16.235	C
C-AB	10	3	594	0.017	10	0.0	0.0	6.153	A
C-A	189	47			189				
A-B	226	57			226				
A-C	174	43			174				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	202	50	486	0.416	203	1.1	0.7	12.802	B
C-AB	8	2	583	0.014	8	0.0	0.0	6.248	A
C-A	159	40			159				
A-B	190	47			190				
A-C	146	36			146				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.69	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.02	0.15	1.01	1.51	1.82			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.83	0.03	0.30	2.43	8.89			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.89	0.03	0.29	1.89	7.49			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.09	0.05	0.58	2.45	3.58			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.73	0.04	0.39	1.65	2.63			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	3.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	332	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	172	100.000
C - A1094 East		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	281	51
	B - B1069 Snape Road (North)	167	0	5
	C - A1094 East	46	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	17
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	6	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	11.63	0.6	2.7	B	158	236
C-AB	0.01	11.78	0.0	0.5	B	4	5
C-A						42	63
A-B						258	386
A-C						47	71

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	129	32	517	0.250	128	0.0	0.3	9.215	A
C-AB	3	1	312	0.009	3	0.0	0.0	11.622	B
C-A	34	9			34				
A-B	211	53			211				
A-C	39	10			39				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	154	39	510	0.303	154	0.3	0.4	10.115	B
C-AB	3	1	312	0.011	3	0.0	0.0	11.712	B
C-A	41	10			41				
A-B	252	63			252				
A-C	46	12			46				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	499	0.379	188	0.4	0.6	11.580	B
C-AB	4	1	312	0.014	4	0.0	0.0	11.780	B
C-A	50	12			50				
A-B	309	77			309				
A-C	56	14			56				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	499	0.379	189	0.6	0.6	11.630	B
C-AB	4	1	312	0.014	4	0.0	0.0	11.706	B
C-A	50	12			50				
A-B	309	77			309				
A-C	56	14			56				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	154	39	509	0.303	155	0.6	0.4	10.175	B
C-AB	3	1	312	0.011	3	0.0	0.0	11.558	B
C-A	41	10			41				
A-B	252	63			252				
A-C	46	12			46				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	129	32	517	0.250	130	0.4	0.3	9.297	A
C-AB	3	1	313	0.009	3	0.0	0.0	11.552	B
C-A	34	9			34				
A-B	211	53			211				
A-C	39	10			39				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.03	0.26	0.60	0.60			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.03	0.29	1.22	2.74			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.03	0.32	1.05	1.28			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	11.75	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	427	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	310	100.000
C - A1094 East		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	271	155
	B - B1069 Snape Road (North)	300	0	10
	C - A1094 East	118	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.76	32.89	3.0	14.9	D	284	426
C-AB	0.05	7.36	0.1	0.5	A	21	31
C-A						104	156
A-B						249	373
A-C						143	214

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	233	58	483	0.483	230	0.0	0.9	14.043	B
C-AB	16	4	515	0.031	16	0.0	0.0	7.212	A
C-A	86	22			86				
A-B	204	51			204				
A-C	117	29			117				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	278	70	468	0.595	276	0.9	1.4	18.583	C
C-AB	20	5	515	0.039	20	0.0	0.1	7.281	A
C-A	102	26			102				
A-B	244	61			244				
A-C	140	35			140				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	341	85	448	0.761	335	1.4	2.8	30.432	D
C-AB	26	6	517	0.050	26	0.1	0.1	7.358	A
C-A	124	31			124				
A-B	299	75			299				
A-C	171	43			171				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	341	85	448	0.761	340	2.8	3.0	32.889	D
C-AB	26	6	517	0.050	26	0.1	0.1	7.338	A
C-A	124	31			124				
A-B	299	75			299				
A-C	171	43			171				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	278	70	468	0.595	284	3.0	1.5	20.136	C
C-AB	20	5	516	0.039	20	0.1	0.1	7.240	A
C-A	102	26			102				
A-B	244	61			244				
A-C	140	35			140				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	233	58	482	0.483	235	1.5	1.0	14.710	B
C-AB	16	4	515	0.031	16	0.1	0.0	7.198	A
C-A	86	22			86				
A-B	204	51			204				
A-C	117	29			117				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.91	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.40	0.11	1.16	2.56	3.29			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.81	0.04	0.36	6.86	14.94			N/A	N/A
C-AB	0.08	0.03	0.26	0.47	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.97	0.03	0.31	3.96	14.51			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.54	0.04	0.45	4.00	6.59			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.96	0.04	0.35	2.36	4.47			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	6.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	425	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	238	100.000
C - A1094 East		ONE HOUR	✓	146	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	195	230
	B - B1069 Snape Road (North)	224	0	15
	C - A1094 East	138	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	4	5
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	6	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.61	21.04	1.5	5.9	C	219	328
C-AB	0.03	7.70	0.0	0.5	A	10	15
C-A						124	186
A-B						179	269
A-C						211	317

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	179	45	470	0.382	177	0.0	0.6	12.182	B
C-AB	8	2	475	0.017	8	0.0	0.0	7.698	A
C-A	102	26			102				
A-B	147	37			147				
A-C	173	43			173				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	214	54	455	0.471	213	0.6	0.9	14.847	B
C-AB	10	2	480	0.021	10	0.0	0.0	7.680	A
C-A	122	30			122				
A-B	175	44			175				
A-C	207	52			207				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	262	66	433	0.606	260	0.9	1.5	20.530	C
C-AB	13	3	488	0.027	13	0.0	0.0	7.622	A
C-A	148	37			148				
A-B	215	54			215				
A-C	253	63			253				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	262	66	433	0.606	262	1.5	1.5	21.041	C
C-AB	13	3	488	0.027	13	0.0	0.0	7.586	A
C-A	148	37			148				
A-B	215	54			215				
A-C	253	63			253				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	214	54	455	0.471	217	1.5	0.9	15.271	C
C-AB	10	2	481	0.021	10	0.0	0.0	7.598	A
C-A	122	30			122				
A-B	175	44			175				
A-C	207	52			207				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	179	45	470	0.382	181	0.9	0.6	12.479	B
C-AB	8	2	476	0.017	8	0.0	0.0	7.659	A
C-A	102	26			102				
A-B	147	37			147				
A-C	173	43			173				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.19	0.95	1.01	1.01			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.46	0.03	0.29	1.46	5.87			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.50	0.03	0.28	1.50	5.53			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.06	0.68	1.76	2.44			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.04	0.42	1.18	1.81			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	10.17	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	467	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	279	100.000
C - A1094 East		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	231	236
	B - B1069 Snape Road (North)	273	0	7
	C - A1094 East	297	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	1	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.77	37.32	3.0	15.6	E	256	385
C-AB	0.02	5.81	0.0	0.5	A	12	18
C-A						267	401
A-B						212	318
A-C						216	324

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	210	53	448	0.469	207	0.0	0.9	14.708	B
C-AB	9	2	628	0.014	9	0.0	0.0	5.812	A
C-A	220	55			220				
A-B	174	43			174				
A-C	177	44			177				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	251	63	429	0.586	249	0.9	1.3	19.822	C
C-AB	12	3	648	0.018	11	0.0	0.0	5.670	A
C-A	262	65			262				
A-B	208	52			208				
A-C	212	53			212				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	308	77	402	0.766	302	1.3	2.8	34.103	D
C-AB	16	4	676	0.024	16	0.0	0.0	5.468	A
C-A	319	80			319				
A-B	254	64			254				
A-C	260	65			260				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	308	77	402	0.766	307	2.8	3.0	37.316	E
C-AB	16	4	676	0.024	16	0.0	0.0	5.453	A
C-A	319	80			319				
A-B	254	64			254				
A-C	260	65			260				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	251	63	429	0.586	257	3.0	1.5	21.684	C
C-AB	12	3	648	0.018	12	0.0	0.0	5.631	A
C-A	262	65			262				
A-B	208	52			208				
A-C	212	53			212				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	210	53	448	0.469	213	1.5	0.9	15.415	C
C-AB	9	2	628	0.014	9	0.0	0.0	5.791	A
C-A	220	55			220				
A-B	174	43			174				
A-C	177	44			177				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.86	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.35	0.11	1.14	2.40	3.00			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.84	0.04	0.38	7.33	15.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.03	0.03	0.32	4.94	15.57			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.49	0.04	0.43	3.88	6.42			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.91	0.03	0.34	2.14	4.26			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	4.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	473	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	226	100.000
C - A1094 East		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	267	206
	B - B1069 Snape Road (North)	220	0	6
	C - A1094 East	236	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	19.69	1.3	4.9	C	208	311
C-AB	0.02	5.65	0.0	0.5	A	9	14
C-A						213	320
A-B						245	367
A-C						189	284

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	170	43	475	0.359	168	0.0	0.5	11.664	B
C-AB	7	2	644	0.011	7	0.0	0.0	5.649	A
C-A	176	44			176				
A-B	201	50			201				
A-C	155	39			155				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	203	51	457	0.446	202	0.5	0.8	14.113	B
C-AB	9	2	654	0.014	9	0.0	0.0	5.578	A
C-A	209	52			209				
A-B	240	60			240				
A-C	186	46			186				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	249	62	432	0.577	247	0.8	1.3	19.286	C
C-AB	12	3	669	0.018	12	0.0	0.0	5.480	A
C-A	255	64			255				
A-B	294	73			294				
A-C	227	57			227				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	249	62	432	0.577	249	1.3	1.3	19.686	C
C-AB	12	3	669	0.018	12	0.0	0.0	5.483	A
C-A	255	64			255				
A-B	294	73			294				
A-C	227	57			227				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	203	51	457	0.446	205	1.3	0.8	14.448	B
C-AB	9	2	654	0.014	9	0.0	0.0	5.584	A
C-A	209	52			209				
A-B	240	60			240				
A-C	186	46			186				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	170	43	475	0.359	171	0.8	0.6	11.909	B
C-AB	7	2	644	0.011	7	0.0	0.0	5.655	A
C-A	176	44			176				
A-B	201	50			201				
A-C	155	39			155				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.78	0.21	0.94	1.40	1.45			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.30	0.03	0.28	1.30	4.39			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.33	0.03	0.28	1.33	4.91			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.83	0.06	0.70	1.44	1.88			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.57	0.04	0.42	1.44	1.47			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	3.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	328	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	172	100.000
C - A1094 East		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	279	49
	B - B1069 Snape Road (North)	167	0	5
	C - A1094 East	44	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	18
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	4	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	11.58	0.6	2.7	B	158	236
C-AB	0.01	11.82	0.0	0.5	B	3	5
C-A						40	60
A-B						256	384
A-C						45	68

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	129	32	518	0.249	128	0.0	0.3	9.193	A
C-AB	3	1	312	0.009	3	0.0	0.0	11.651	B
C-A	33	8			33				
A-B	210	52			210				
A-C	37	9			37				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	154	39	511	0.302	154	0.3	0.4	10.084	B
C-AB	3	1	311	0.011	3	0.0	0.0	11.747	B
C-A	39	10			39				
A-B	251	63			251				
A-C	44	11			44				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	500	0.378	188	0.4	0.6	11.533	B
C-AB	4	1	311	0.014	4	0.0	0.0	11.824	B
C-A	48	12			48				
A-B	307	77			307				
A-C	54	14			54				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	500	0.378	189	0.6	0.6	11.581	B
C-AB	4	1	311	0.014	4	0.0	0.0	11.750	B
C-A	48	12			48				
A-B	307	77			307				
A-C	54	14			54				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	154	39	511	0.302	155	0.6	0.4	10.144	B
C-AB	3	1	311	0.011	3	0.0	0.0	11.597	B
C-A	39	10			39				
A-B	251	63			251				
A-C	44	11			44				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	129	32	518	0.249	130	0.4	0.3	9.275	A
C-AB	3	1	312	0.009	3	0.0	0.0	11.580	B
C-A	33	8			33				
A-B	210	52			210				
A-C	37	9			37				

Queue Variation Results for each time segment

05:45 - 06:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

06:00 - 06:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.03	0.26	0.60	0.60			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:30 - 06:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.60	0.03	0.29	1.22	2.73			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.44	0.03	0.32	1.03	1.27			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	11.40	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	514	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	307	100.000
C - A1094 East		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	359	154
	B - B1069 Snape Road (North)	297	0	10
	C - A1094 East	117	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	2	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.77	35.15	3.1	15.8	E	281	422
C-AB	0.06	7.88	0.1	0.5	A	23	35
C-A						102	153
A-B						330	494
A-C						142	213

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	231	58	475	0.486	227	0.0	0.9	14.318	B
C-AB	18	4	490	0.037	18	0.0	0.0	7.619	A
C-A	85	21			85				
A-B	270	68			270				
A-C	116	29			116				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	276	69	459	0.600	274	0.9	1.4	19.163	C
C-AB	22	6	489	0.046	22	0.0	0.1	7.739	A
C-A	101	25			101				
A-B	323	81			323				
A-C	139	35			139				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	338	84	438	0.772	332	1.4	2.9	32.217	D
C-AB	29	7	488	0.060	29	0.1	0.1	7.884	A
C-A	121	30			121				
A-B	395	99			395				
A-C	170	42			170				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	338	84	438	0.772	337	2.9	3.1	35.149	E
C-AB	29	7	488	0.060	29	0.1	0.1	7.857	A
C-A	121	30			121				
A-B	395	99			395				
A-C	170	42			170				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	276	69	459	0.600	282	3.1	1.6	20.942	C
C-AB	22	6	489	0.046	23	0.1	0.1	7.681	A
C-A	101	25			101				
A-B	323	81			323				
A-C	139	35			139				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	231	58	475	0.486	233	1.6	1.0	15.034	C
C-AB	18	4	490	0.037	18	0.1	0.1	7.596	A
C-A	85	21			85				
A-B	270	68			270				
A-C	116	29			116				

Queue Variation Results for each time segment

06:45 - 07:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.43	0.11	1.17	2.65	3.45			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.95	0.04	0.37	7.53	15.64			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.13	0.03	0.32	4.78	15.85			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.58	0.04	0.44	4.15	6.86			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.97	0.03	0.35	2.36	4.60			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	7.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	485	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	251	100.000
C - A1094 East		ONE HOUR	✓	156	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	256	229
	B - B1069 Snape Road (North)	236	0	16
	C - A1094 East	136	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	5
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	5	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.65	24.39	1.8	8.5	C	231	346
C-AB	0.06	7.20	0.1	0.5	A	24	37
C-A						119	179
A-B						235	352
A-C						210	316

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	464	0.407	186	0.0	0.7	12.844	B
C-AB	19	5	530	0.036	19	0.0	0.0	7.041	A
C-A	99	25			99				
A-B	193	48			193				
A-C	173	43			173				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	226	56	447	0.505	225	0.7	1.0	16.085	C
C-AB	24	6	530	0.045	24	0.0	0.1	7.115	A
C-A	117	29			117				
A-B	230	58			230				
A-C	206	52			206				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	277	69	423	0.653	274	1.0	1.8	23.528	C
C-AB	31	8	532	0.058	31	0.1	0.1	7.204	A
C-A	141	35			141				
A-B	282	70			282				
A-C	252	63			252				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	277	69	423	0.653	276	1.8	1.8	24.388	C
C-AB	31	8	532	0.058	31	0.1	0.1	7.191	A
C-A	141	35			141				
A-B	282	70			282				
A-C	252	63			252				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	226	56	447	0.505	229	1.8	1.1	16.728	C
C-AB	24	6	531	0.045	24	0.1	0.1	7.094	A
C-A	117	29			117				
A-B	230	58			230				
A-C	206	52			206				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	189	47	464	0.408	191	1.1	0.7	13.226	B
C-AB	19	5	530	0.036	19	0.1	0.0	7.035	A
C-A	99	25			99				
A-B	193	48			193				
A-C	173	43			173				

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.67	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.99	0.16	0.99	1.37	1.72			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.76	0.03	0.30	2.26	8.48			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.82	0.03	0.29	1.82	7.31			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.06	0.05	0.58	2.32	3.37			N/A	N/A
C-AB	0.07	0.00	0.00	0.07	0.07			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.70	0.04	0.39	1.58	2.48			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	10.45	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	462	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	282	100.000
C - A1094 East		ONE HOUR	✓	300	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	230	232
	B - B1069 Snape Road (North)	276	0	7
	C - A1094 East	293	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	1	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.77	37.76	3.1	16.0	E	259	389
C-AB	0.02	5.83	0.0	0.5	A	12	18
C-A						263	395
A-B						211	317
A-C						213	319

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	213	53	450	0.473	209	0.0	0.9	14.750	B
C-AB	9	2	627	0.014	9	0.0	0.0	5.826	A
C-A	217	54			217				
A-B	173	43			173				
A-C	174	44			174				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	254	63	430	0.590	252	0.9	1.4	19.922	C
C-AB	11	3	646	0.018	11	0.0	0.0	5.686	A
C-A	258	65			258				
A-B	207	52			207				
A-C	208	52			208				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	311	78	404	0.770	305	1.4	2.9	34.420	D
C-AB	16	4	674	0.024	16	0.0	0.0	5.487	A
C-A	315	79			315				
A-B	253	63			253				
A-C	255	64			255				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	311	78	404	0.770	310	2.9	3.1	37.762	E
C-AB	16	4	674	0.024	16	0.0	0.0	5.470	A
C-A	315	79			315				
A-B	253	63			253				
A-C	255	64			255				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	254	63	430	0.590	260	3.1	1.5	21.849	C
C-AB	11	3	646	0.018	11	0.0	0.0	5.647	A
C-A	258	65			258				
A-B	207	52			207				
A-C	208	52			208				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	213	53	450	0.473	215	1.5	0.9	15.472	C
C-AB	9	2	627	0.014	9	0.0	0.0	5.808	A
C-A	217	54			217				
A-B	173	43			173				
A-C	174	44			174				

Queue Variation Results for each time segment

14:45 - 15:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:00 - 15:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.37	0.11	1.15	2.47	3.13			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	2.90	0.04	0.38	7.55	15.28			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:30 - 15:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	3.09	0.03	0.32	5.17	15.99			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.51	0.04	0.43	3.95	6.57			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:00 - 16:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.92	0.03	0.34	2.17	4.35			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A1094 East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way	4.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	466	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	227	100.000
C - A1094 East		ONE HOUR	✓	233	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	265	201
	B - B1069 Snape Road (North)	221	0	6
	C - A1094 East	225	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.58	19.51	1.3	4.9	C	209	313
C-AB	0.02	6.23	0.0	0.5	A	11	17
C-A						202	304
A-B						243	365
A-C						185	277

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	171	43	477	0.359	169	0.0	0.5	11.619	B
C-AB	8	2	586	0.014	8	0.0	0.0	6.233	A
C-A	167	42			167				
A-B	199	50			199				
A-C	152	38			152				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	204	51	459	0.445	203	0.5	0.8	14.036	B
C-AB	11	3	597	0.018	11	0.0	0.0	6.148	A
C-A	199	50			199				
A-B	238	60			238				
A-C	181	45			181				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	250	63	434	0.576	248	0.8	1.3	19.115	C
C-AB	14	4	614	0.023	14	0.0	0.0	6.017	A
C-A	242	60			242				
A-B	292	73			292				
A-C	222	55			222				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	250	63	434	0.576	250	1.3	1.3	19.505	C
C-AB	14	4	614	0.023	14	0.0	0.0	6.002	A
C-A	242	60			242				
A-B	292	73			292				
A-C	222	55			222				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	204	51	459	0.445	206	1.3	0.8	14.368	B
C-AB	11	3	597	0.018	11	0.0	0.0	6.110	A
C-A	199	50			199				
A-B	238	60			238				
A-C	181	45			181				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	171	43	477	0.359	172	0.8	0.6	11.865	B
C-AB	8	2	586	0.014	8	0.0	0.0	6.214	A
C-A	167	42			167				
A-B	199	50			199				
A-C	152	38			152				

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.78	0.21	0.94	1.40	1.45			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.30	0.03	0.28	1.30	4.30			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	1.33	0.03	0.28	1.33	4.86			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.82	0.06	0.70	1.43	1.87			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.57	0.04	0.42	1.43	1.45			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Updated Sensitivity Test results, no fuel and income, actual flows

V16A NO FUEL AND INCOME SENSITIVTY TEST

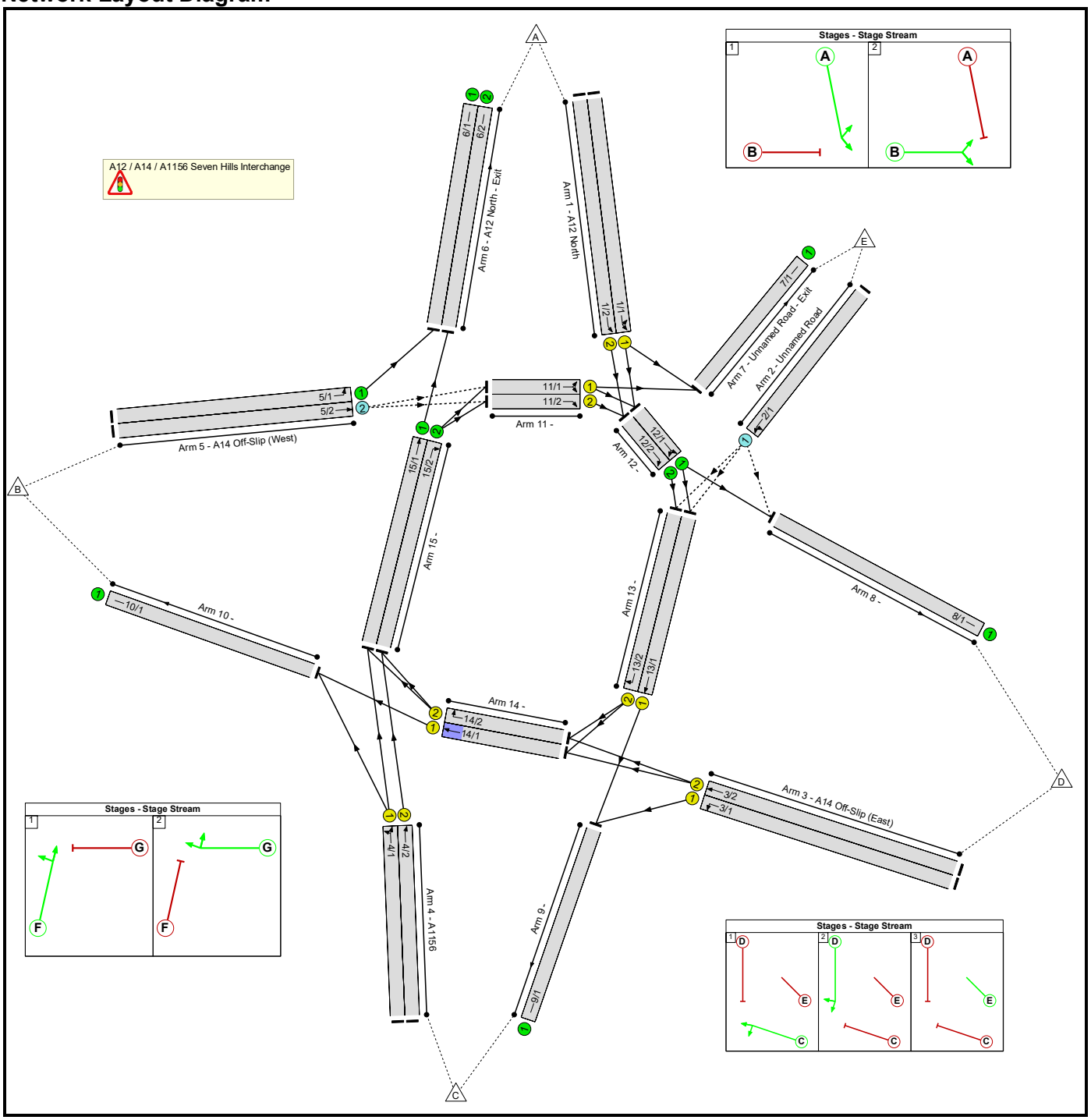
Full Input Data And Results

User and Project Details

Project:	**Sizewell C**
Title:	**Junction 21 mitigation measures**
Location:	
Additional detail:	
File name:	2019.10.17 J21_Model_v16 Sens Miti (updated).lsg3x
Author:	Chris Rice
Company:	WSP
Address:	Keble House, Southernhay Gardens, Exeter

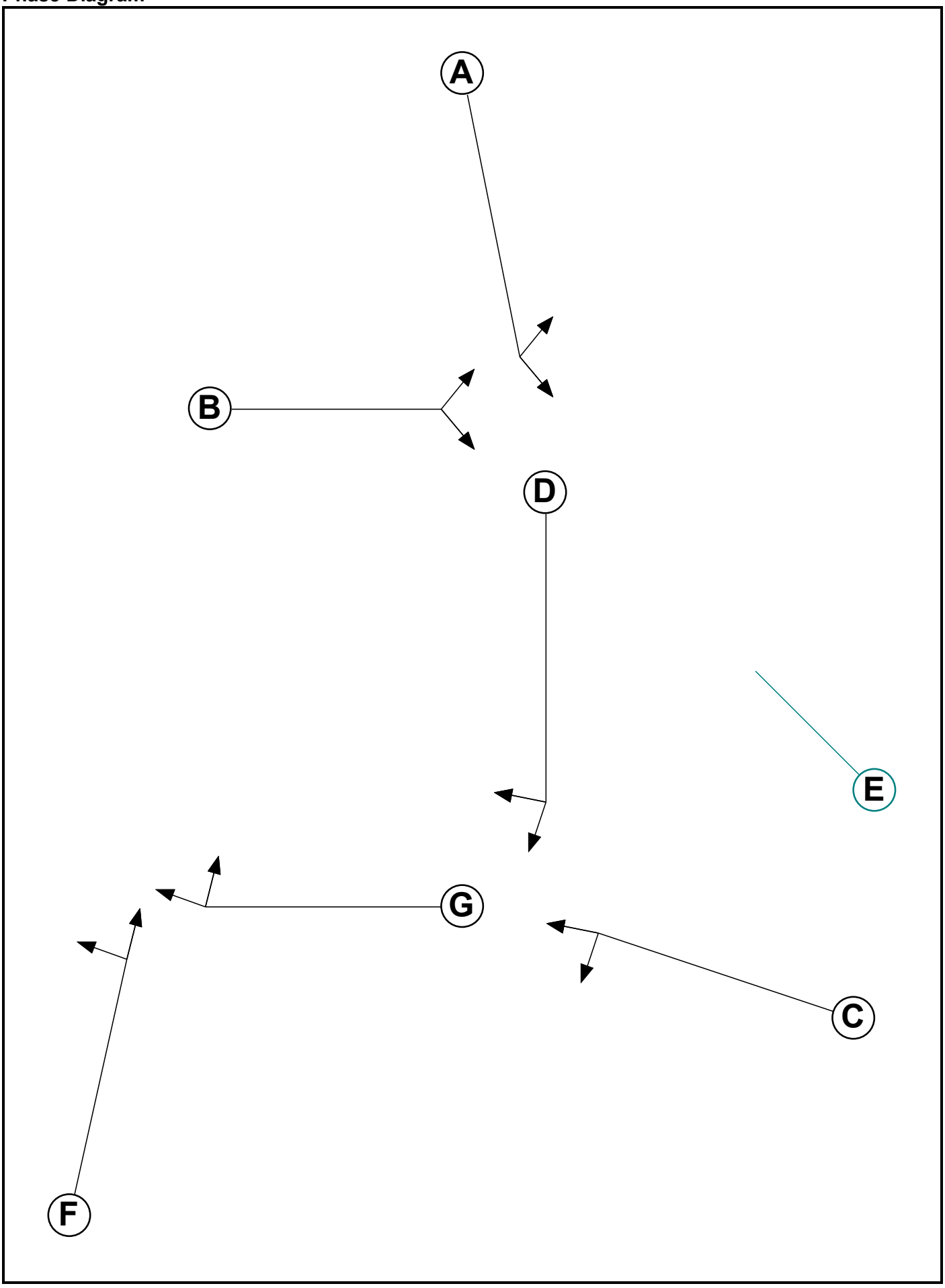
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7
E	Dummy	2		3	3
F	Traffic	3		7	7
G	Traffic	3		7	7

Phase Intergreens Matrix

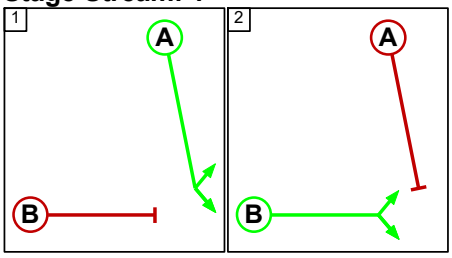
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G
A		5	-	-	-	-	-
B	5		-	-	-	-	-
C	-	-		5	3	-	-
D	-	-	5		3	-	-
E	-	-	2	2		-	-
F	-	-	-	-	-		5
G	-	-	-	-	-	5	

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D
2	3	E
3	1	F
3	2	G

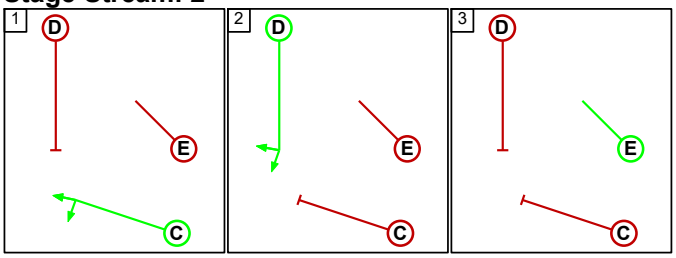
Stage Diagram

Stage Stream: 1

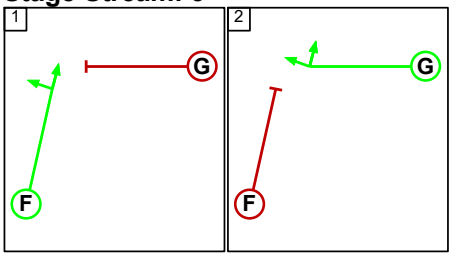


Full Input Data And Results

Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

	To Stage		
		1	2
From Stage	1		5
	2	5	

Stage Stream: 2

	To Stage			
		1	2	3
From Stage	1		5	3
	2	5		3
	3	2	2	

Full Input Data And Results

Stage Stream: 3

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Unnamed Road)	8/1 (Left)	1000	0	12/1	0.33	All	-	-	-	-	-
				12/2	0.33	All					
	13/1 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					
	13/2 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					
5/2 (A14 Off-Slip (West))	11/1 (Ahead)	1000	0	15/1	0.33	All	-	-	-	-	-
				15/2	0.33	All					
	11/2 (Ahead)	1000	0	15/1	0.33	All					
				15/2	0.33	All					

Full Input Data And Results

Lane Input Data

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A12 North)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 7 Left	24.50
											Arm 12 Ahead	24.50
1/2 (A12 North)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 12 Ahead	24.50
2/1 (Unnamed Road)	O		2	3	34.8	Geom	-	3.50	0.00	Y	Arm 8 Left	29.90
											Arm 13 Ahead	29.90
3/1 (A14 Off-Slip (East))	U	C	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 9 Left	44.60
3/2 (A14 Off-Slip (East))	U	C	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 14 Ahead	44.60
4/1 (A1156)	U	F	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 10 Left	45.40
											Arm 15 Ahead	45.40
4/2 (A1156)	U	F	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 15 Ahead	45.40
5/1 (A14 Off-Slip (West))	U		2	3	34.8	Inf	-	-	-	-	-	-
5/2 (A14 Off-Slip (West))	O		2	3	34.8	Geom	-	3.25	0.00	Y	Arm 11 Ahead	40.50
6/1 (A12 North - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
6/2 (A12 North - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
7/1 (Unnamed Road - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
8/1	U		2	3	34.8	Inf	-	-	-	-	-	-
9/1	U		2	3	34.8	Inf	-	-	-	-	-	-
10/1	U		2	3	34.8	Inf	-	-	-	-	-	-
11/1	U	B	2	3	14.8	Geom	-	3.50	0.00	Y	Arm 7 Left	36.00
											Arm 12 Right	36.00
11/2	U	B	2	3	14.8	Geom	-	3.50	0.00	Y	Arm 12 Right	36.00
12/1	U		2	3	8.7	Inf	-	-	-	-	-	-
12/2	U		2	3	8.7	Inf	-	-	-	-	-	-

Full Input Data And Results

13/1	U	D	2	3	26.1	Geom	-	3.25	0.00	Y	Arm 9 Ahead	45.00
13/2	U	D	2	3	26.1	Geom	-	3.25	0.00	Y	Arm 14 Right	45.00
14/1	U	G	2	3	14.8	Geom	-	3.25	0.00	N	Arm 10 Ahead	41.00
14/2	U	G	2	3	14.8	Geom	-	3.25	0.00	Y	Arm 15 Right	41.00
15/1	U		2	3	30.4	Inf	-	-	-	-	-	-
15/2	U		2	3	30.4	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'BY 06:00-07:00'	06:00	07:00	01:00	
2: 'BY 07:00-08:00'	07:00	08:00	01:00	
3: 'BY 08:00-09:00'	08:00	09:00	01:00	
4: 'BY 15:00-16:00'	15:00	16:00	01:00	
5: 'BY 17:00-18:00'	17:00	18:00	01:00	
6: '23RC 06:00-07:00'	06:00	07:00	01:00	
7: '23RC 07:00-08:00'	07:00	08:00	01:00	
8: '23RC 08:00-09:00'	08:00	09:00	01:00	
9: '23RC 15:00-16:00'	15:00	16:00	01:00	
10: '23RC 17:00-18:00'	17:00	18:00	01:00	
11: '23EY 06:00-07:00'	06:00	07:00	01:00	
12: '23EY 07:00-08:00'	07:00	08:00	01:00	
13: '23EY 08:00-09:00'	08:00	09:00	01:00	
14: '23EY 15:00-16:00'	15:00	16:00	01:00	
15: '23EY 17:00-18:00'	17:00	18:00	01:00	
16: '28RC 06:00-07:00'	06:00	07:00	01:00	
17: '28RC 07:00-08:00'	07:00	08:00	01:00	
18: '28RC 08:00-09:00'	08:00	09:00	01:00	
19: '28RC 15:00-16:00'	15:00	16:00	01:00	
20: '28RC 17:00-18:00'	17:00	18:00	01:00	
21: '28PC 06:00-07:00'	06:00	07:00	01:00	
22: '28PC 07:00-08:00'	07:00	08:00	01:00	
23: '28PC 08:00-09:00'	08:00	09:00	01:00	
24: '28PC 15:00-16:00'	15:00	16:00	01:00	
25: '28PC 17:00-18:00'	17:00	18:00	01:00	
26: '34RC 06:00-07:00'	06:00	07:00	01:00	
27: '34RC 07:00-08:00'	07:00	08:00	01:00	
28: '34RC 08:00-09:00'	08:00	09:00	01:00	
29: '34RC 15:00-16:00'	15:00	16:00	01:00	
30: '34RC 17:00-18:00'	17:00	18:00	01:00	
31: '34OP 06:00-07:00'	06:00	07:00	01:00	
32: '34OP 07:00-08:00'	07:00	08:00	01:00	
33: '34OP 08:00-09:00'	08:00	09:00	01:00	
34: '34OP 15:00-16:00'	15:00	16:00	01:00	
35: '34OP 17:00-18:00'	17:00	18:00	01:00	

Scenario 1: 'BY 06:00-07:00' (FG1: 'BY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	643	71	210	1	925
	B	600	21	3	0	10	634
	C	29	7	0	135	2	173
	D	161	0	70	0	10	241
	E	8	17	0	1	0	26
	Tot.	798	688	144	346	23	1999

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: BY 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	282
1/2	643
2/1	26
3/1	70
3/2	171
4/1	36
4/2	137
5/1	600
5/2	34
6/1	600
6/2	198
7/1	23
8/1	346
9/1	144
10/1	688
11/1	160
11/2	21
12/1	419
12/2	664
13/1	74
13/2	689
14/1	681
14/2	179
15/1	198
15/2	147

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.8 %	1871	1871
				Arm 13 Ahead	29.90	96.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	13.8 %	1886	1886
				Arm 12 Right	36.00	86.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: 'BY 07:00-08:00' (FG2: 'BY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1143	184	286	4	1617
	B	1252	6	66	0	32	1356
	C	158	59	0	154	10	381
	D	342	4	205	0	13	564
	E	2	43	5	1	0	51
	Tot.	1754	1255	460	441	59	3969

Traffic Lane Flows

Lane	Scenario 2: BY 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	474
1/2	1143
2/1	51
3/1	205
3/2	359
4/1	217
4/2	164
5/1	1252
5/2	104
6/1	1252
6/2	502
7/1	59
8/1	441
9/1	460
10/1	1255
11/1	275
11/2	6
12/1	690
12/2	1149
13/1	255
13/2	1194
14/1	1196
14/2	357
15/1	502
15/2	177

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	2.0 %	1871	1871
				Arm 13 Ahead	29.90	98.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	27.2 %	1878	1878
				Arm 15 Ahead	45.40	72.8 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	20.0 %	1886	1886
				Arm 12 Right	36.00	80.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: 'BY 08:00-09:00' (FG3: 'BY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1215	312	402	3	1932
	B	1546	12	113	0	9	1680
	C	263	81	0	216	2	562
	D	375	0	233	0	14	622
	E	8	60	19	4	0	91
	Tot.	2192	1368	677	622	28	4887

Traffic Lane Flows

Lane	Scenario 3: BY 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	717
1/2	1215
2/1	91
3/1	233
3/2	389
4/1	344
4/2	218
5/1	1546
5/2	134
6/1	1546
6/2	646
7/1	28
8/1	622
9/1	677
10/1	1368
11/1	354
11/2	12
12/1	1043
12/2	1227
13/1	444
13/2	1295
14/1	1287
14/2	397
15/1	646
15/2	232

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.4 %	1871	1871
				Arm 13 Ahead	29.90	95.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	23.5 %	1878	1878
				Arm 15 Ahead	45.40	76.5 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	7.1 %	1886	1886
				Arm 12 Right	36.00	92.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: 'BY 15:00-16:00' (FG4: 'BY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1047	291	313	5	1657
	B	1189	4	44	0	41	1278
	C	287	83	4	139	3	516
	D	357	0	190	0	1	548
	E	5	25	2	3	0	35
	Tot.	1839	1159	531	455	50	4034

Traffic Lane Flows

Lane	Scenario 4: BY 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	609
1/2	1048
2/1	35
3/1	190
3/2	358
4/1	370
4/2	146
5/1	1189
5/2	89
6/1	1189
6/2	650
7/1	50
8/1	455
9/1	531
10/1	1159
11/1	232
11/2	4
12/1	791
12/2	1052
13/1	341
13/2	1082
14/1	1076
14/2	364
15/1	650
15/2	147

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	8.6 %	1871	1871
				Arm 13 Ahead	29.90	91.4 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.4 %	1878	1878
				Arm 15 Ahead	45.40	77.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	19.4 %	1886	1886
				Arm 12 Right	36.00	80.6 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: 'BY 17:00-18:00' (FG5: 'BY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1034	233	378	1	1647
	B	1322	5	89	0	20	1436
	C	201	77	0	182	24	484
	D	373	0	269	0	0	642
	E	0	19	5	1	0	25
	Tot.	1897	1135	596	561	45	4234

Traffic Lane Flows

Lane	Scenario 5: BY 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	612
1/2	1035
2/1	25
3/1	269
3/2	373
4/1	278
4/2	206
5/1	1322
5/2	114
6/1	1322
6/2	575
7/1	45
8/1	561
9/1	596
10/1	1135
11/1	315
11/2	5
12/1	882
12/2	1040
13/1	327
13/2	1059
14/1	1058
14/2	374
15/1	575
15/2	206

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.2 %	1866	1866
				Arm 12 Ahead	24.50	99.8 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.0 %	1871	1871
				Arm 13 Ahead	29.90	96.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	27.7 %	1878	1878
				Arm 15 Ahead	45.40	72.3 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.0 %	1886	1886
				Arm 12 Right	36.00	86.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '23RC 06:00-07:00' (FG6: '23RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	678	71	214	1	964
	B	619	21	3	0	11	654
	C	29	7	0	138	2	176
	D	164	0	73	0	11	248
	E	9	19	0	1	0	29
	Tot.	821	725	147	353	25	2071

Traffic Lane Flows

Lane	Scenario 6: 23RC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	286
1/2	678
2/1	29
3/1	73
3/2	175
4/1	36
4/2	140
5/1	619
5/2	35
6/1	619
6/2	202
7/1	25
8/1	353
9/1	147
10/1	725
11/1	165
11/2	21
12/1	426
12/2	699
13/1	74
13/2	727
14/1	718
14/2	184
15/1	202
15/2	151

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.5 %	1886	1886
				Arm 12 Right	36.00	85.5 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '23RC 07:00-08:00' (FG7: '23RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1160	197	292	4	1653
	B	1305	6	66	0	35	1412
	C	168	59	0	170	11	408
	D	350	4	178	0	14	546
	E	2	47	5	1	0	55
	Tot.	1825	1276	446	463	64	4074

Traffic Lane Flows

Lane	Scenario 7: 23RC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	493
1/2	1160
2/1	55
3/1	178
3/2	368
4/1	227
4/2	181
5/1	1305
5/2	107
6/1	1305
6/2	520
7/1	64
8/1	463
9/1	446
10/1	1276
11/1	296
11/2	6
12/1	725
12/2	1166
13/1	268
13/2	1215
14/1	1217
14/2	366
15/1	520
15/2	195

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.8 %	1871	1871
				Arm 13 Ahead	29.90	98.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	20.3 %	1886	1886
				Arm 12 Right	36.00	79.7 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '23RC 08:00-09:00' (FG8: '23RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1244	287	404	3	1938
	B	1597	12	113	0	10	1732
	C	283	81	0	241	2	607
	D	386	0	250	0	15	651
	E	9	66	21	4	0	100
	Tot.	2275	1403	671	649	30	5028

Traffic Lane Flows

Lane	Scenario 8: 23RC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	694
1/2	1244
2/1	100
3/1	250
3/2	401
4/1	364
4/2	243
5/1	1597
5/2	135
6/1	1597
6/2	678
7/1	30
8/1	649
9/1	671
10/1	1403
11/1	381
11/2	12
12/1	1045
12/2	1256
13/1	421
13/2	1331
14/1	1322
14/2	410
15/1	678
15/2	258

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.0 %	1871	1871
				Arm 13 Ahead	29.90	96.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.3 %	1878	1878
				Arm 15 Ahead	45.40	77.7 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	7.1 %	1886	1886
				Arm 12 Right	36.00	92.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '23RC 15:00-16:00' (FG9: '23RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1044	321	322	5	1693
	B	1262	4	44	0	45	1355
	C	299	83	4	157	4	547
	D	375	0	227	0	1	603
	E	6	27	2	3	0	38
	Tot.	1943	1158	598	482	55	4236

Traffic Lane Flows

Lane	Scenario 9: 23RC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	648
1/2	1045
2/1	38
3/1	227
3/2	376
4/1	382
4/2	165
5/1	1262
5/2	93
6/1	1262
6/2	681
7/1	55
8/1	482
9/1	598
10/1	1158
11/1	255
11/2	4
12/1	848
12/2	1049
13/1	371
13/2	1082
14/1	1075
14/2	383
15/1	681
15/2	166

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	7.9 %	1871	1871
				Arm 13 Ahead	29.90	92.1 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	21.7 %	1878	1878
				Arm 15 Ahead	45.40	78.3 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	19.6 %	1886	1886
				Arm 12 Right	36.00	80.4 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '23RC 17:00-18:00' (FG10: '23RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1054	251	389	1	1696
	B	1319	5	89	0	22	1435
	C	232	77	0	186	27	522
	D	379	0	310	0	0	689
	E	0	21	6	1	0	28
	Tot.	1931	1157	656	576	50	4370

Traffic Lane Flows

Lane	Scenario 10: 23RC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	641
1/2	1055
2/1	28
3/1	310
3/2	379
4/1	309
4/2	213
5/1	1319
5/2	116
6/1	1319
6/2	612
7/1	50
8/1	576
9/1	656
10/1	1157
11/1	324
11/2	5
12/1	915
12/2	1060
13/1	346
13/2	1081
14/1	1080
14/2	380
15/1	612
15/2	213

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.2 %	1866	1866
				Arm 12 Ahead	24.50	99.8 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.6 %	1871	1871
				Arm 13 Ahead	29.90	96.4 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	24.9 %	1878	1878
				Arm 15 Ahead	45.40	75.1 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	15.1 %	1886	1886
				Arm 12 Right	36.00	84.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '23EY 06:00-07:00' (FG11: '23EY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	682	79	214	1	976
	B	710	21	6	0	11	748
	C	29	7	0	138	2	176
	D	176	0	73	0	11	260
	E	9	19	0	1	0	29
	Tot.	924	729	158	353	25	2189

Traffic Lane Flows

Lane	Scenario 11: 23EY 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	294
1/2	682
2/1	29
3/1	73
3/2	187
4/1	36
4/2	140
5/1	710
5/2	38
6/1	710
6/2	214
7/1	25
8/1	353
9/1	158
10/1	729
11/1	168
11/2	21
12/1	437
12/2	703
13/1	85
13/2	731
14/1	722
14/2	196
15/1	214
15/2	151

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.3 %	1886	1886
				Arm 12 Right	36.00	85.7 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '23EY 07:00-08:00' (FG12: '23EY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1164	235	291	4	1694
	B	1440	6	72	0	35	1553
	C	168	59	0	169	11	407
	D	389	4	189	0	14	596
	E	2	47	5	1	0	55
	Tot.	1999	1280	501	461	64	4305

Traffic Lane Flows

Lane	Scenario 12: 23EY 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	530
1/2	1164
2/1	55
3/1	189
3/2	407
4/1	227
4/2	180
5/1	1440
5/2	113
6/1	1440
6/2	559
7/1	64
8/1	461
9/1	501
10/1	1280
11/1	301
11/2	6
12/1	767
12/2	1170
13/1	312
13/2	1219
14/1	1221
14/2	405
15/1	559
15/2	194

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.8 %	1871	1871
				Arm 13 Ahead	29.90	98.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	19.9 %	1886	1886
				Arm 12 Right	36.00	80.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '23EY 08:00-09:00' (FG13: '23EY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1256	296	408	3	1963
	B	1683	12	121	0	10	1826
	C	283	84	0	245	2	614
	D	406	0	251	0	15	672
	E	9	66	21	4	0	100
	Tot.	2381	1418	689	657	30	5175

Traffic Lane Flows

Lane	Scenario 13: 23EY 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	707
1/2	1256
2/1	100
3/1	251
3/2	421
4/1	367
4/2	247
5/1	1683
5/2	143
6/1	1683
6/2	698
7/1	30
8/1	657
9/1	689
10/1	1418
11/1	393
11/2	12
12/1	1070
12/2	1268
13/1	438
13/2	1343
14/1	1334
14/2	430
15/1	698
15/2	262

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.4 %	1866	1866
				Arm 12 Ahead	24.50	99.6 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.0 %	1871	1871
				Arm 13 Ahead	29.90	96.0 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.9 %	1878	1878
				Arm 15 Ahead	45.40	77.1 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	6.9 %	1886	1886
				Arm 12 Right	36.00	93.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '23EY 15:00-16:00' (FG14: '23EY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1064	322	332	5	1724
	B	1301	4	46	0	45	1396
	C	299	85	4	157	4	549
	D	390	0	226	0	1	617
	E	6	27	2	3	0	38
	Tot.	1997	1180	600	492	55	4324

Traffic Lane Flows

Lane	Scenario 14: 23EY 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	659
1/2	1065
2/1	38
3/1	226
3/2	391
4/1	384
4/2	165
5/1	1301
5/2	95
6/1	1301
6/2	696
7/1	55
8/1	492
9/1	600
10/1	1180
11/1	257
11/2	4
12/1	861
12/2	1069
13/1	374
13/2	1102
14/1	1095
14/2	398
15/1	696
15/2	166

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	7.9 %	1871	1871
				Arm 13 Ahead	29.90	92.1 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.1 %	1878	1878
				Arm 15 Ahead	45.40	77.9 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	19.5 %	1886	1886
				Arm 12 Right	36.00	80.5 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 15: '23EY 17:00-18:00' (FG15: '23EY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1072	250	407	1	1731
	B	1311	5	89	0	22	1427
	C	265	88	0	190	27	570
	D	385	0	309	0	0	694
	E	0	21	6	1	0	28
	Tot.	1962	1186	654	598	50	4450

Traffic Lane Flows

Lane	Scenario 15: 23EY 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	658
1/2	1073
2/1	28
3/1	309
3/2	385
4/1	353
4/2	217
5/1	1311
5/2	116
6/1	1311
6/2	651
7/1	50
8/1	598
9/1	654
10/1	1186
11/1	328
11/2	5
12/1	936
12/2	1078
13/1	345
13/2	1099
14/1	1098
14/2	386
15/1	651
15/2	217

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.2 %	1866	1866
				Arm 12 Ahead	24.50	99.8 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.6 %	1871	1871
				Arm 13 Ahead	29.90	96.4 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	24.9 %	1878	1878
				Arm 15 Ahead	45.40	75.1 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	14.9 %	1886	1886
				Arm 12 Right	36.00	85.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 16: '28RC 06:00-07:00' (FG16: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	680	83	218	1	982
	B	637	21	3	0	12	673
	C	29	7	0	0	2	38
	D	167	0	76	0	12	255
	E	9	20	0	1	0	30
	Tot.	842	728	162	219	27	1978

Traffic Lane Flows

Lane	Scenario 16: 28RC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	302
1/2	680
2/1	30
3/1	76
3/2	179
4/1	36
4/2	2
5/1	637
5/2	36
6/1	637
6/2	205
7/1	27
8/1	219
9/1	162
10/1	728
11/1	29
11/2	21
12/1	304
12/2	701
13/1	86
13/2	730
14/1	721
14/2	188
15/1	205
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	89.7 %	1886	1886
				Arm 12 Right	36.00	10.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 17: '28RC 07:00-08:00' (FG17: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1190	197	294	5	1686
	B	1352	6	66	0	37	1461
	C	168	59	0	70	12	309
	D	356	4	196	0	15	571
	E	2	50	6	1	0	59
	Tot.	1878	1309	465	365	69	4086

Traffic Lane Flows

Lane	Scenario 17: 28RC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	496
1/2	1190
2/1	59
3/1	196
3/2	375
4/1	227
4/2	82
5/1	1352
5/2	109
6/1	1352
6/2	526
7/1	69
8/1	365
9/1	465
10/1	1309
11/1	200
11/2	6
12/1	627
12/2	1196
13/1	269
13/2	1248
14/1	1250
14/2	373
15/1	526
15/2	97

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	32.0 %	1886	1886
				Arm 12 Right	36.00	68.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 18: '28RC 08:00-09:00' (FG18: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1248	360	407	4	2019
	B	1647	12	113	0	11	1783
	C	283	81	0	124	2	490
	D	391	0	259	0	16	666
	E	9	70	22	5	0	106
	Tot.	2330	1411	754	536	33	5064

Traffic Lane Flows

Lane	Scenario 18: 28RC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	771
1/2	1248
2/1	106
3/1	259
3/2	407
4/1	364
4/2	126
5/1	1647
5/2	136
6/1	1647
6/2	683
7/1	33
8/1	536
9/1	754
10/1	1411
11/1	266
11/2	12
12/1	1004
12/2	1260
13/1	495
13/2	1339
14/1	1330
14/2	416
15/1	683
15/2	142

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.5 %	1866	1866
				Arm 12 Ahead	24.50	99.5 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.7 %	1871	1871
				Arm 13 Ahead	29.90	95.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.3 %	1878	1878
				Arm 15 Ahead	45.40	77.7 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	10.9 %	1886	1886
				Arm 12 Right	36.00	89.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 19: '28RC 15:00-16:00' (FG19: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1075	351	324	6	1757
	B	1309	4	44	0	48	1405
	C	299	83	4	110	4	500
	D	392	0	254	0	1	647
	E	6	29	2	4	0	41
	Tot.	2007	1191	655	438	59	4350

Traffic Lane Flows

Lane	Scenario 19: 28RC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	681
1/2	1076
2/1	41
3/1	254
3/2	393
4/1	382
4/2	118
5/1	1309
5/2	96
6/1	1309
6/2	698
7/1	59
8/1	438
9/1	655
10/1	1191
11/1	211
11/2	4
12/1	833
12/2	1080
13/1	401
13/2	1115
14/1	1108
14/2	400
15/1	698
15/2	119

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.9 %	1866	1866
				Arm 12 Ahead	24.50	99.1 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.8 %	1871	1871
				Arm 13 Ahead	29.90	90.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	21.7 %	1878	1878
				Arm 15 Ahead	45.40	78.3 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	25.1 %	1886	1886
				Arm 12 Right	36.00	74.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 20: '28RC 17:00-18:00' (FG20: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1079	296	394	1	1771
	B	1423	5	89	0	23	1540
	C	232	77	0	145	28	482
	D	385	0	337	0	0	722
	E	0	22	6	1	0	29
	Tot.	2041	1183	728	540	52	4544

Traffic Lane Flows

Lane	Scenario 20: 28RC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	691
1/2	1080
2/1	29
3/1	337
3/2	385
4/1	309
4/2	173
5/1	1423
5/2	117
6/1	1423
6/2	618
7/1	52
8/1	540
9/1	728
10/1	1183
11/1	285
11/2	5
12/1	924
12/2	1085
13/1	391
13/2	1107
14/1	1106
14/2	386
15/1	618
15/2	173

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	24.9 %	1878	1878
				Arm 15 Ahead	45.40	75.1 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	17.9 %	1886	1886
				Arm 12 Right	36.00	82.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 21: '28PC 06:00-07:00' (FG21: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	682	83	218	1	984
	B	741	21	113	0	12	887
	C	79	7	0	0	2	88
	D	179	0	77	0	12	268
	E	9	20	0	1	0	30
	Tot.	1008	730	273	219	27	2257

Traffic Lane Flows

Lane	Scenario 21: 28PC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	302
1/2	682
2/1	30
3/1	77
3/2	191
4/1	86
4/2	2
5/1	741
5/2	146
6/1	741
6/2	267
7/1	27
8/1	219
9/1	273
10/1	730
11/1	139
11/2	21
12/1	414
12/2	703
13/1	196
13/2	732
14/1	723
14/2	200
15/1	267
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	8.1 %	1878	1878
				Arm 15 Ahead	45.40	91.9 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	18.7 %	1886	1886
				Arm 12 Right	36.00	81.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 22: '28PC 07:00-08:00' (FG22: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1181	197	291	5	1674
	B	1399	6	169	0	37	1611
	C	292	59	0	68	12	431
	D	364	4	196	0	15	579
	E	2	50	6	1	0	59
	Tot.	2057	1300	568	360	69	4354

Traffic Lane Flows

Lane	Scenario 22: 28PC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	493
1/2	1181
2/1	59
3/1	196
3/2	383
4/1	351
4/2	80
5/1	1399
5/2	212
6/1	1399
6/2	658
7/1	69
8/1	360
9/1	568
10/1	1300
11/1	301
11/2	6
12/1	725
12/2	1187
13/1	372
13/2	1239
14/1	1241
14/2	381
15/1	658
15/2	95

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	16.8 %	1878	1878
				Arm 15 Ahead	45.40	83.2 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	21.3 %	1886	1886
				Arm 12 Right	36.00	78.7 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 23: '28PC 08:00-09:00' (FG23: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1255	340	416	4	2015
	B	1614	12	177	0	11	1814
	C	410	81	0	100	2	593
	D	392	0	259	0	16	667
	E	9	70	22	5	0	106
	Tot.	2425	1418	798	521	33	5195

Traffic Lane Flows

Lane	Scenario 23: 28PC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	760
1/2	1255
2/1	106
3/1	259
3/2	408
4/1	491
4/2	102
5/1	1614
5/2	200
6/1	1614
6/2	811
7/1	33
8/1	521
9/1	798
10/1	1418
11/1	306
11/2	12
12/1	1033
12/2	1267
13/1	539
13/2	1346
14/1	1337
14/2	417
15/1	811
15/2	118

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.5 %	1866	1866
				Arm 12 Ahead	24.50	99.5 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.7 %	1871	1871
				Arm 13 Ahead	29.90	95.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	16.5 %	1878	1878
				Arm 15 Ahead	45.40	83.5 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	9.5 %	1886	1886
				Arm 12 Right	36.00	90.5 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 24: '28PC 15:00-16:00' (FG24: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1082	341	339	6	1769
	B	1278	4	79	0	48	1409
	C	398	83	4	103	4	592
	D	393	0	253	0	1	647
	E	6	29	2	4	0	41
	Tot.	2076	1198	679	446	59	4458

Traffic Lane Flows

Lane	Scenario 24: 28PC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	686
1/2	1083
2/1	41
3/1	253
3/2	394
4/1	481
4/2	111
5/1	1278
5/2	131
6/1	1278
6/2	798
7/1	59
8/1	446
9/1	679
10/1	1198
11/1	239
11/2	4
12/1	866
12/2	1087
13/1	426
13/2	1122
14/1	1115
14/2	401
15/1	798
15/2	112

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.9 %	1866	1866
				Arm 12 Ahead	24.50	99.1 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.8 %	1871	1871
				Arm 13 Ahead	29.90	90.2 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	17.3 %	1878	1878
				Arm 15 Ahead	45.40	82.7 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	22.2 %	1886	1886
				Arm 12 Right	36.00	77.8 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 25: '28PC 17:00-18:00' (FG25: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1074	265	403	1	1744
	B	1412	5	96	0	23	1536
	C	260	77	0	136	28	501
	D	386	0	342	0	0	728
	E	0	22	6	1	0	29
	Tot.	2059	1178	709	540	52	4538

Traffic Lane Flows

Lane	Scenario 25: 28PC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	669
1/2	1075
2/1	29
3/1	342
3/2	386
4/1	337
4/2	164
5/1	1412
5/2	124
6/1	1412
6/2	647
7/1	52
8/1	540
9/1	709
10/1	1178
11/1	283
11/2	5
12/1	900
12/2	1080
13/1	367
13/2	1102
14/1	1101
14/2	387
15/1	647
15/2	164

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.4 %	1871	1871
				Arm 13 Ahead	29.90	96.6 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.8 %	1878	1878
				Arm 15 Ahead	45.40	77.2 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	18.0 %	1886	1886
				Arm 12 Right	36.00	82.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 26: '34RC 06:00-07:00' (FG26: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	702	83	224	1	1010
	B	670	21	3	0	12	706
	C	29	7	0	0	2	38
	D	171	0	71	0	12	254
	E	10	20	0	1	0	31
	Tot.	880	750	157	225	27	2039

Traffic Lane Flows

Lane	Scenario 26: 34RC 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	308
1/2	702
2/1	31
3/1	71
3/2	183
4/1	36
4/2	2
5/1	670
5/2	36
6/1	670
6/2	210
7/1	27
8/1	225
9/1	157
10/1	750
11/1	29
11/2	21
12/1	310
12/2	723
13/1	86
13/2	753
14/1	743
14/2	193
15/1	210
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.2 %	1871	1871
				Arm 13 Ahead	29.90	96.8 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	89.7 %	1886	1886
				Arm 12 Right	36.00	10.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 27: '34RC 07:00-08:00' (FG27: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1207	197	303	5	1712
	B	1391	6	66	0	38	1501
	C	168	59	0	82	12	321
	D	361	4	208	0	16	589
	E	2	51	6	1	0	60
	Tot.	1922	1327	477	386	71	4183

Traffic Lane Flows

Lane	Scenario 27: 34RC 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	505
1/2	1207
2/1	60
3/1	208
3/2	381
4/1	227
4/2	94
5/1	1391
5/2	110
6/1	1391
6/2	531
7/1	71
8/1	386
9/1	477
10/1	1327
11/1	214
11/2	6
12/1	648
12/2	1213
13/1	269
13/2	1266
14/1	1268
14/2	379
15/1	531
15/2	110

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	30.8 %	1886	1886
				Arm 12 Right	36.00	69.2 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 28: '34RC 08:00-09:00' (FG28: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1262	397	402	4	2065
	B	1638	12	113	0	11	1774
	C	281	81	0	137	2	501
	D	386	0	283	0	17	686
	E	10	72	23	5	0	110
	Tot.	2315	1427	816	544	34	5136

Traffic Lane Flows

Lane	Scenario 28: 34RC 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	803
1/2	1262
2/1	110
3/1	283
3/2	403
4/1	362
4/2	139
5/1	1638
5/2	136
6/1	1638
6/2	677
7/1	34
8/1	544
9/1	816
10/1	1427
11/1	280
11/2	12
12/1	1049
12/2	1274
13/1	533
13/2	1356
14/1	1346
14/2	413
15/1	677
15/2	156

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.5 %	1866	1866
				Arm 12 Ahead	24.50	99.5 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.5 %	1871	1871
				Arm 13 Ahead	29.90	95.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.4 %	1878	1878
				Arm 15 Ahead	45.40	77.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	10.7 %	1886	1886
				Arm 12 Right	36.00	89.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 29: '34RC 15:00-16:00' (FG29: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1033	417	328	6	1785
	B	1361	4	44	0	49	1458
	C	322	83	4	123	4	536
	D	420	0	299	0	1	720
	E	6	30	2	4	0	42
	Tot.	2110	1150	766	455	60	4541

Traffic Lane Flows

Lane	Scenario 29: 34RC 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	751
1/2	1034
2/1	42
3/1	299
3/2	421
4/1	405
4/2	131
5/1	1361
5/2	97
6/1	1361
6/2	749
7/1	60
8/1	455
9/1	766
10/1	1150
11/1	225
11/2	4
12/1	916
12/2	1038
13/1	467
13/2	1074
14/1	1067
14/2	428
15/1	749
15/2	132

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.5 %	1871	1871
				Arm 13 Ahead	29.90	90.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	20.5 %	1878	1878
				Arm 15 Ahead	45.40	79.5 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	24.0 %	1886	1886
				Arm 12 Right	36.00	76.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 30: '34RC 17:00-18:00' (FG30: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1099	325	375	1	1801
	B	1518	5	89	0	24	1636
	C	231	77	0	190	29	527
	D	394	0	335	0	0	729
	E	0	23	6	1	0	30
	Tot.	2144	1204	755	566	54	4723

Traffic Lane Flows

Lane	Scenario 30: 34RC 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	701
1/2	1100
2/1	30
3/1	335
3/2	394
4/1	308
4/2	219
5/1	1518
5/2	118
6/1	1518
6/2	626
7/1	54
8/1	566
9/1	755
10/1	1204
11/1	332
11/2	5
12/1	979
12/2	1105
13/1	420
13/2	1128
14/1	1127
14/2	395
15/1	626
15/2	219

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	25.0 %	1878	1878
				Arm 15 Ahead	45.40	75.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	16.0 %	1886	1886
				Arm 12 Right	36.00	84.0 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 31: '34OP 06:00-07:00' (FG31: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	702	83	224	1	1010
	B	670	21	3	0	12	706
	C	29	7	0	0	2	38
	D	171	0	71	0	12	254
	E	10	20	0	1	0	31
	Tot.	880	750	157	225	27	2039

Traffic Lane Flows

Lane	Scenario 31: 34OP 06:00-07:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	308
1/2	702
2/1	31
3/1	71
3/2	183
4/1	36
4/2	2
5/1	670
5/2	36
6/1	670
6/2	210
7/1	27
8/1	225
9/1	157
10/1	750
11/1	29
11/2	21
12/1	310
12/2	723
13/1	86
13/2	753
14/1	743
14/2	193
15/1	210
15/2	14

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.3 %	1866	1866
				Arm 12 Ahead	24.50	99.7 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.2 %	1871	1871
				Arm 13 Ahead	29.90	96.8 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	19.4 %	1878	1878
				Arm 15 Ahead	45.40	80.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	89.7 %	1886	1886
				Arm 12 Right	36.00	10.3 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 32: '34OP 07:00-08:00' (FG32: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1218	197	305	5	1725
	B	1395	6	66	0	38	1505
	C	168	59	0	82	12	321
	D	361	4	208	0	16	589
	E	2	51	6	1	0	60
	Tot.	1926	1338	477	388	71	4200

Traffic Lane Flows

Lane	Scenario 32: 34OP 07:00-08:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	507
1/2	1218
2/1	60
3/1	208
3/2	381
4/1	227
4/2	94
5/1	1395
5/2	110
6/1	1395
6/2	531
7/1	71
8/1	388
9/1	477
10/1	1338
11/1	214
11/2	6
12/1	650
12/2	1224
13/1	269
13/2	1277
14/1	1279
14/2	379
15/1	531
15/2	110

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	1.0 %	1866	1866
				Arm 12 Ahead	24.50	99.0 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	1.7 %	1871	1871
				Arm 13 Ahead	29.90	98.3 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	26.0 %	1878	1878
				Arm 15 Ahead	45.40	74.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	30.8 %	1886	1886
				Arm 12 Right	36.00	69.2 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 33: '34OP 08:00-09:00' (FG33: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1262	415	407	4	2088
	B	1675	12	113	0	11	1811
	C	281	81	0	146	2	510
	D	388	0	283	0	17	688
	E	10	72	23	5	0	110
	Tot.	2354	1427	834	558	34	5207

Traffic Lane Flows

Lane	Scenario 33: 34OP 08:00-09:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	826
1/2	1262
2/1	110
3/1	283
3/2	405
4/1	362
4/2	148
5/1	1675
5/2	136
6/1	1675
6/2	679
7/1	34
8/1	558
9/1	834
10/1	1427
11/1	289
11/2	12
12/1	1081
12/2	1274
13/1	551
13/2	1356
14/1	1346
14/2	415
15/1	679
15/2	165

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.5 %	1866	1866
				Arm 12 Ahead	24.50	99.5 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	4.5 %	1871	1871
				Arm 13 Ahead	29.90	95.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	22.4 %	1878	1878
				Arm 15 Ahead	45.40	77.6 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	10.4 %	1886	1886
				Arm 12 Right	36.00	89.6 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 34: '34OP 15:00-16:00' (FG34: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1029	415	329	6	1780
	B	1359	4	44	0	49	1456
	C	326	83	4	122	4	539
	D	420	0	299	0	1	720
	E	6	30	2	4	0	42
	Tot.	2112	1146	764	455	60	4537

Traffic Lane Flows

Lane	Scenario 34: 34OP 15:00-16:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	750
1/2	1030
2/1	42
3/1	299
3/2	421
4/1	409
4/2	130
5/1	1359
5/2	97
6/1	1359
6/2	753
7/1	60
8/1	455
9/1	764
10/1	1146
11/1	224
11/2	4
12/1	914
12/2	1034
13/1	465
13/2	1070
14/1	1063
14/2	428
15/1	753
15/2	131

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.8 %	1866	1866
				Arm 12 Ahead	24.50	99.2 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	9.5 %	1871	1871
				Arm 13 Ahead	29.90	90.5 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	20.3 %	1878	1878
				Arm 15 Ahead	45.40	79.7 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	24.1 %	1886	1886
				Arm 12 Right	36.00	75.9 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 35: '34OP 17:00-18:00' (FG35: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1099	324	375	1	1800
	B	1518	5	89	0	24	1636
	C	231	77	0	191	29	528
	D	394	0	335	0	0	729
	E	0	23	6	1	0	30
	Tot.	2144	1204	754	567	54	4723

Traffic Lane Flows

Lane	Scenario 35: 34OP 17:00-18:00
Junction: A12 / A14 / A1156 Seven Hills Interchange	
1/1	700
1/2	1100
2/1	30
3/1	335
3/2	394
4/1	308
4/2	220
5/1	1518
5/2	118
6/1	1518
6/2	626
7/1	54
8/1	567
9/1	754
10/1	1204
11/1	333
11/2	5
12/1	979
12/2	1105
13/1	419
13/2	1128
14/1	1127
14/2	395
15/1	626
15/2	220

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / A14 / A1156 Seven Hills Interchange

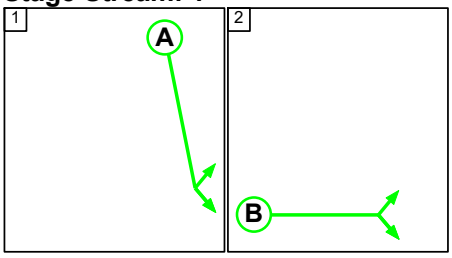
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 North)	3.65	0.00	Y	Arm 7 Left	24.50	0.1 %	1866	1866
				Arm 12 Ahead	24.50	99.9 %		
1/2 (A12 North)	3.65	0.00	Y	Arm 12 Ahead	24.50	100.0 %	1866	1866
2/1 (Unnamed Road)	3.50	0.00	Y	Arm 8 Left	29.90	3.3 %	1871	1871
				Arm 13 Ahead	29.90	96.7 %		
3/1 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 9 Left	44.60	100.0 %	1877	1877
3/2 (A14 Off-Slip (East))	3.25	0.00	Y	Arm 14 Ahead	44.60	100.0 %	1877	1877
4/1 (A1156)	3.25	0.00	Y	Arm 10 Left	45.40	25.0 %	1878	1878
				Arm 15 Ahead	45.40	75.0 %		
4/2 (A1156)	3.25	0.00	Y	Arm 15 Ahead	45.40	100.0 %	1878	1878
5/1 (A14 Off-Slip (West) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A14 Off-Slip (West))	3.25	0.00	Y	Arm 11 Ahead	40.50	100.0 %	1871	1871
6/1 (A12 North - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A12 North - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (Unnamed Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	3.50	0.00	Y	Arm 7 Left	36.00	15.9 %	1886	1886
				Arm 12 Right	36.00	84.1 %		
11/2	3.50	0.00	Y	Arm 12 Right	36.00	100.0 %	1886	1886
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf
13/1	3.25	0.00	Y	Arm 9 Ahead	45.00	100.0 %	1877	1877
13/2	3.25	0.00	Y	Arm 14 Right	45.00	100.0 %	1877	1877
14/1	3.25	0.00	N	Arm 10 Ahead	41.00	100.0 %	2007	2007
14/2	3.25	0.00	Y	Arm 15 Right	41.00	100.0 %	1872	1872
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

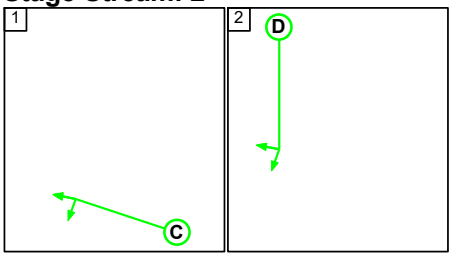
Scenario 1: 'BY 06:00-07:00' (FG1: 'BY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

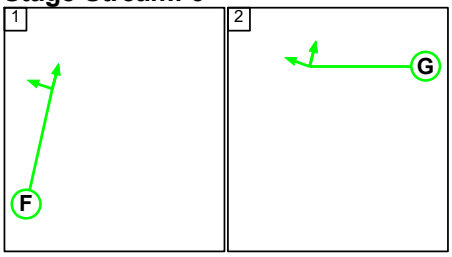
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

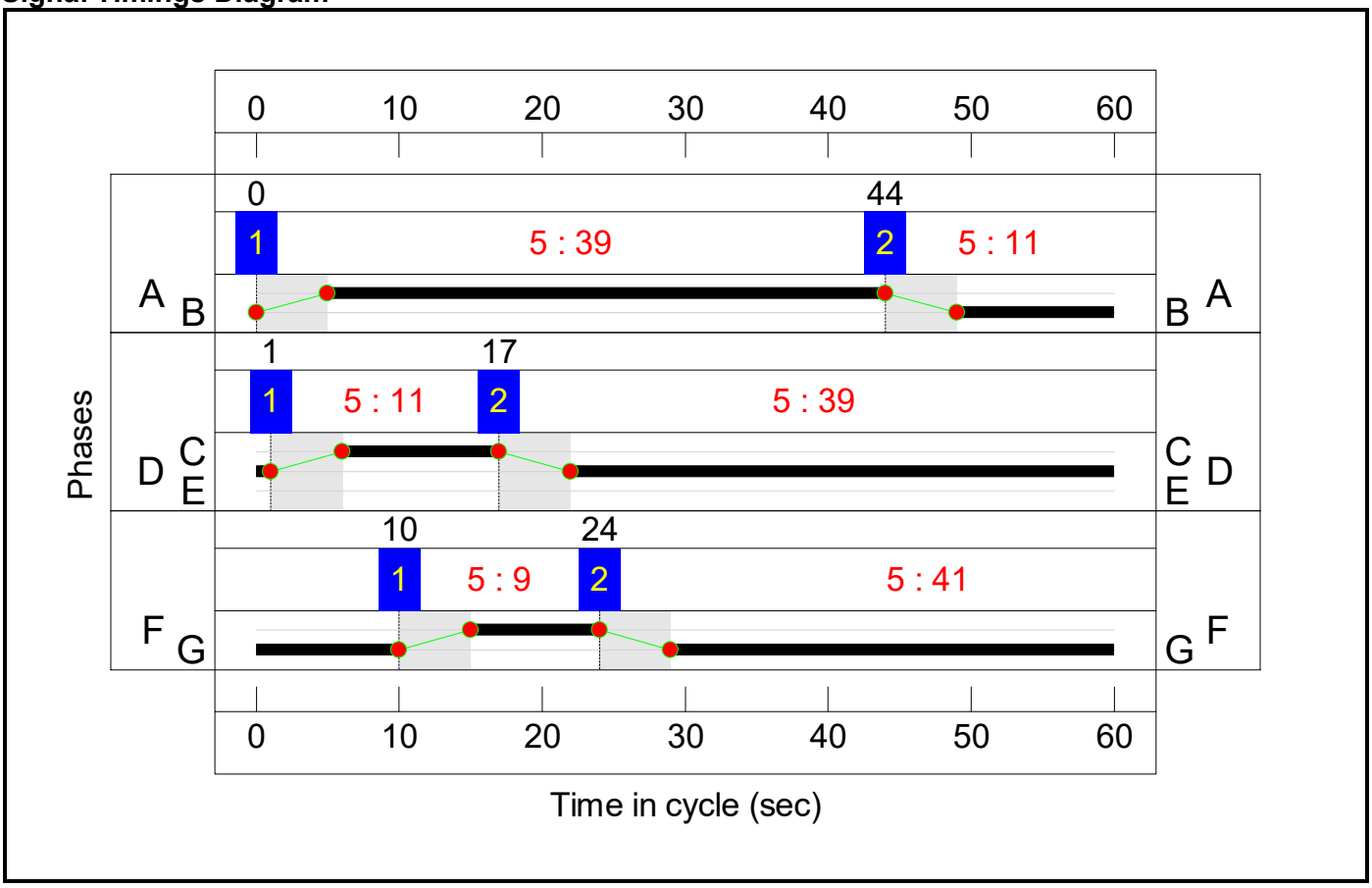
Stage	1	2
Duration	11	39
Change Point	1	17

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	10	24

Full Input Data And Results

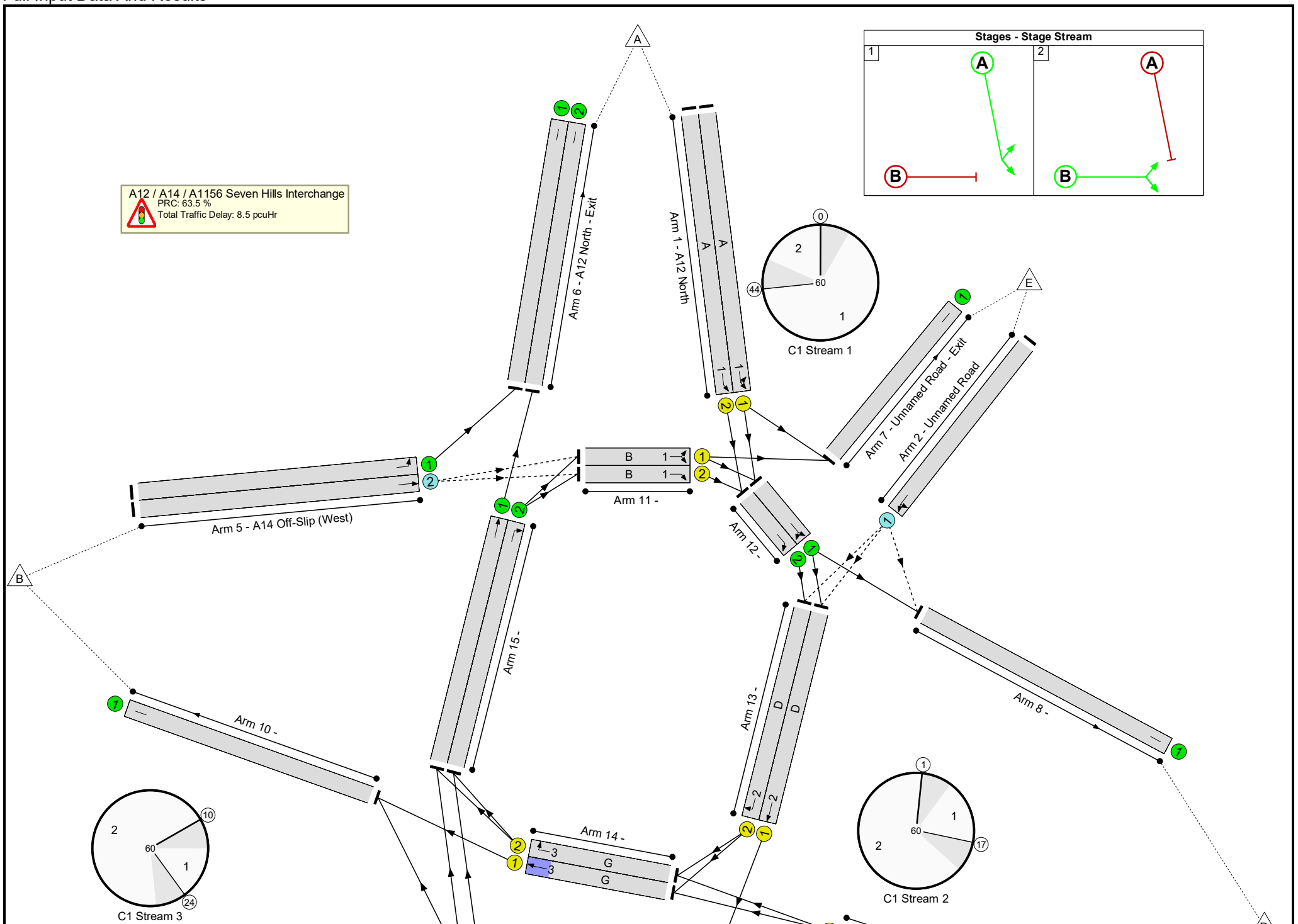
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	282	1866	1244	22.7%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	643	1866	1244	51.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	26	1871	642	4.0%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	70	1877	375	18.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	171	1877	375	45.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	36	1878	313	11.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	137	1878	313	43.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	34	1871	886	3.8%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	144	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	160	1886	377	42.4%
11/2	Right	U	1	N/A	B		1	11	-	21	1886	377	5.6%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	74	1877	1251	5.9%
13/2	Right	U	2	N/A	D		1	39	-	689	1877	1251	55.1%
14/1	Ahead	U	3	N/A	G		1	41	-	681	2007	1405	48.5%
14/2	Right	U	3	N/A	G		1	41	-	179	1872	1310	13.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	147	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**60**	**0**	**0**	**5.2**	**3.3**	**0.0**	**8.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**60**	**0**	**0**	**5.2**	**3.3**	**0.0**	**8.5**	**-**	**-**	**-**	**-**
1/1	282	282	-	-	-	0.3	0.1	-	0.5	5.8	1.8	0.1	1.9
1/2	643	643	-	-	-	0.9	0.5	-	1.4	8.1	5.4	0.5	5.9
2/1	26	26	26	0	0	0.0	0.0	-	0.0	3.0	0.0	0.0	0.0
3/1	70	70	-	-	-	0.4	0.1	-	0.5	25.9	1.0	0.1	1.1
3/2	171	171	-	-	-	1.0	0.4	-	1.4	29.9	2.5	0.4	2.9
4/1	36	36	-	-	-	0.2	0.1	-	0.3	27.7	0.5	0.1	0.6
4/2	137	137	-	-	-	0.9	0.4	-	1.2	32.7	2.0	0.4	2.4
5/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	34	34	34	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.0
6/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	144	144	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	688	688	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	160	160	-	-	-	0.4	0.4	-	0.8	17.5	2.3	0.4	2.7
11/2	21	21	-	-	-	0.1	0.0	-	0.1	24.7	0.3	0.0	0.3
12/1	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	74	74	-	-	-	0.0	0.0	-	0.1	3.1	0.1	0.0	0.2
13/2	689	689	-	-	-	0.3	0.6	-	0.9	4.9	2.1	0.6	2.7
14/1	681	681	-	-	-	0.1	0.5	-	0.5	2.8	0.2	0.5	0.7

Full Input Data And Results

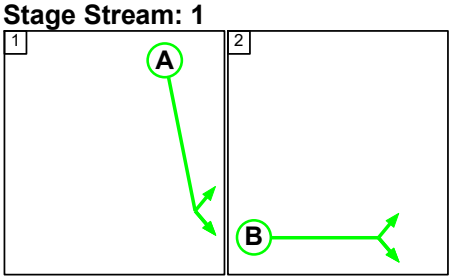
14/2	179	179	-	-	-	0.6	0.1	-	0.7	14.2	2.9	0.1	3.0
15/1	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	147	147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	74.1	Total Delay for Signalled Lanes (pcuHr):	2.82	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	63.5	Total Delay for Signalled Lanes (pcuHr):	2.93	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	85.7	Total Delay for Signalled Lanes (pcuHr):	2.76	Cycle Time (s): 60
	PRC Over All Lanes (%):	63.5	Total Delay Over All Lanes(pcuHr):	8.54	

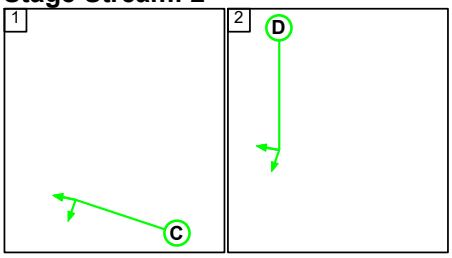
Full Input Data And Results
Scenario 2: 'BY 07:00-08:00' (FG2: 'BY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

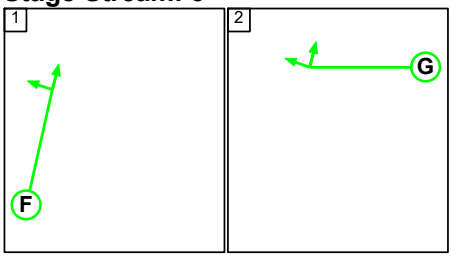
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	6	51

Stage Stream: 2

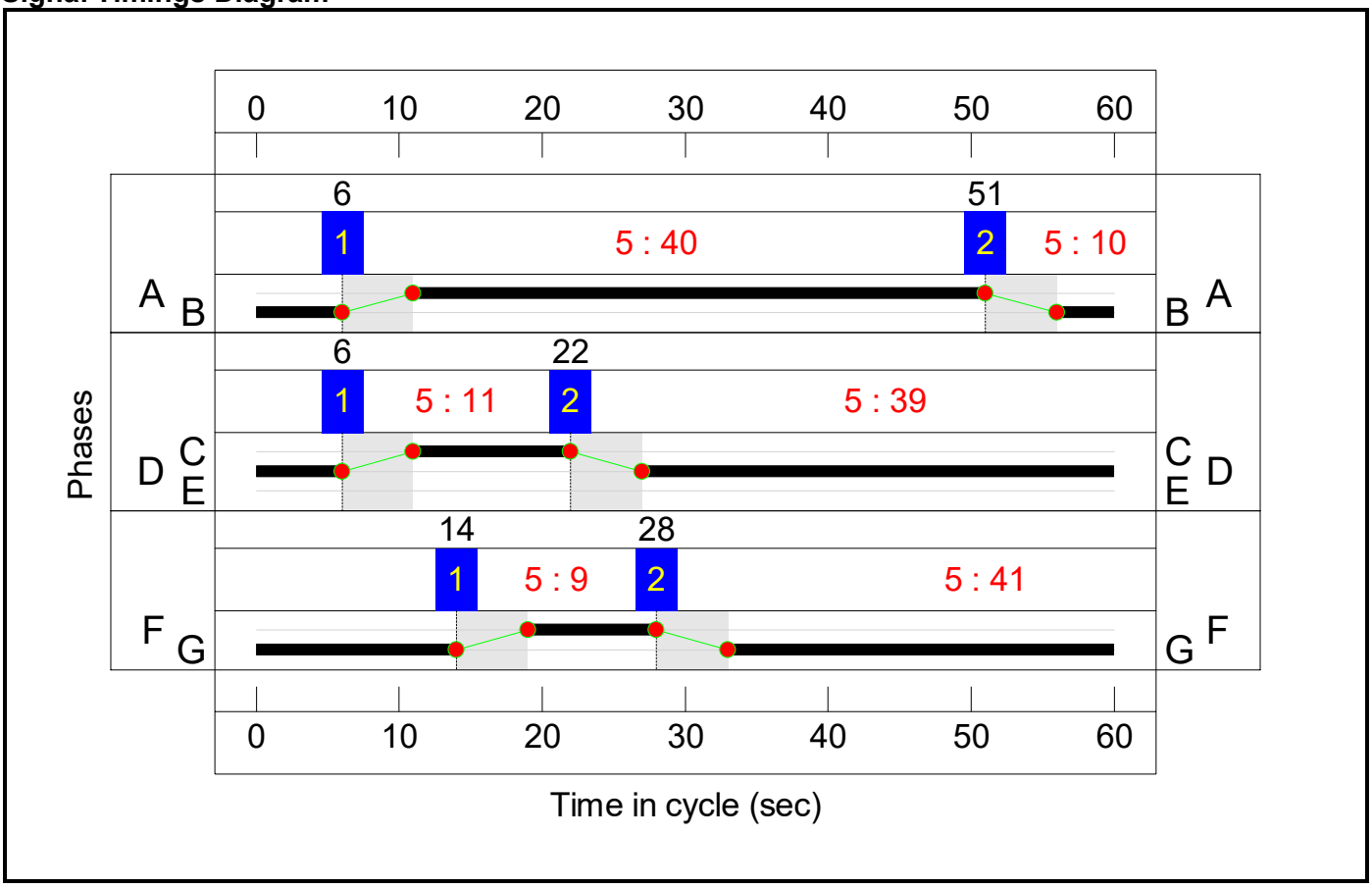
Stage	1	2
Duration	11	39
Change Point	6	22

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	14	28

Full Input Data And Results

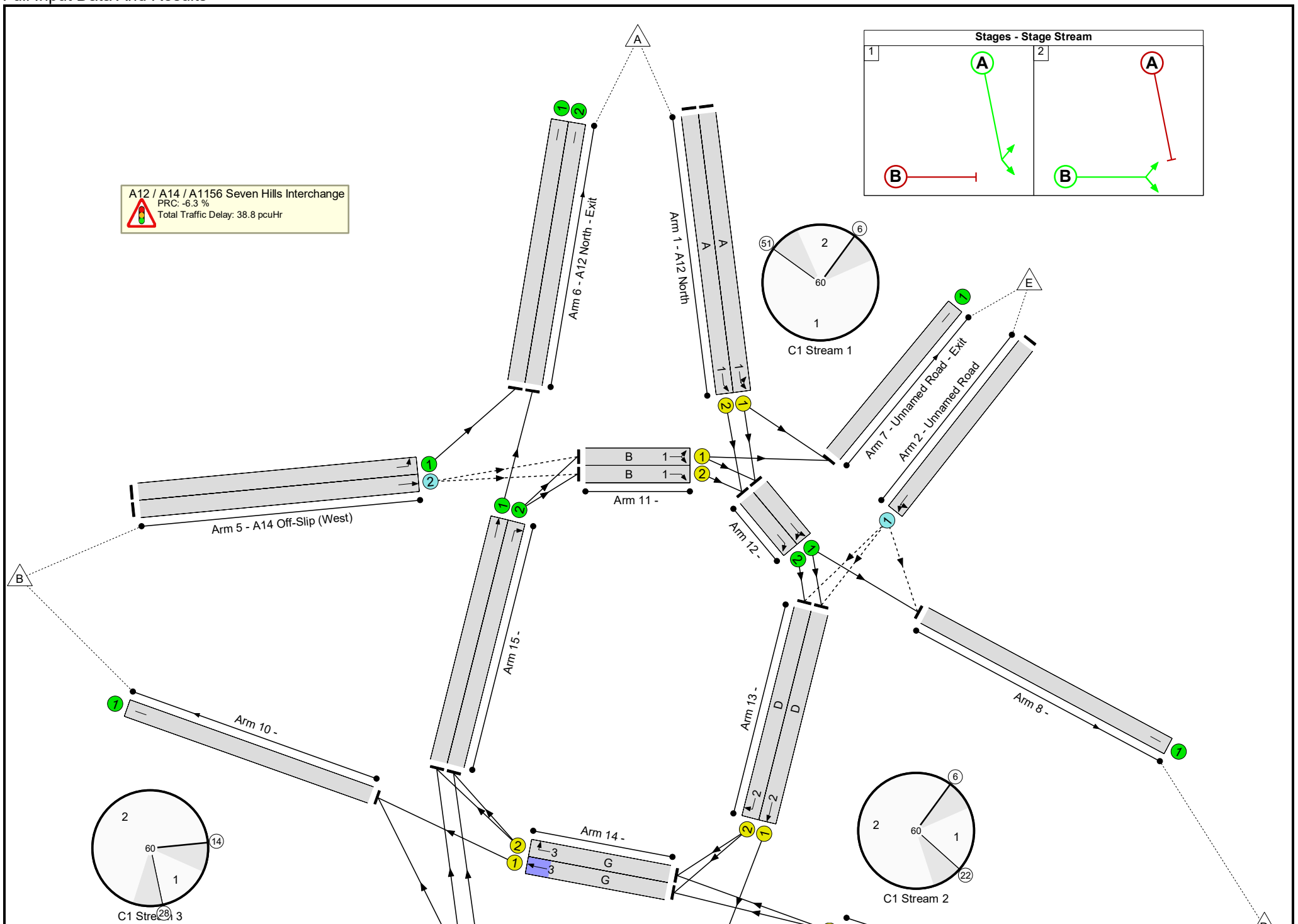
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.6%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	474	1866	1275	37.2%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1143	1866	1275	89.6%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	51	1871	402	12.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	205	1877	375	54.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	359	1877	375	95.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	217	1878	313	69.3%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	164	1878	313	52.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1252	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	104	1871	776	13.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1252	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1255	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	275	1886	346	79.5%
11/2	Right	U	1	N/A	B		1	10	-	6	1886	346	1.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	690	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1149	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	255	1877	1251	20.4%
13/2	Right	U	2	N/A	D		1	39	-	1194	1877	1251	95.4%
14/1	Ahead	U	3	N/A	G		1	41	-	1196	2007	1405	85.1%
14/2	Right	U	3	N/A	G		1	41	-	357	1872	1310	27.2%
15/1	Ahead	U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**155**	**0**	**0**	**12.8**	**26.1**	**0.0**	**38.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**155**	**0**	**0**	**12.8**	**26.1**	**0.0**	**38.8**	**-**	**-**	**-**	**-**
1/1	474	474	-	-	-	0.5	0.3	-	0.8	6.3	3.3	0.3	3.6
1/2	1143	1143	-	-	-	2.5	4.1	-	6.5	20.6	15.6	4.1	19.6
2/1	51	51	51	0	0	0.0	0.1	-	0.1	5.6	0.1	0.1	0.2
3/1	205	205	-	-	-	1.2	0.6	-	1.8	32.1	3.0	0.6	3.6
3/2	359	359	-	-	-	2.4	6.2	-	8.6	86.2	5.9	6.2	12.1
4/1	217	217	-	-	-	1.4	1.1	-	2.5	41.9	3.4	1.1	4.5
4/2	164	164	-	-	-	1.0	0.5	-	1.6	34.8	2.5	0.5	3.0
5/1	1252	1252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	104	104	104	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
6/1	1252	1252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1255	1255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	275	275	-	-	-	1.2	1.8	-	3.1	40.3	4.4	1.8	6.3
11/2	6	6	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	690	690	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1149	1149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	255	255	-	-	-	0.2	0.1	-	0.3	4.9	1.4	0.1	1.5
13/2	1194	1194	-	-	-	0.8	8.1	-	8.9	26.8	6.8	8.1	14.9
14/1	1196	1196	-	-	-	0.2	2.8	-	3.0	9.0	0.7	2.8	3.5

Full Input Data And Results

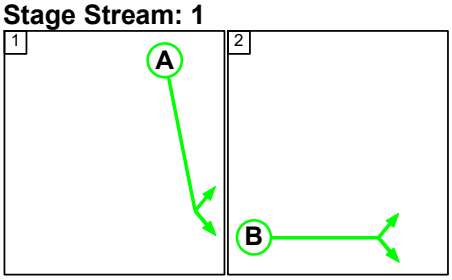
14/2	357	357	-	-	-	1.2	0.2	-	1.4	14.3	5.9	0.2	6.1
15/1	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 Stream: 1 PRC for Signalled Lanes (%):	0.4	Total Delay for Signalled Lanes (pcuHr):	10.49	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):	-6.3	Total Delay for Signalled Lanes (pcuHr):	19.67	Cycle Time (s):	60
C1 Stream: 3 PRC for Signalled Lanes (%):	5.7	Total Delay for Signalled Lanes (pcuHr):	8.51	Cycle Time (s):	60
PRC Over All Lanes (%):	-6.3	Total Delay Over All Lanes(pcuHr):	38.83		

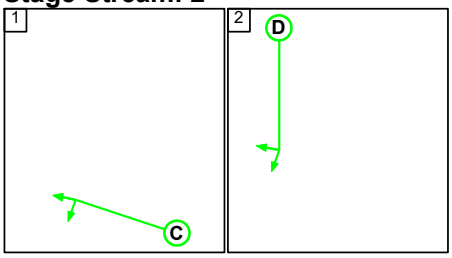
Full Input Data And Results
Scenario 3: 'BY 08:00-09:00' (FG3: 'BY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

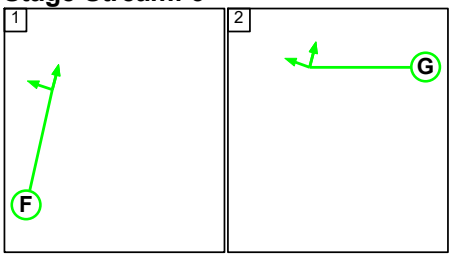
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	5	49

Stage Stream: 2

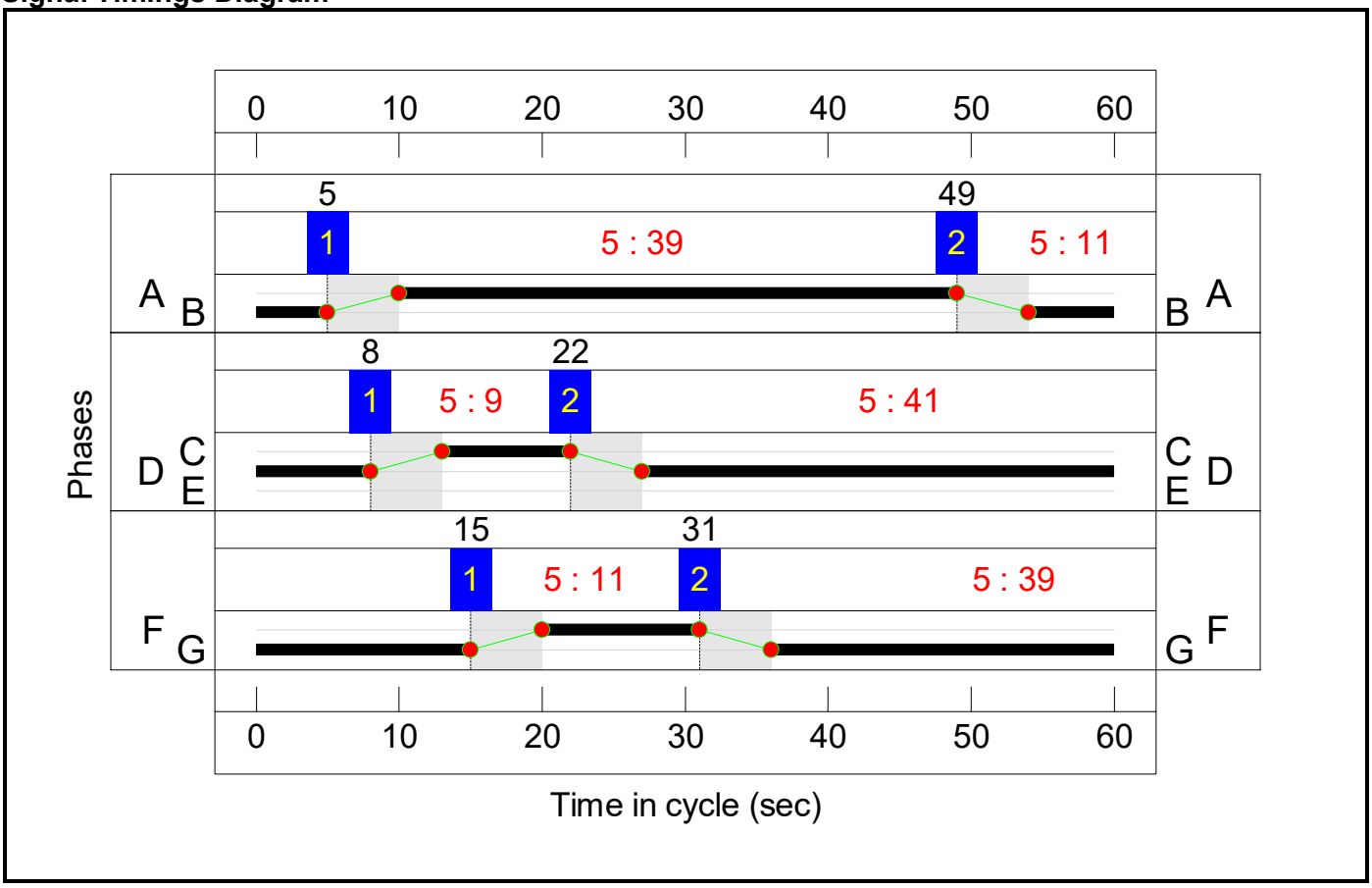
Stage	1	2
Duration	9	41
Change Point	8	22

Stage Stream: 3

Stage	1	2
Duration	11	39
Change Point	15	31

Full Input Data And Results

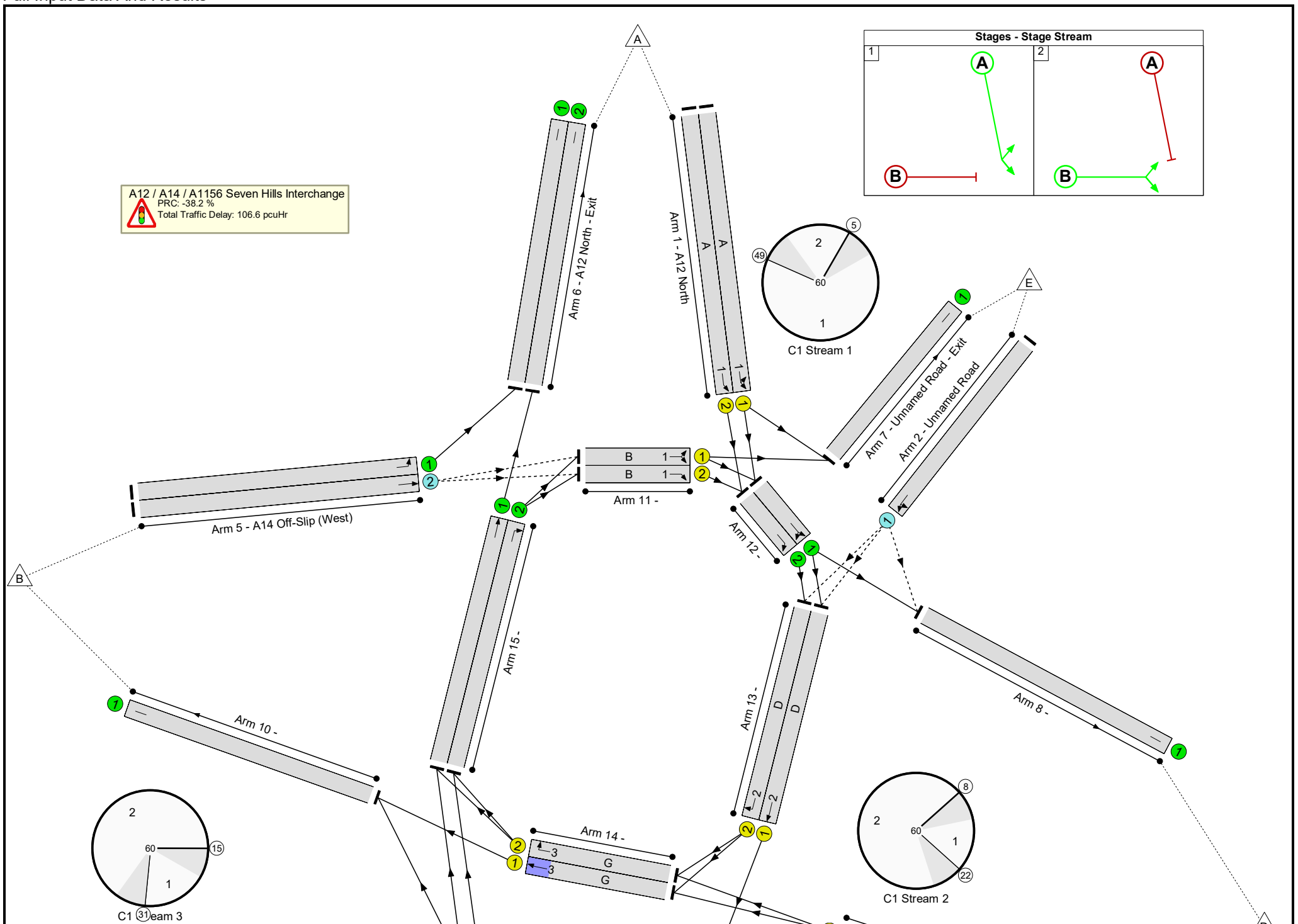
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**124.3%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**124.3%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	717	1866	1244	57.6%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	1215	1866	1244	97.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	91	1871	283	32.1%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	233	1877	313	74.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	389	1877	313	124.3%
4/1	A1156 Left Ahead	U	3	N/A	F		1	11	-	344	1878	376	91.6%
4/2	A1156 Ahead	U	3	N/A	F		1	11	-	218	1878	376	58.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1546	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	134	1871	735	18.2%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1546	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1368	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	354	1886	377	93.1%
11/2	Right	U	1	N/A	B		1	11	-	12	1886	377	3.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1043	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1227	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	444	1877	1314	33.8%
13/2	Right	U	2	N/A	D		1	41	-	1295	1877	1314	98.6%
14/1	Ahead	U	3	N/A	G		1	39	-	1287	2007	1338	96.2%
14/2	Right	U	3	N/A	G		1	39	-	397	1872	1248	25.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	232	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**225**	**0**	**0**	**18.6**	**88.0**	**0.0**	**106.6**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**225**	**0**	**0**	**18.6**	**88.0**	**0.0**	**106.6**	**-**	**-**	**-**	**-**
1/1	717	717	-	-	-	1.1	0.7	-	1.8	8.8	6.4	0.7	7.1
1/2	1215	1215	-	-	-	3.2	11.6	-	14.9	44.0	19.2	11.6	30.9
2/1	91	91	91	0	0	0.1	0.2	-	0.3	13.3	0.9	0.2	1.1
3/1	233	233	-	-	-	1.5	1.4	-	2.9	45.6	3.7	1.4	5.1
3/2	389	313	-	-	-	4.8	40.5	-	45.3	419.4	7.8	40.5	48.2
4/1	344	344	-	-	-	2.2	4.3	-	6.5	68.3	5.5	4.3	9.8
4/2	218	218	-	-	-	1.3	0.7	-	2.0	33.1	3.3	0.7	4.0
5/1	1546	1546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	134	134	134	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1546	1546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1368	1368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	351	351	-	-	-	1.5	4.9	-	6.4	65.6	5.8	4.9	10.7
11/2	12	12	-	-	-	0.1	0.0	-	0.1	24.5	0.2	0.0	0.2
12/1	1043	1043	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1227	1227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	444	444	-	-	-	0.4	0.3	-	0.6	5.1	2.7	0.3	2.9
13/2	1295	1295	-	-	-	0.6	13.9	-	14.5	40.2	11.6	13.9	25.5
14/1	1287	1287	-	-	-	0.6	9.3	-	9.8	27.4	3.7	9.3	12.9

Full Input Data And Results

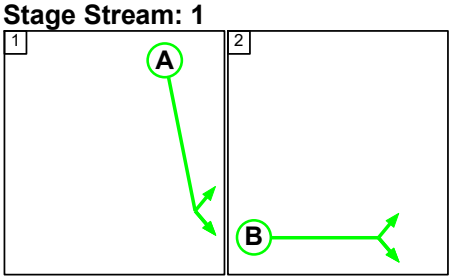
14/2	321	321	-	-	-	1.2	0.2	-	1.4	15.3	5.3	0.2	5.4
15/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	229	229	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-8.5	Total Delay for Signalled Lanes (pcuHr):	23.09	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-38.2	Total Delay for Signalled Lanes (pcuHr):	63.35	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-6.9	Total Delay for Signalled Lanes (pcuHr):	19.70	Cycle Time (s): 60
	PRC Over All Lanes (%):	-38.2	Total Delay Over All Lanes(pcuHr):	106.59	

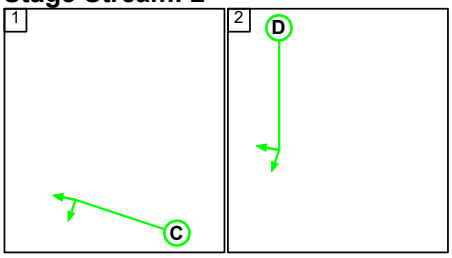
Full Input Data And Results
Scenario 4: 'BY 15:00-16:00' (FG4: 'BY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

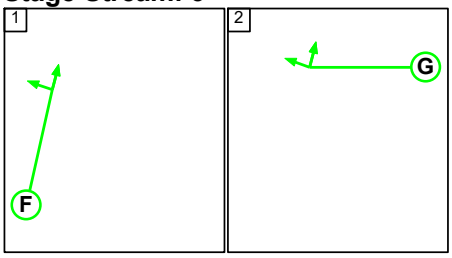
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	8	54

Stage Stream: 2

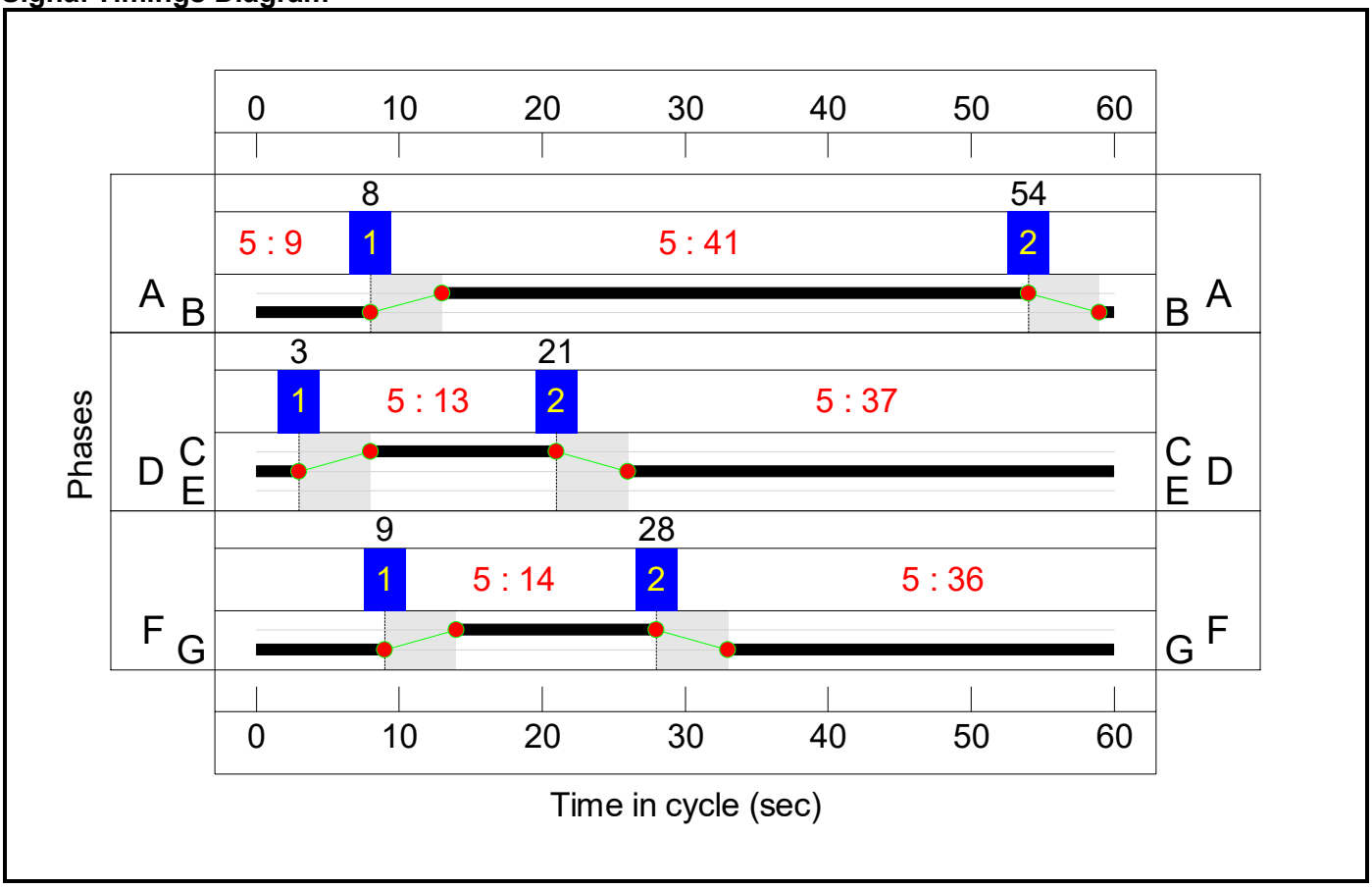
Stage	1	2
Duration	13	37
Change Point	3	21

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	9	28

Full Input Data And Results

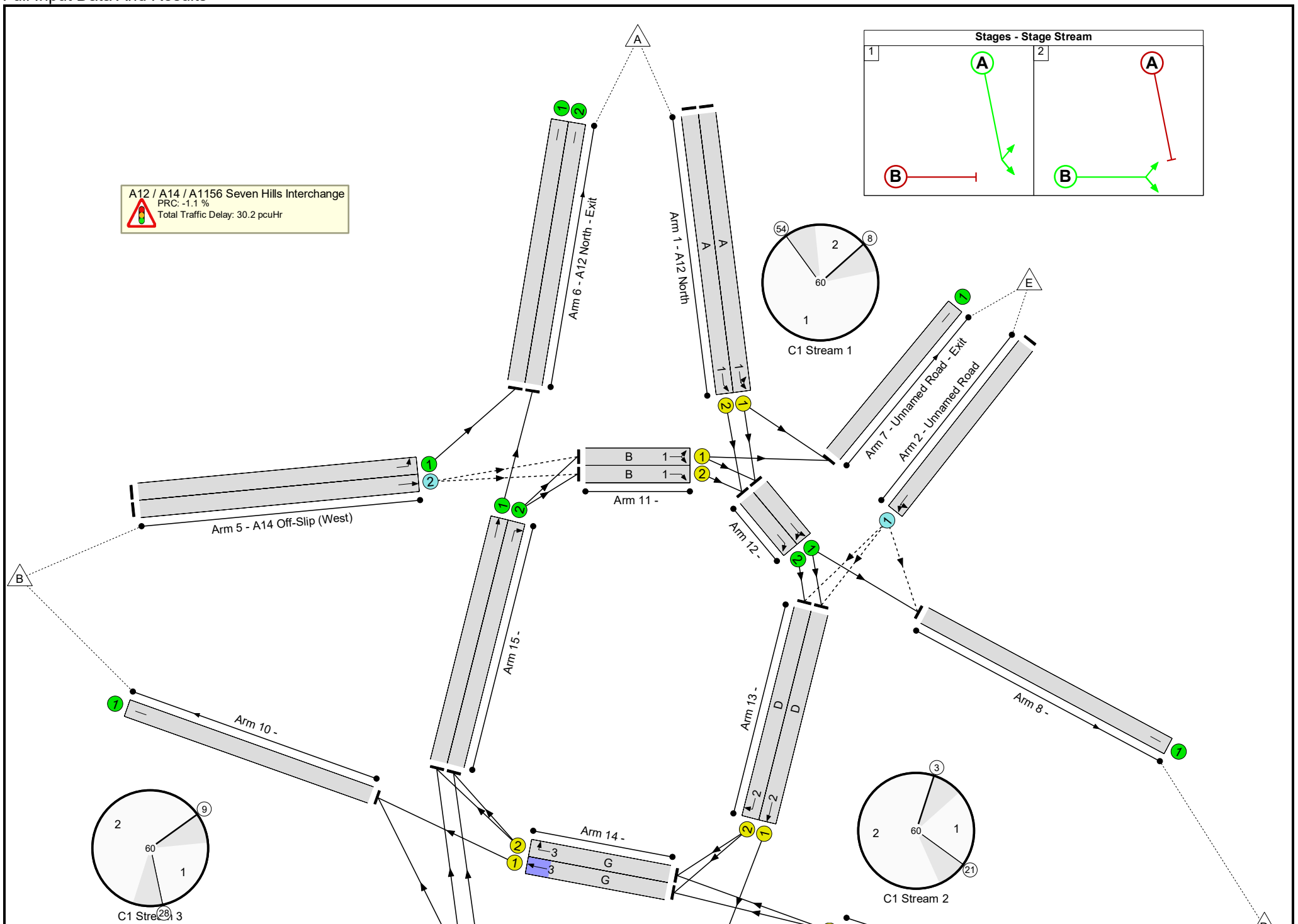
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.0%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.0%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	609	1866	1306	46.6%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	1048	1866	1306	80.2%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	35	1871	409	8.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	190	1877	438	43.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	358	1877	438	81.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	370	1878	470	78.8%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	146	1878	470	31.1%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1189	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	89	1871	737	12.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1189	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1159	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	232	1886	314	73.8%
11/2	Right	U	1	N/A	B		1	9	-	4	1886	314	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	791	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1052	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	341	1877	1189	28.7%
13/2	Right	U	2	N/A	D		1	37	-	1082	1877	1189	91.0%
14/1	Ahead	U	3	N/A	G		1	36	-	1076	2007	1238	86.9%
14/2	Right	U	3	N/A	G		1	36	-	364	1872	1154	31.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	147	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**124**	**0**	**0**	**13.5**	**16.7**	**0.0**	**30.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**124**	**0**	**0**	**13.5**	**16.7**	**0.0**	**30.2**	**-**	**-**	**-**	**-**
1/1	609	609	-	-	-	0.7	0.4	-	1.1	6.6	4.4	0.4	4.8
1/2	1048	1048	-	-	-	1.8	2.0	-	3.8	13.0	11.9	2.0	13.9
2/1	35	35	35	0	0	0.0	0.0	-	0.1	5.6	0.1	0.0	0.2
3/1	190	190	-	-	-	1.0	0.4	-	1.4	26.9	2.7	0.4	3.1
3/2	358	358	-	-	-	2.2	2.1	-	4.3	43.2	5.6	2.1	7.7
4/1	370	370	-	-	-	2.2	1.8	-	4.0	38.5	5.8	1.8	7.6
4/2	146	146	-	-	-	0.7	0.2	-	1.0	23.9	1.9	0.2	2.2
5/1	1189	1189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	89	89	89	0	0	0.0	0.1	-	0.1	2.8	0.0	0.1	0.1
6/1	1189	1189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1159	1159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	232	232	-	-	-	1.3	1.4	-	2.6	41.0	3.8	1.4	5.1
11/2	4	4	-	-	-	0.0	0.0	-	0.0	27.0	0.1	0.0	0.1
12/1	791	791	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1052	1052	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	341	341	-	-	-	0.3	0.2	-	0.5	5.6	1.6	0.2	1.9
13/2	1082	1082	-	-	-	1.3	4.7	-	5.9	19.8	6.3	4.7	11.0
14/1	1076	1076	-	-	-	0.4	3.2	-	3.6	12.2	1.6	3.2	4.8

Full Input Data And Results

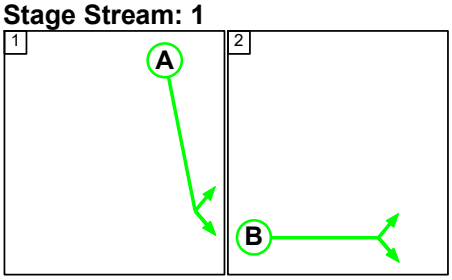
14/2	364	364	-	-	-	1.5	0.2	-	1.8	17.6	6.0	0.2	6.2
15/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	147	147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	12.2	Total Delay for Signalled Lanes (pcuHr):	7.58	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-1.1	Total Delay for Signalled Lanes (pcuHr):	12.18	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	3.5	Total Delay for Signalled Lanes (pcuHr):	10.34	Cycle Time (s): 60
	PRC Over All Lanes (%):	-1.1	Total Delay Over All Lanes(pcuHr):	30.22	

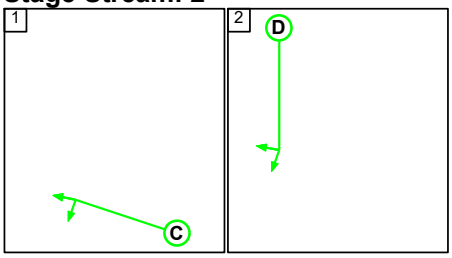
Full Input Data And Results
Scenario 5: 'BY 17:00-18:00' (FG5: 'BY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

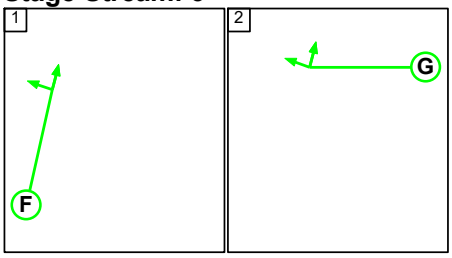
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

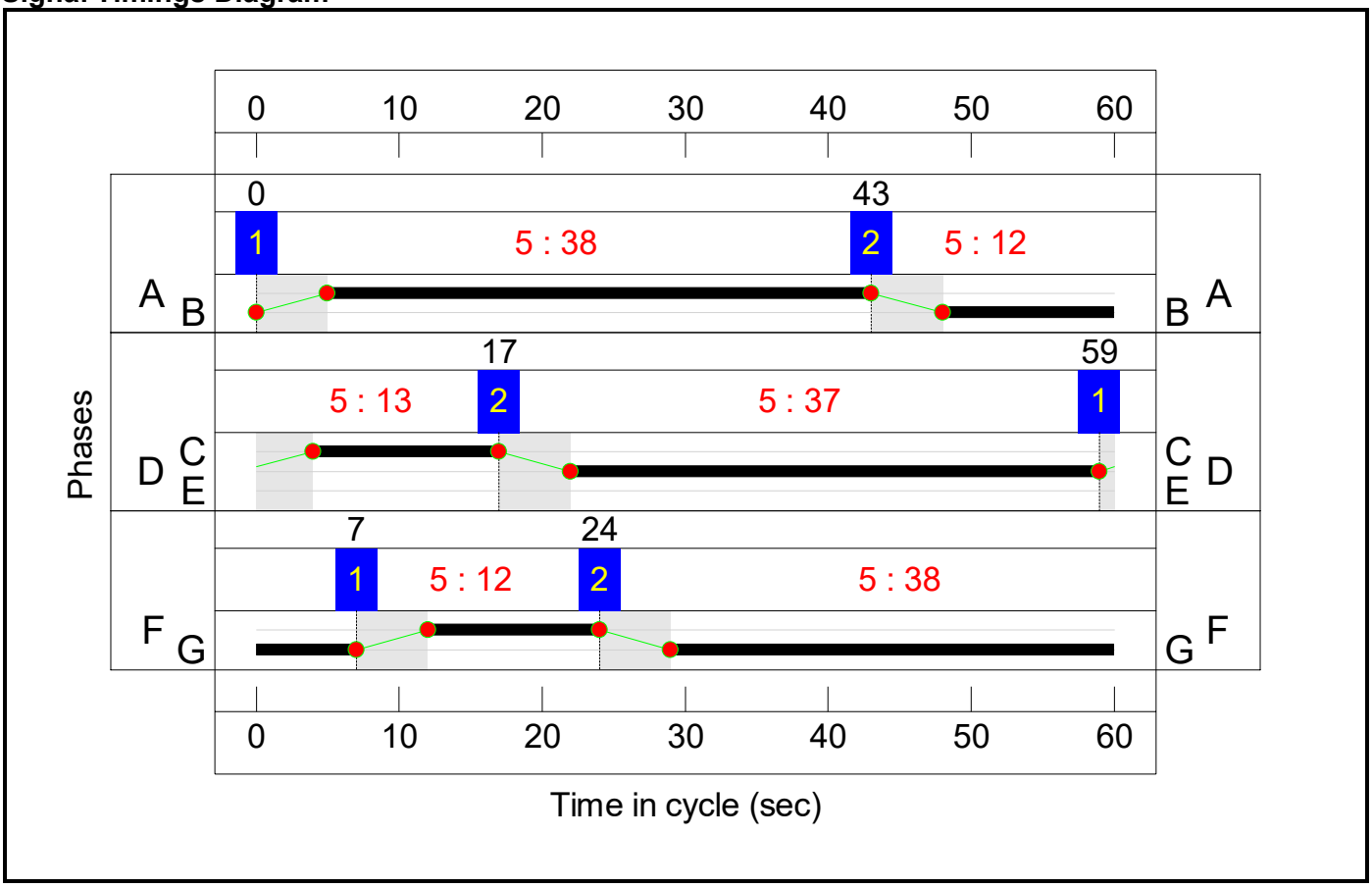
Stage	1	2
Duration	13	37
Change Point	59	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	7	24

Full Input Data And Results

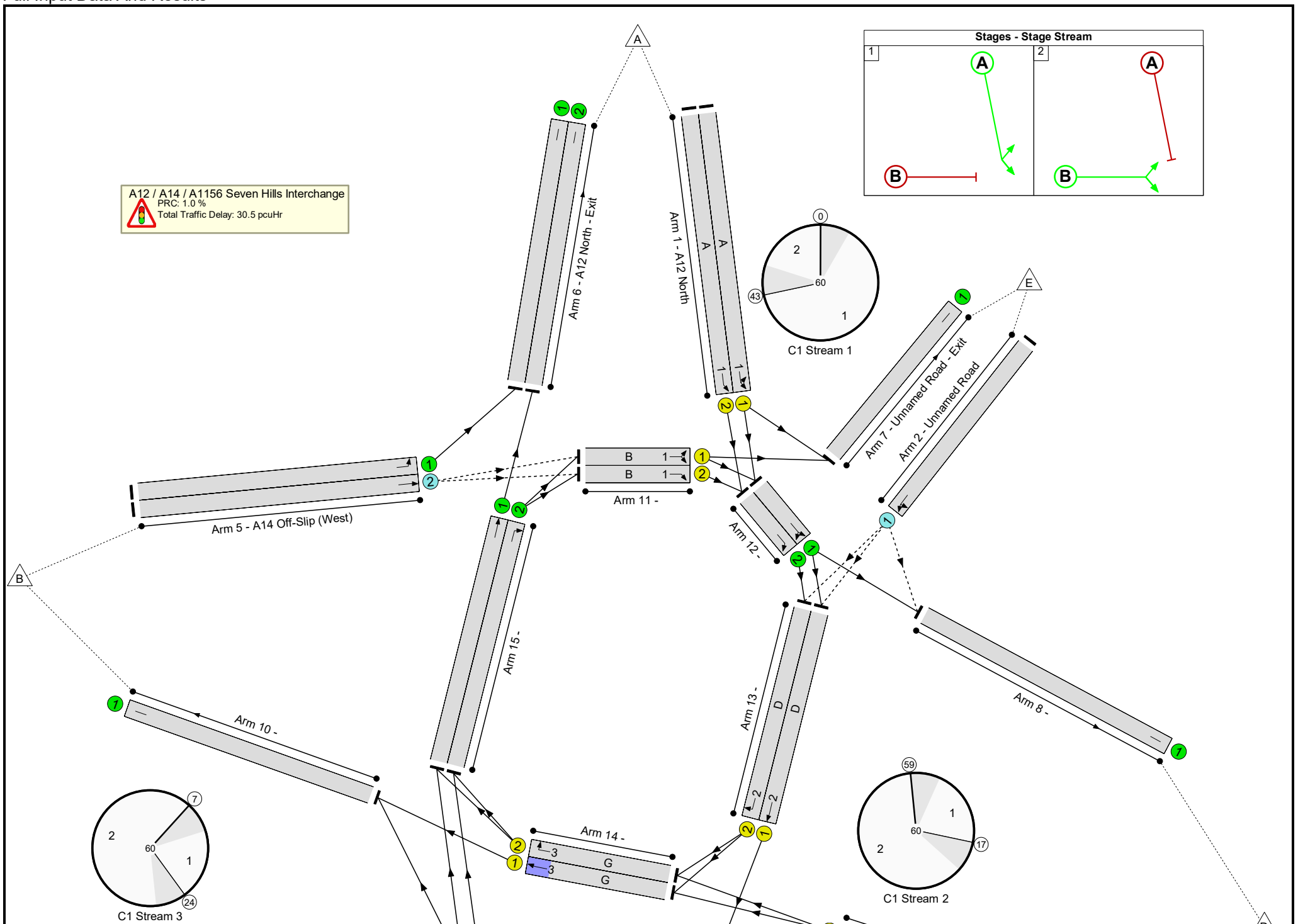
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	612	1866	1213	50.5%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1035	1866	1213	85.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	25	1871	389	6.4%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	269	1877	438	61.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	373	1877	438	85.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	278	1878	407	68.3%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	206	1878	407	50.6%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	114	1871	742	15.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	45	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	561	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1135	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	315	1886	409	77.1%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	882	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	327	1877	1189	27.5%
13/2	Right	U	2	N/A	D		1	37	-	1059	1877	1189	89.1%
14/1	Ahead	U	3	N/A	G		1	38	-	1058	2007	1305	81.1%
14/2	Right	U	3	N/A	G		1	38	-	374	1872	1217	30.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	206	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**139**	**0**	**0**	**14.0**	**16.5**	**0.0**	**30.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**139**	**0**	**0**	**14.0**	**16.5**	**0.0**	**30.5**	**-**	**-**	**-**	**-**
1/1	612	612	-	-	-	0.9	0.5	-	1.4	8.5	5.3	0.5	5.8
1/2	1035	1035	-	-	-	2.4	2.8	-	5.2	18.1	13.5	2.8	16.3
2/1	25	25	25	0	0	0.0	0.0	-	0.0	6.0	0.1	0.0	0.1
3/1	269	269	-	-	-	1.5	0.8	-	2.3	31.1	4.0	0.8	4.7
3/2	373	373	-	-	-	2.3	2.7	-	4.9	47.6	5.9	2.7	8.6
4/1	278	278	-	-	-	1.7	1.1	-	2.7	35.4	4.2	1.1	5.3
4/2	206	206	-	-	-	1.2	0.5	-	1.7	29.6	3.0	0.5	3.5
5/1	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	114	114	114	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	45	45	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1135	1135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	315	315	-	-	-	1.3	1.6	-	2.9	33.0	5.0	1.6	6.7
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	882	882	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	327	327	-	-	-	0.4	0.2	-	0.5	6.0	2.1	0.2	2.3
13/2	1059	1059	-	-	-	0.6	3.9	-	4.5	15.2	3.8	3.9	7.6
14/1	1058	1058	-	-	-	0.2	2.1	-	2.3	7.8	0.6	2.1	2.7

Full Input Data And Results

14/2	374	374	-	-	-	1.6	0.2	-	1.8	17.6	6.2	0.2	6.4
15/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

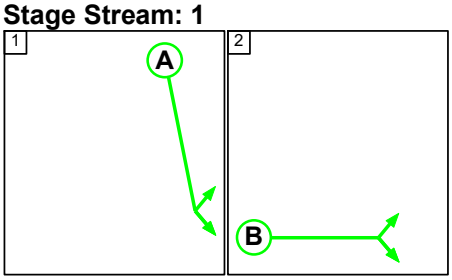
C1	Stream: 1 PRC for Signalled Lanes (%):	5.5	Total Delay for Signalled Lanes (pcuHr):	9.55	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	1.0	Total Delay for Signalled Lanes (pcuHr):	12.28	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	11.0	Total Delay for Signalled Lanes (pcuHr):	8.55	Cycle Time (s): 60
	PRC Over All Lanes (%):	1.0	Total Delay Over All Lanes(pcuHr):	30.51	

Full Input Data And Results

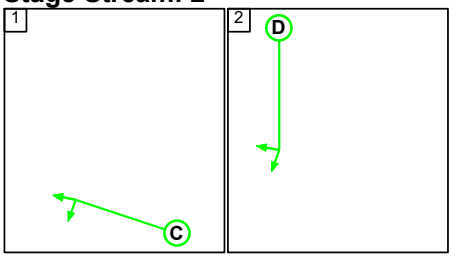
Scenario 6: '23RC 06:00-07:00' (FG6: '23RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

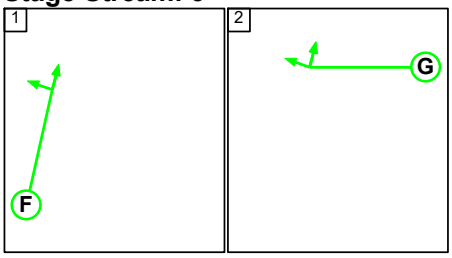
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

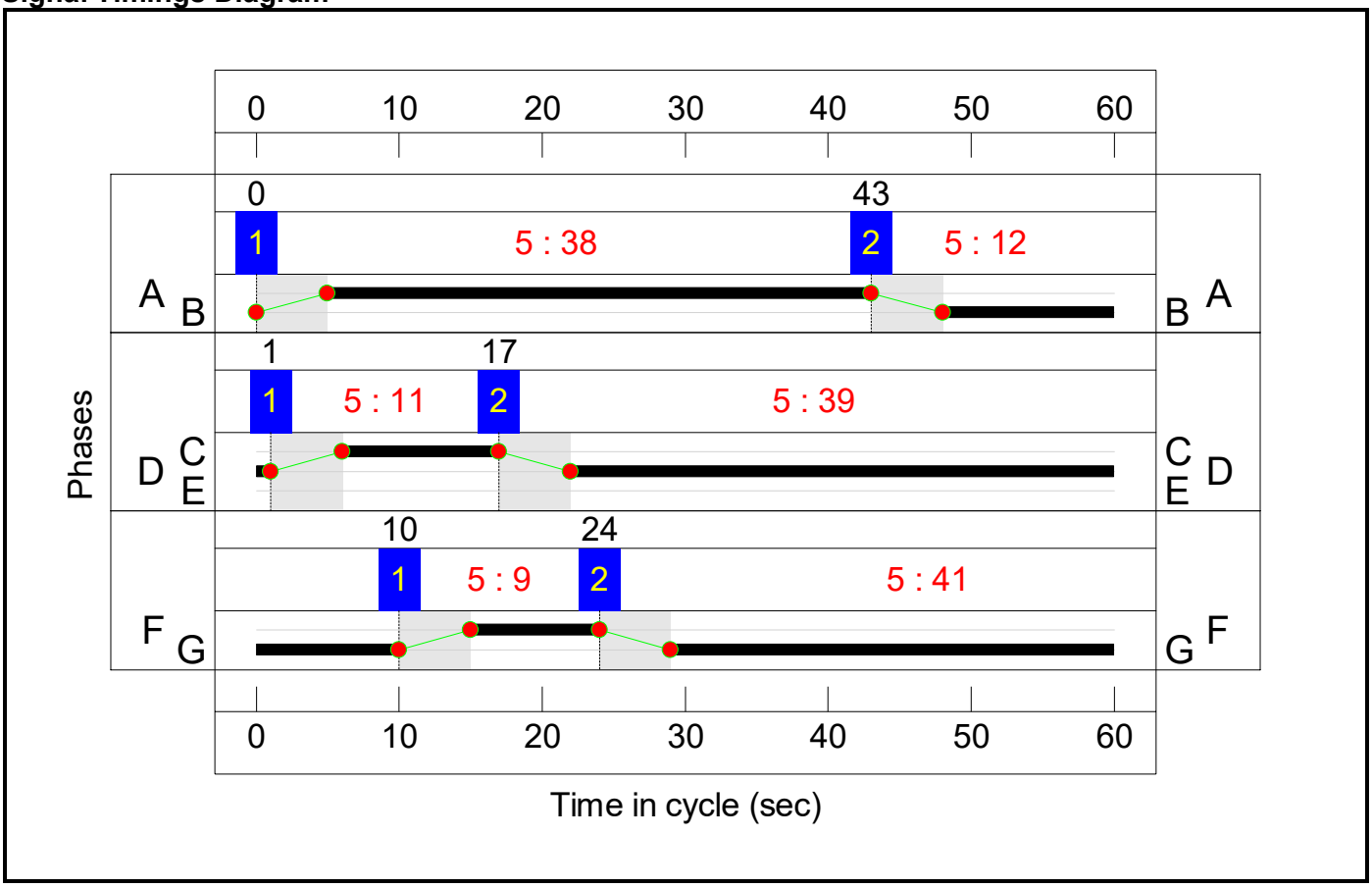
Stage	1	2
Duration	11	39
Change Point	1	17

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	10	24

Full Input Data And Results

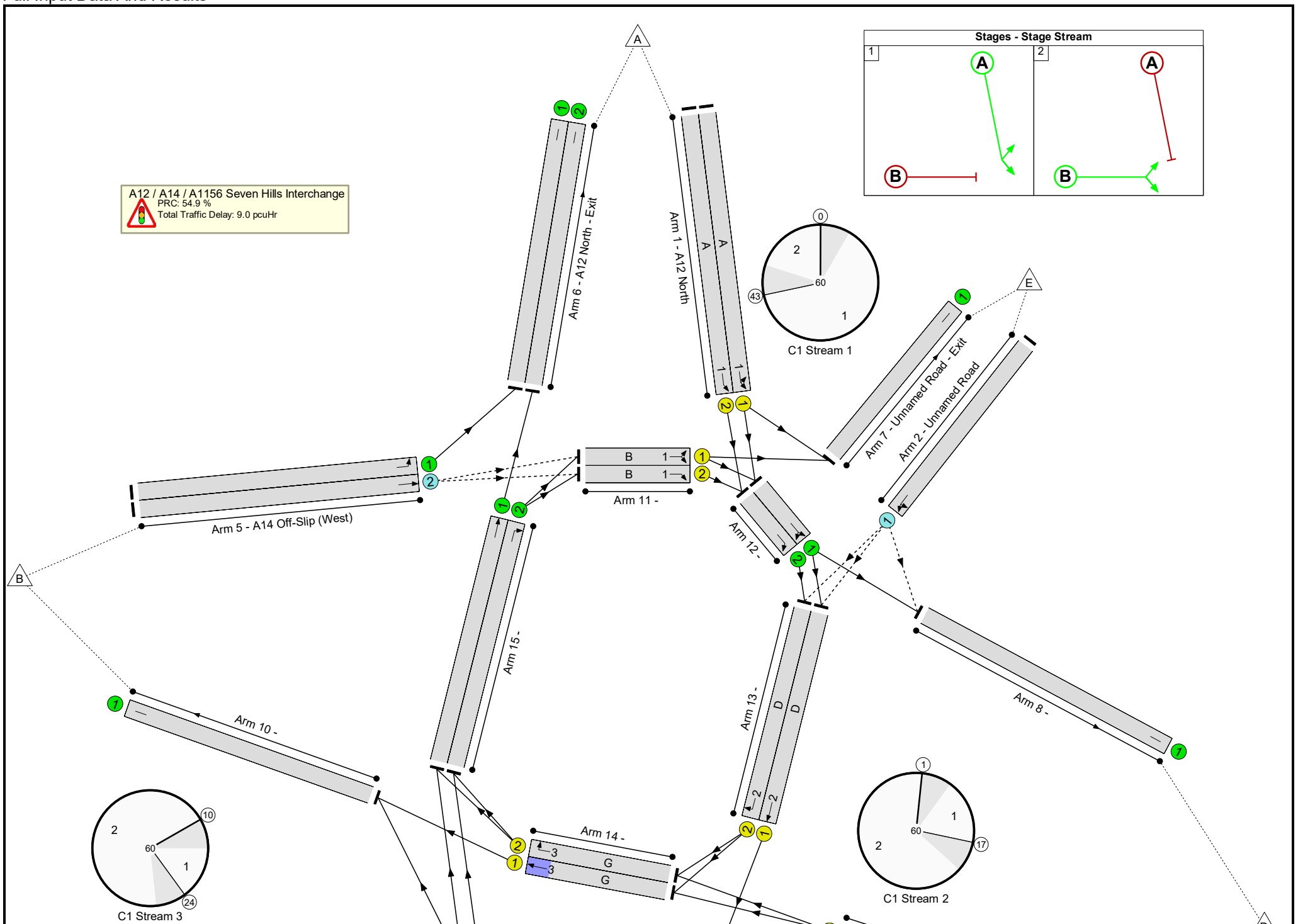
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	286	1866	1213	23.6%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	678	1866	1213	55.9%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	629	4.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	73	1877	375	19.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	175	1877	375	46.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	36	1878	313	11.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	140	1878	313	44.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	619	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	35	1871	883	4.0%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	619	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	202	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	147	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	165	1886	409	40.4%
11/2	Right	U	1	N/A	B		1	12	-	21	1886	409	5.1%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	426	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	699	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	74	1877	1251	5.9%
13/2	Right	U	2	N/A	D		1	39	-	727	1877	1251	58.1%
14/1	Ahead	U	3	N/A	G		1	41	-	718	2007	1405	51.1%
14/2	Right	U	3	N/A	G		1	41	-	184	1872	1310	14.0%
15/1	Ahead	U	N/A	N/A	-		-	-	-	202	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	151	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**64**	**0**	**0**	**5.5**	**3.5**	**0.0**	**9.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**64**	**0**	**0**	**5.5**	**3.5**	**0.0**	**9.0**	**-**	**-**	**-**	**-**
1/1	286	286	-	-	-	0.3	0.2	-	0.5	6.3	1.9	0.2	2.1
1/2	678	678	-	-	-	1.1	0.6	-	1.7	9.1	6.0	0.6	6.7
2/1	29	29	29	0	0	0.0	0.0	-	0.0	3.0	0.0	0.0	0.0
3/1	73	73	-	-	-	0.4	0.1	-	0.5	25.9	1.0	0.1	1.1
3/2	175	175	-	-	-	1.0	0.4	-	1.5	30.1	2.5	0.4	3.0
4/1	36	36	-	-	-	0.2	0.1	-	0.3	27.7	0.5	0.1	0.6
4/2	140	140	-	-	-	0.9	0.4	-	1.3	32.9	2.1	0.4	2.5
5/1	619	619	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	35	35	35	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.0
6/1	619	619	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	147	147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	725	725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	165	165	-	-	-	0.4	0.3	-	0.7	15.9	2.3	0.3	2.7
11/2	21	21	-	-	-	0.1	0.0	-	0.1	23.4	0.3	0.0	0.3
12/1	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	699	699	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	74	74	-	-	-	0.0	0.0	-	0.1	2.9	0.1	0.0	0.2
13/2	727	727	-	-	-	0.3	0.7	-	1.0	4.9	1.8	0.7	2.5
14/1	718	718	-	-	-	0.1	0.5	-	0.6	2.9	0.2	0.5	0.7

Full Input Data And Results

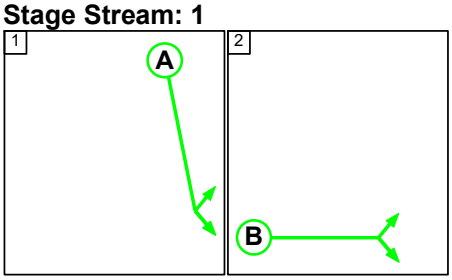
14/2	184	184	-	-	-	0.6	0.1	-	0.7	14.2	3.0	0.1	3.0
15/1	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	151	151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	61.0	Total Delay for Signalled Lanes (pcuHr):	3.08	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	54.9	Total Delay for Signalled Lanes (pcuHr):	3.05	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	76.1	Total Delay for Signalled Lanes (pcuHr):	2.86	Cycle Time (s): 60
	PRC Over All Lanes (%):	54.9	Total Delay Over All Lanes(pcuHr):	9.04	

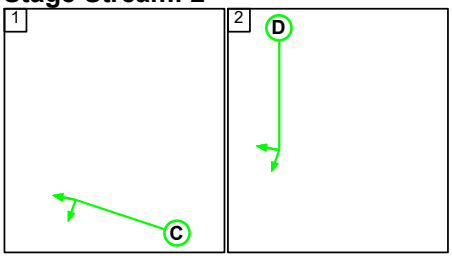
Full Input Data And Results
Scenario 7: '23RC 07:00-08:00' (FG7: '23RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

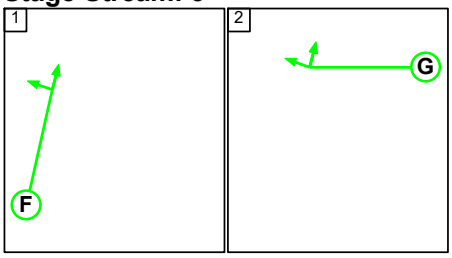
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	59	44

Stage Stream: 2

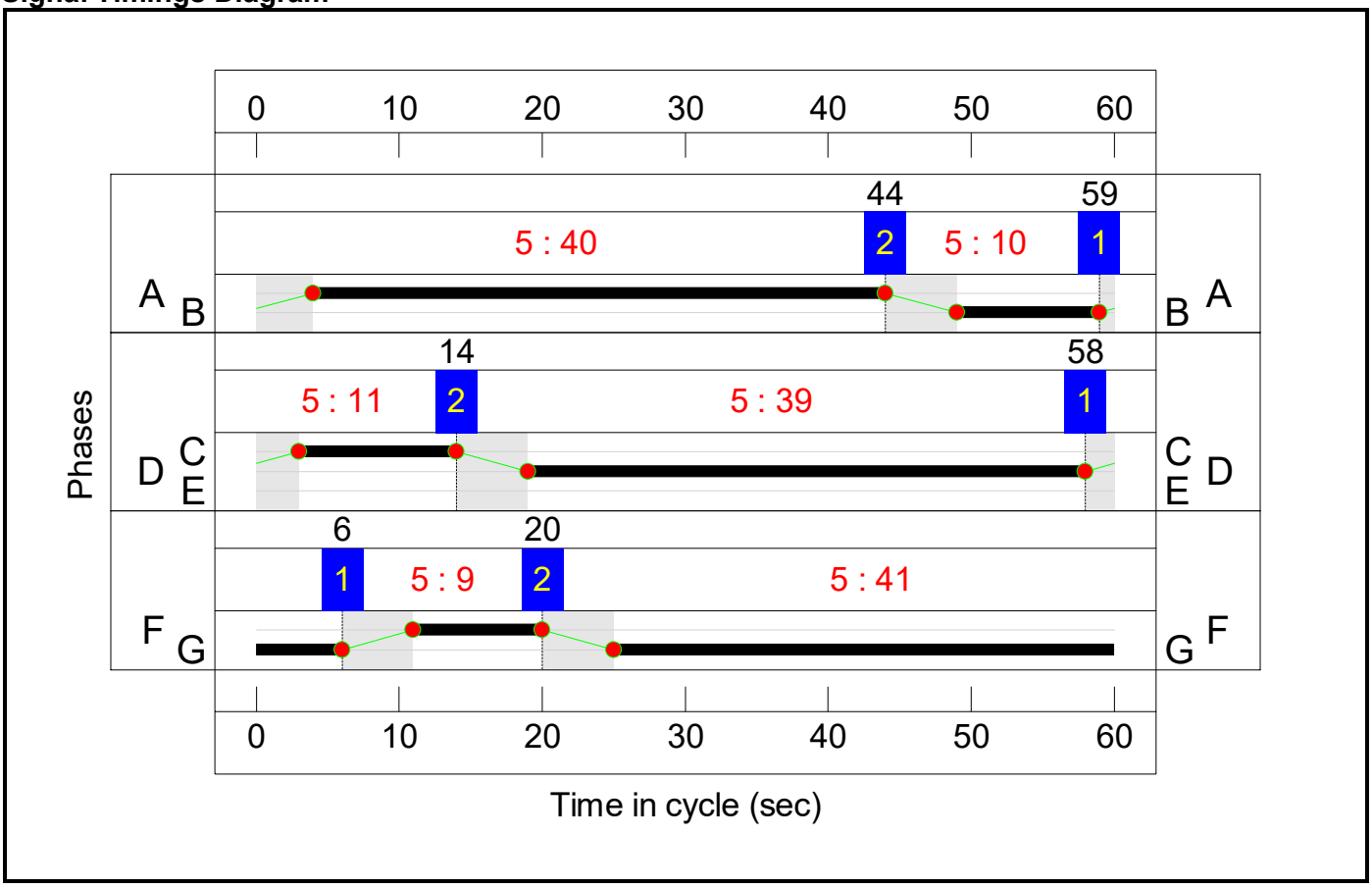
Stage	1	2
Duration	11	39
Change Point	58	14

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	6	20

Full Input Data And Results

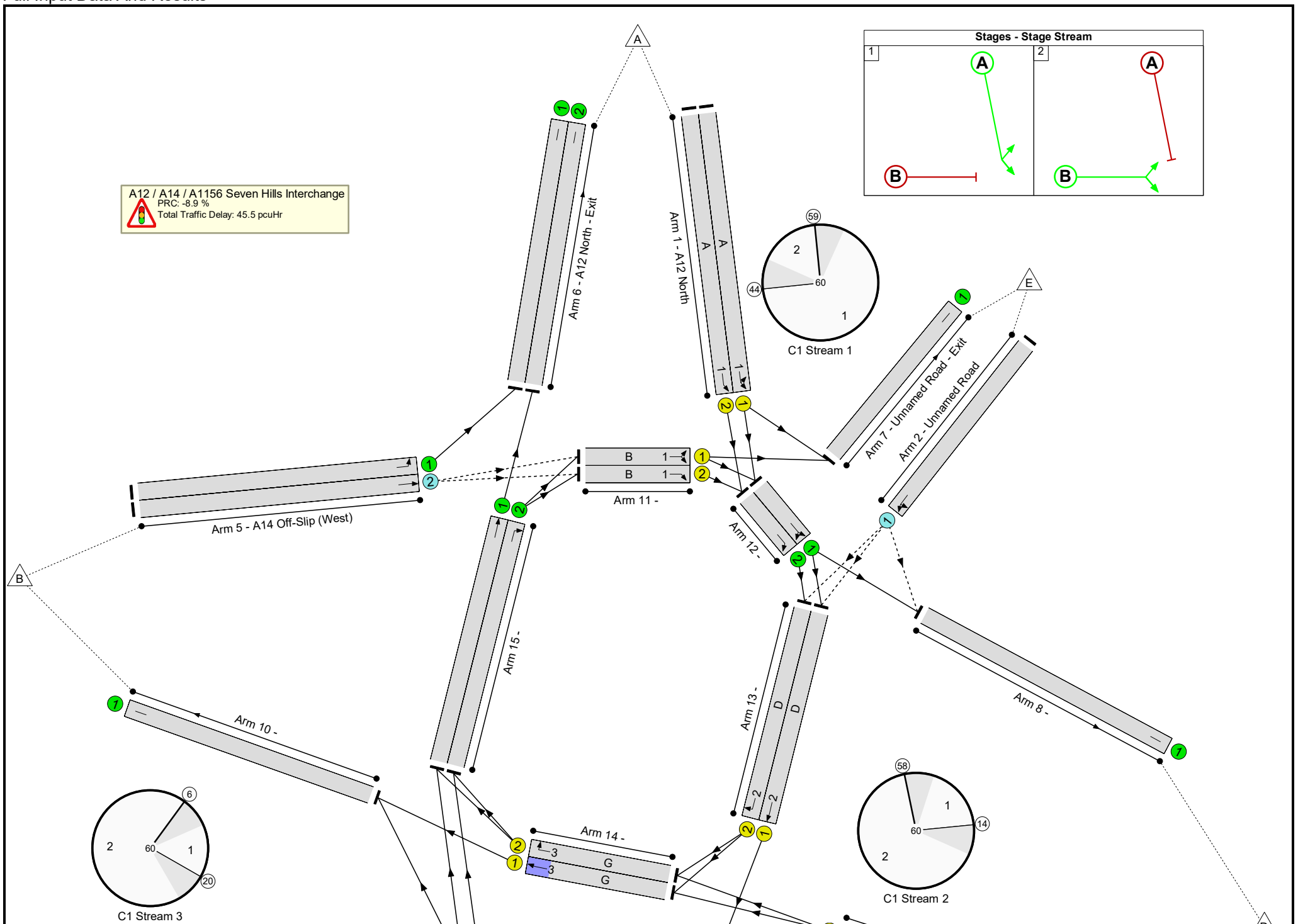
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.0%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.0%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	493	1866	1275	38.7%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1160	1866	1275	91.0%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	55	1871	386	14.3%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	178	1877	375	47.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	368	1877	375	98.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	227	1878	313	72.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	181	1878	313	57.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1305	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	107	1871	764	14.0%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1305	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1276	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	296	1886	346	85.6%
11/2	Right	U	1	N/A	B		1	10	-	6	1886	346	1.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1166	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	268	1877	1251	21.4%
13/2	Right	U	2	N/A	D		1	39	-	1215	1877	1251	97.1%
14/1	Ahead	U	3	N/A	G		1	41	-	1217	2007	1405	86.6%
14/2	Right	U	3	N/A	G		1	41	-	366	1872	1310	27.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	195	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**162**	**0**	**0**	**13.3**	**32.2**	**0.0**	**45.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**162**	**0**	**0**	**13.3**	**32.2**	**0.0**	**45.5**	**-**	**-**	**-**	**-**
1/1	493	493	-	-	-	0.6	0.3	-	0.9	6.4	3.4	0.3	3.7
1/2	1160	1160	-	-	-	2.6	4.7	-	7.2	22.4	16.1	4.7	20.8
2/1	55	55	55	0	0	0.0	0.1	-	0.1	6.0	0.1	0.1	0.2
3/1	178	178	-	-	-	1.0	0.4	-	1.5	30.3	2.6	0.4	3.1
3/2	368	368	-	-	-	2.4	7.9	-	10.4	101.4	6.0	7.9	13.9
4/1	227	227	-	-	-	1.5	1.3	-	2.8	44.0	3.5	1.3	4.8
4/2	181	181	-	-	-	1.2	0.7	-	1.8	36.6	2.8	0.7	3.4
5/1	1305	1305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	107	107	107	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
6/1	1305	1305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	64	64	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1276	1276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	296	296	-	-	-	1.4	2.7	-	4.0	49.2	4.8	2.7	7.5
11/2	6	6	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	725	725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1166	1166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	268	268	-	-	-	0.2	0.1	-	0.4	4.8	1.4	0.1	1.5
13/2	1215	1215	-	-	-	0.9	10.6	-	11.5	34.1	8.4	10.6	18.9
14/1	1217	1217	-	-	-	0.2	3.1	-	3.3	9.9	0.8	3.1	3.9

Full Input Data And Results

14/2	366	366	-	-	-	1.3	0.2	-	1.5	14.4	6.1	0.2	6.3
15/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	195	195	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

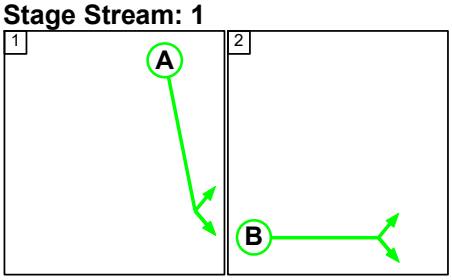
C1	Stream: 1 PRC for Signalled Lanes (%):	-1.1	Total Delay for Signalled Lanes (pcuHr):	12.19	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-8.9	Total Delay for Signalled Lanes (pcuHr):	23.71	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	3.9	Total Delay for Signalled Lanes (pcuHr):	9.41	Cycle Time (s): 60
	PRC Over All Lanes (%):	-8.9	Total Delay Over All Lanes(pcuHr):	45.49	

Full Input Data And Results

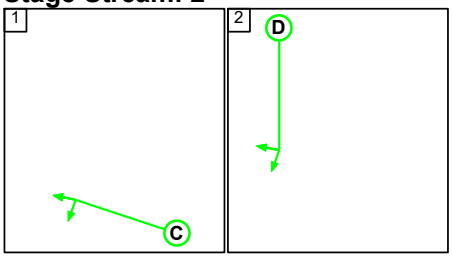
Scenario 8: '23RC 08:00-09:00' (FG8: '23RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

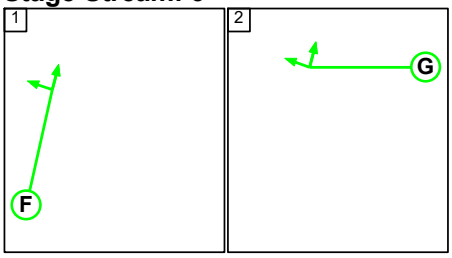
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	59	41

Stage Stream: 2

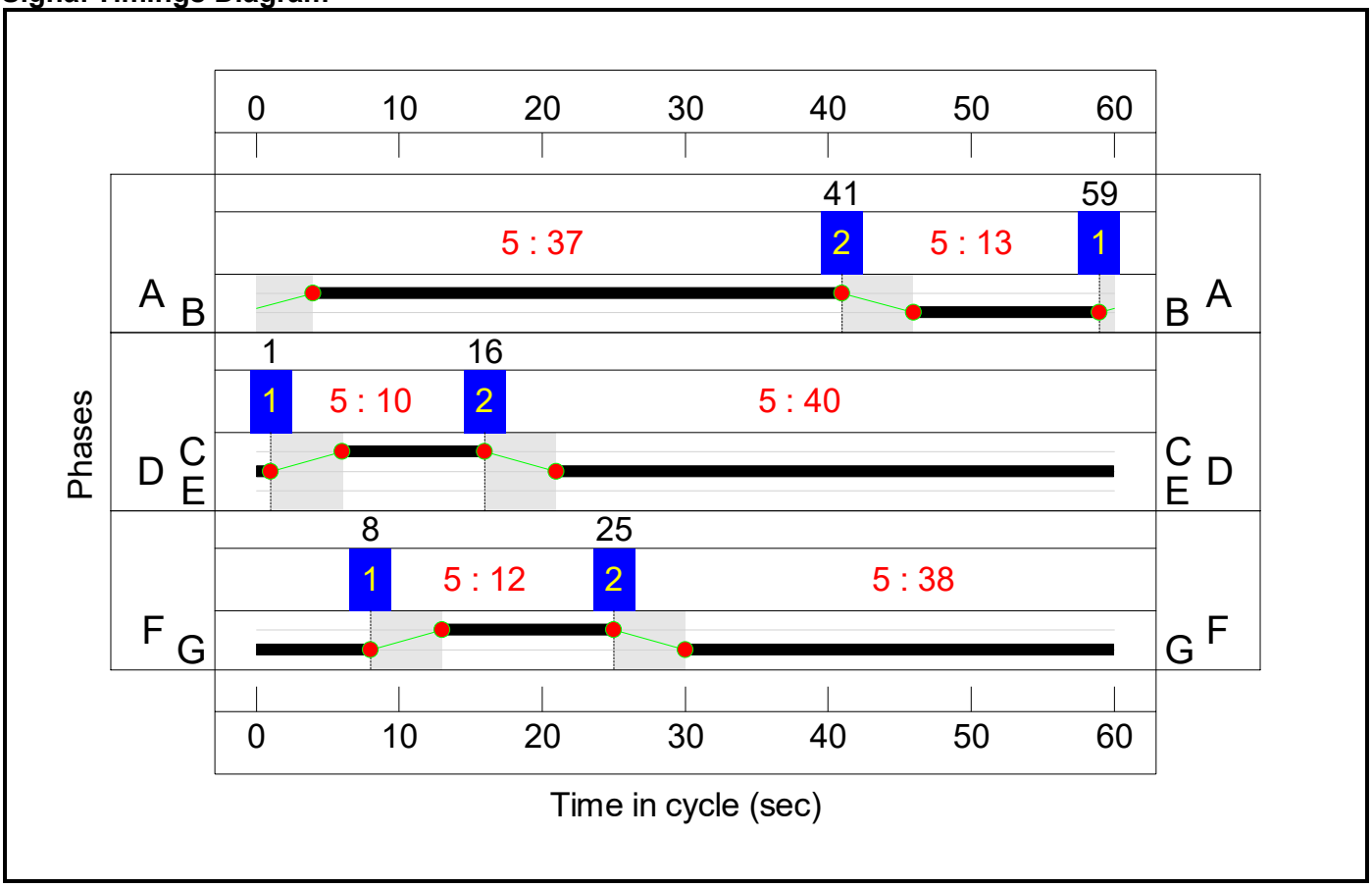
Stage	1	2
Duration	10	40
Change Point	1	16

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	8	25

Full Input Data And Results

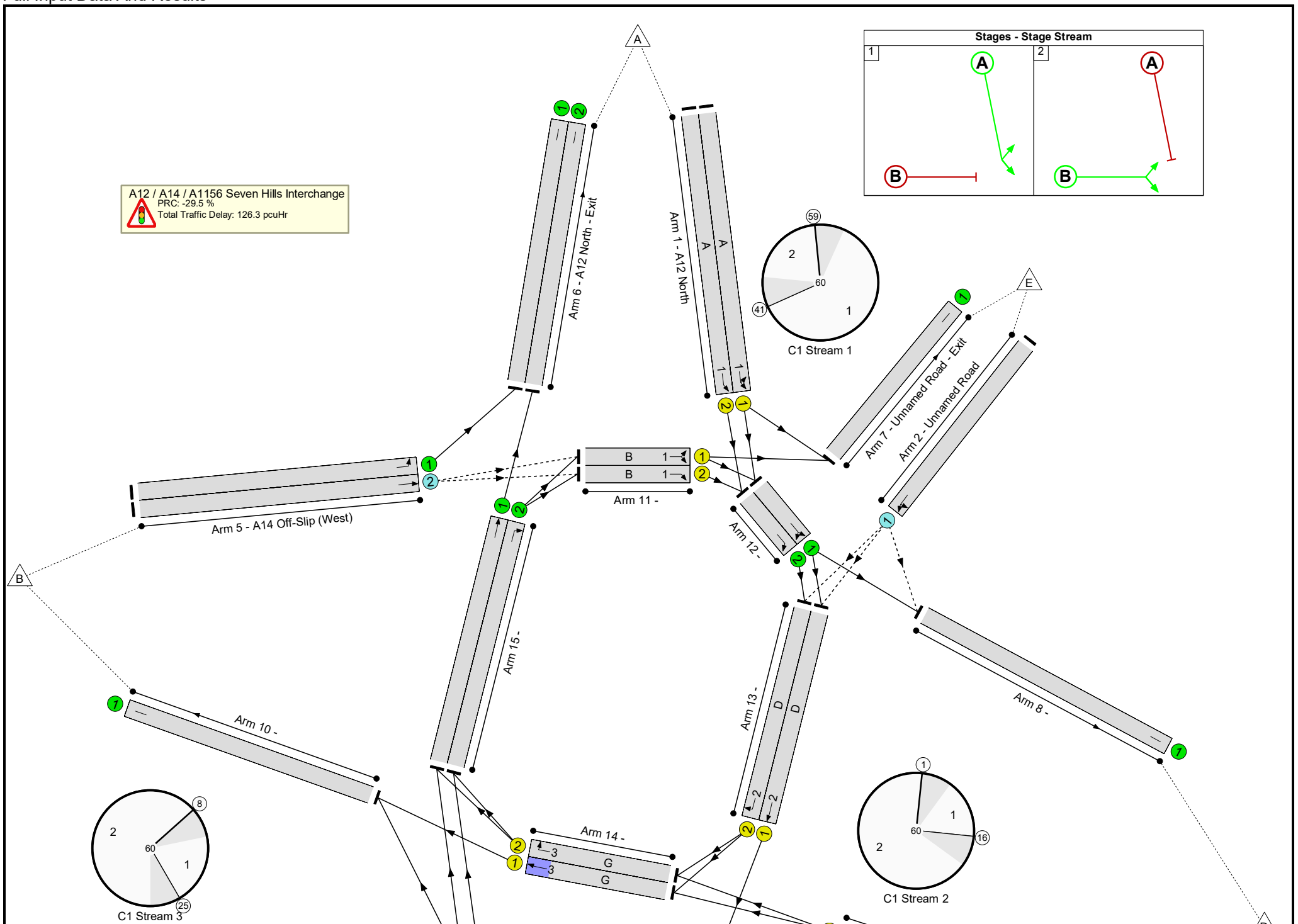
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.5%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**116.5%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	694	1866	1182	58.7%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1244	1866	1182	105.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	100	1871	295	33.9%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	250	1877	344	72.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	401	1877	344	116.5%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	364	1878	407	89.5%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	243	1878	407	59.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1597	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	135	1871	710	19.0%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1597	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	30	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	649	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	671	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1403	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	381	1886	440	86.1%
11/2	Right	U	1	N/A	B		1	13	-	12	1886	440	2.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1045	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1256	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	421	1877	1283	32.8%
13/2	Right	U	2	N/A	D		1	40	-	1331	1877	1283	98.9%
14/1	Ahead	U	3	N/A	G		1	38	-	1322	2007	1305	96.6%
14/2	Right	U	3	N/A	G		1	38	-	410	1872	1217	29.0%
15/1	Ahead	U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	258	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**235**	**0**	**0**	**21.1**	**105.2**	**0.0**	**126.3**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**235**	**0**	**0**	**21.1**	**105.2**	**0.0**	**126.3**	**-**	**-**	**-**	**-**
1/1	694	694	-	-	-	1.2	0.7	-	1.9	10.1	6.7	0.7	7.5
1/2	1244	1182	-	-	-	5.5	39.1	-	44.5	128.8	21.8	39.1	60.8
2/1	100	100	100	0	0	0.1	0.3	-	0.4	13.7	1.0	0.3	1.3
3/1	250	250	-	-	-	1.6	1.3	-	2.9	41.7	3.9	1.3	5.2
3/2	401	344	-	-	-	4.4	31.6	-	36.0	323.5	7.6	31.6	39.2
4/1	364	364	-	-	-	2.3	3.6	-	5.9	58.7	5.9	3.6	9.5
4/2	243	243	-	-	-	1.4	0.7	-	2.2	32.0	3.6	0.7	4.3
5/1	1597	1597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	135	135	135	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
6/1	1597	1597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	28	28	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	649	649	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	671	671	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1341	1341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	379	379	-	-	-	1.4	2.8	-	4.3	40.7	6.1	2.8	8.9
11/2	12	12	-	-	-	0.1	0.0	-	0.1	22.2	0.2	0.0	0.2
12/1	1045	1045	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1194	1194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	421	421	-	-	-	0.4	0.2	-	0.7	5.6	2.6	0.2	2.9
13/2	1269	1269	-	-	-	0.6	14.7	-	15.3	43.4	11.1	14.7	25.8
14/1	1260	1260	-	-	-	0.6	9.8	-	10.4	29.7	4.2	9.8	14.0

Full Input Data And Results

14/2	353	353	-	-	-	1.4	0.2	-	1.6	16.4	5.8	0.2	6.0
15/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	256	256	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

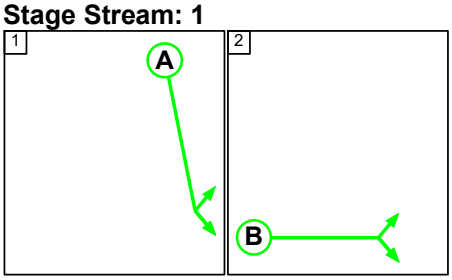
C1	Stream: 1 PRC for Signalled Lanes (%):	-17.0	Total Delay for Signalled Lanes (pcuHr):	50.82	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-29.5	Total Delay for Signalled Lanes (pcuHr):	54.89	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-7.3	Total Delay for Signalled Lanes (pcuHr):	20.10	Cycle Time (s): 60
	PRC Over All Lanes (%):	-29.5	Total Delay Over All Lanes(pcuHr):	126.30	

Full Input Data And Results

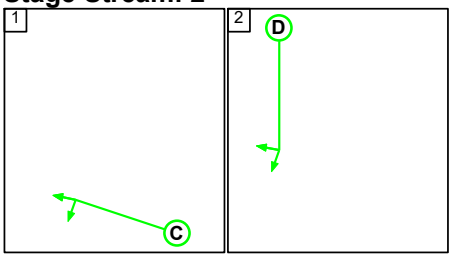
Scenario 9: '23RC 15:00-16:00' (FG9: '23RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

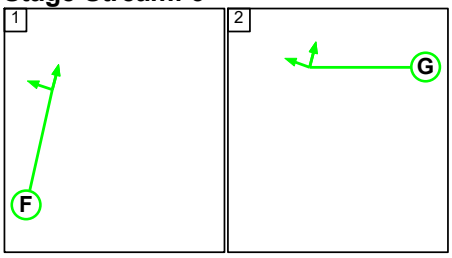
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	1	46

Stage Stream: 2

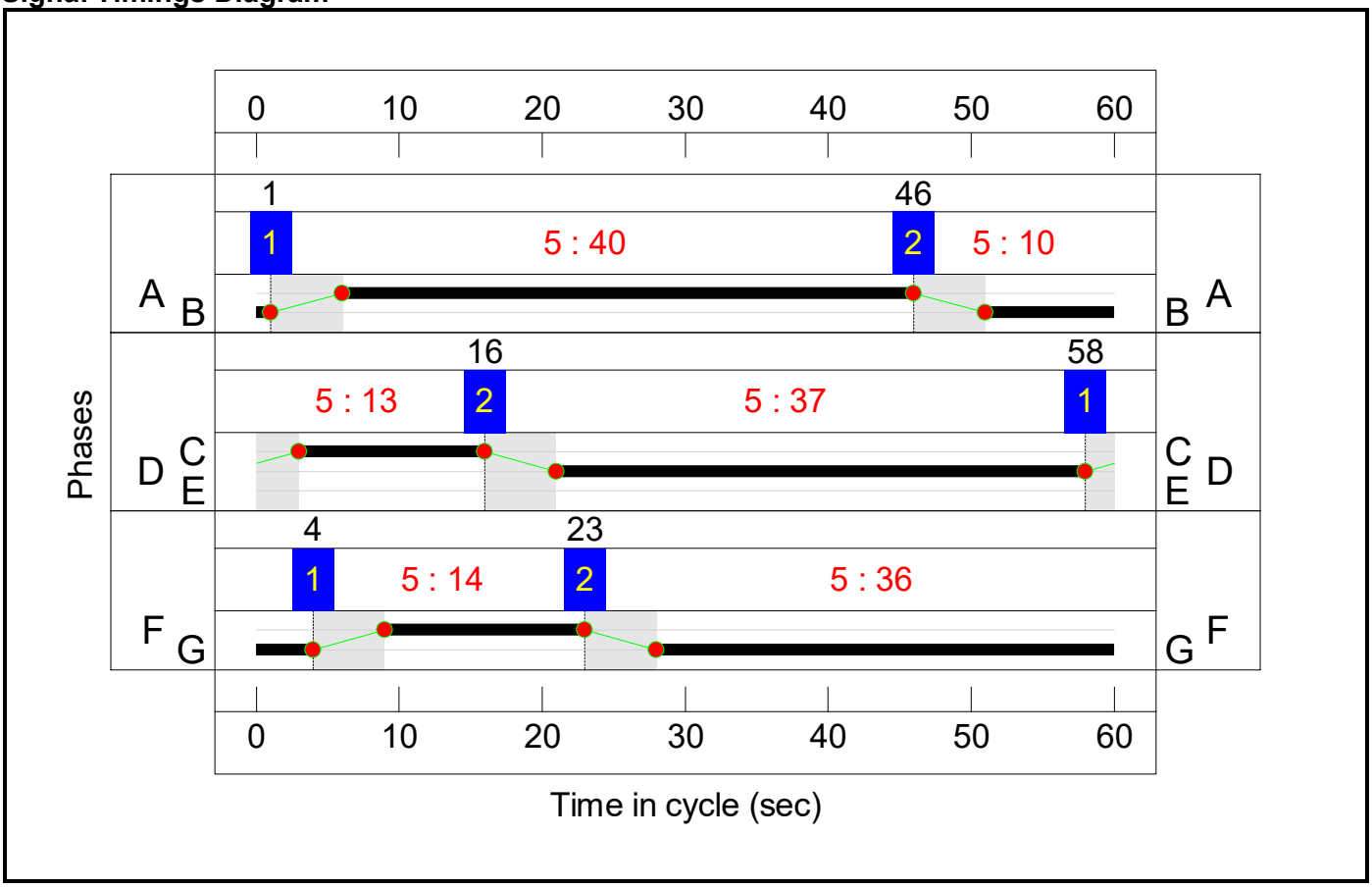
Stage	1	2
Duration	13	37
Change Point	58	16

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	4	23

Full Input Data And Results

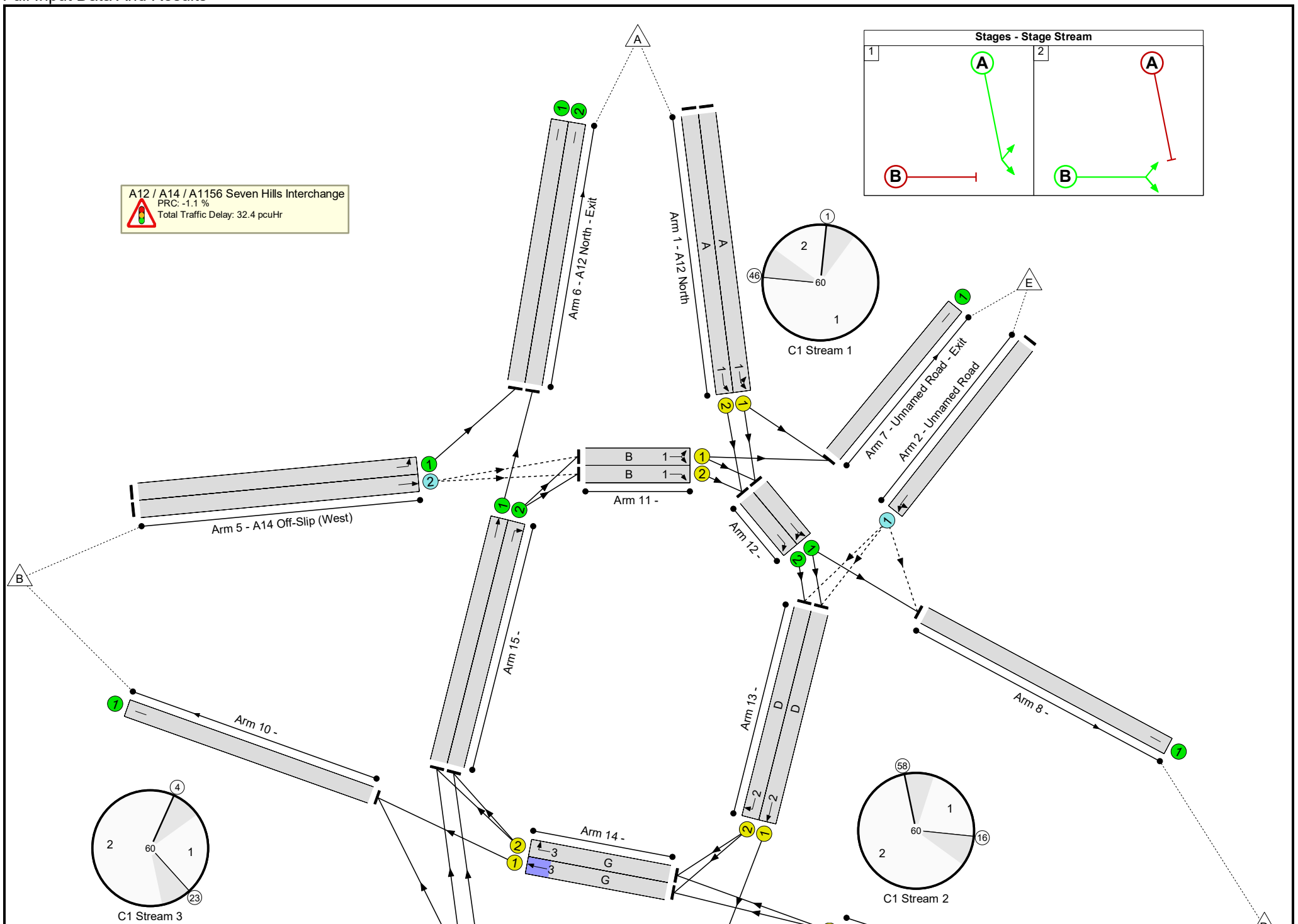
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**91.0%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**91.0%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	648	1866	1275	50.8%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1045	1866	1275	82.0%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	38	1871	396	9.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	227	1877	438	51.8%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	376	1877	438	85.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	382	1878	470	81.4%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	165	1878	470	35.1%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1262	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	93	1871	720	12.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1262	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1158	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	255	1886	346	73.7%
11/2	Right	U	1	N/A	B		1	10	-	4	1886	346	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	848	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	371	1877	1189	31.2%
13/2	Right	U	2	N/A	D		1	37	-	1082	1877	1189	91.0%
14/1	Ahead	U	3	N/A	G		1	36	-	1075	2007	1238	86.9%
14/2	Right	U	3	N/A	G		1	36	-	383	1872	1154	33.2%
15/1	Ahead	U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**131**	**0**	**0**	**14.2**	**18.2**	**0.0**	**32.4**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**131**	**0**	**0**	**14.2**	**18.2**	**0.0**	**32.4**	**-**	**-**	**-**	**-**
1/1	648	648	-	-	-	0.8	0.5	-	1.3	7.5	5.2	0.5	5.7
1/2	1045	1045	-	-	-	2.0	2.2	-	4.2	14.5	12.5	2.2	14.7
2/1	38	38	38	0	0	0.0	0.1	-	0.1	6.2	0.1	0.1	0.2
3/1	227	227	-	-	-	1.3	0.5	-	1.8	28.6	3.3	0.5	3.8
3/2	376	376	-	-	-	2.3	2.8	-	5.1	48.7	6.0	2.8	8.7
4/1	382	382	-	-	-	2.2	2.1	-	4.3	40.8	5.9	2.1	8.0
4/2	165	165	-	-	-	0.8	0.3	-	1.1	24.4	2.2	0.3	2.5
5/1	1262	1262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	93	93	93	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1262	1262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1158	1158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	255	255	-	-	-	1.3	1.4	-	2.6	37.1	4.1	1.4	5.5
11/2	4	4	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	371	371	-	-	-	0.3	0.2	-	0.6	5.4	1.6	0.2	1.9
13/2	1082	1082	-	-	-	1.0	4.7	-	5.7	18.9	6.8	4.7	11.5
14/1	1075	1075	-	-	-	0.4	3.2	-	3.6	12.1	1.6	3.2	4.8

Full Input Data And Results

14/2	383	383	-	-	-	1.6	0.2	-	1.9	17.7	6.3	0.2	6.6
15/1	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

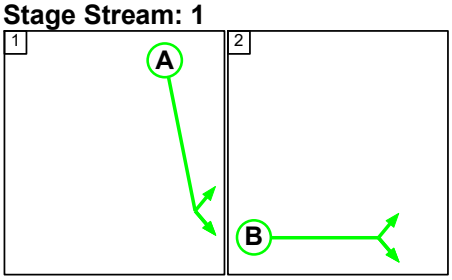
C1	Stream: 1 PRC for Signalled Lanes (%):	9.8	Total Delay for Signalled Lanes (pcuHr):	8.21	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-1.1	Total Delay for Signalled Lanes (pcuHr):	13.14	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	3.6	Total Delay for Signalled Lanes (pcuHr):	10.94	Cycle Time (s): 60
	PRC Over All Lanes (%):	-1.1	Total Delay Over All Lanes(pcuHr):	32.43	

Full Input Data And Results

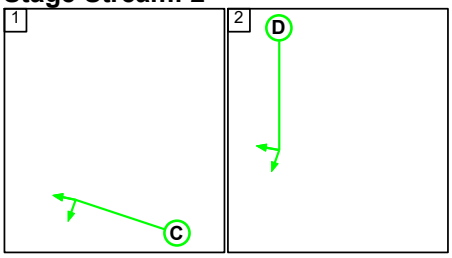
Scenario 10: '23RC 17:00-18:00' (FG10: '23RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

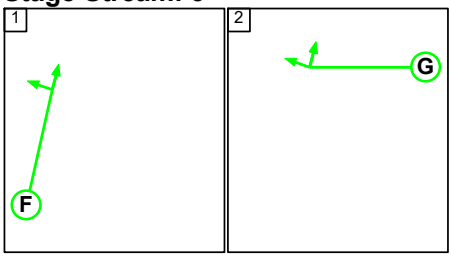
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

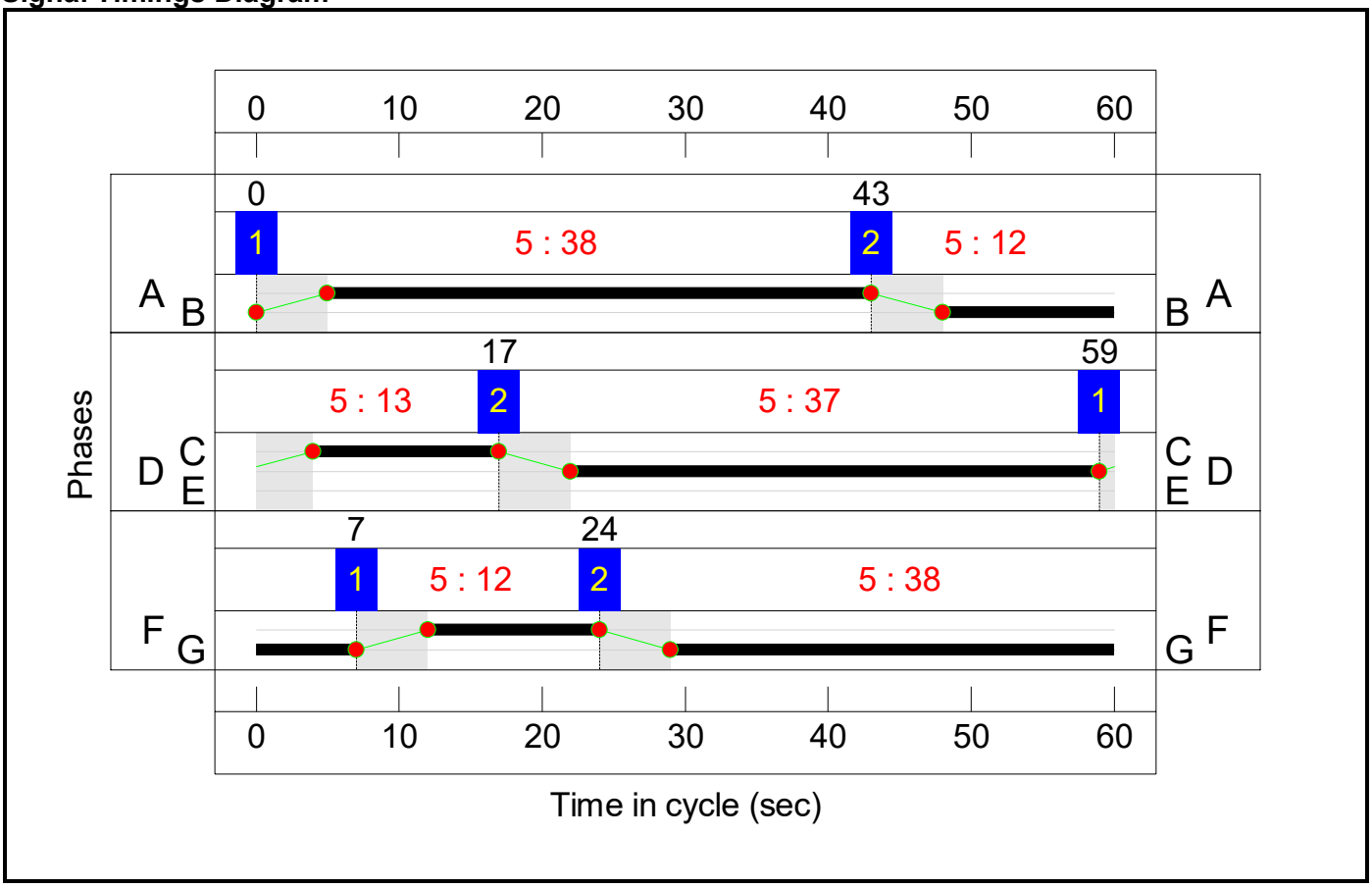
Stage	1	2
Duration	13	37
Change Point	59	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	7	24

Full Input Data And Results

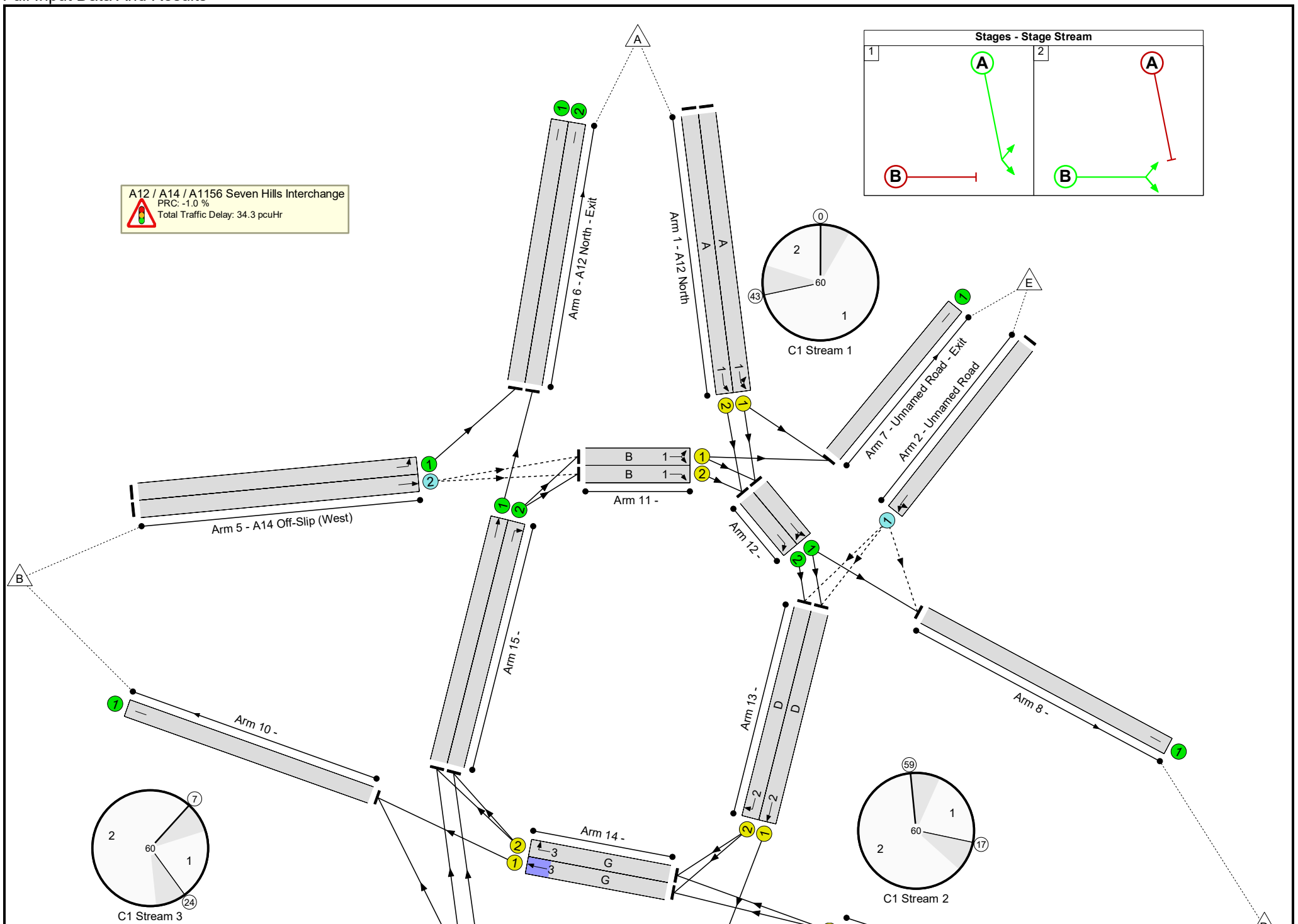
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**90.9%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**90.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	641	1866	1213	52.8%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1055	1866	1213	87.0%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	28	1871	374	7.5%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	310	1877	438	70.8%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	379	1877	438	86.5%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	309	1878	407	75.9%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	213	1878	407	52.3%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1319	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	116	1871	727	15.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1319	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	612	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	656	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1157	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	324	1886	409	79.3%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	915	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1060	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	346	1877	1189	29.1%
13/2	Right	U	2	N/A	D		1	37	-	1081	1877	1189	90.9%
14/1	Ahead	U	3	N/A	G		1	38	-	1080	2007	1305	82.8%
14/2	Right	U	3	N/A	G		1	38	-	380	1872	1217	31.2%
15/1	Ahead	U	N/A	N/A	-		-	-	-	612	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	213	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**144**	**0**	**0**	**14.9**	**19.3**	**0.0**	**34.3**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**144**	**0**	**0**	**14.9**	**19.3**	**0.0**	**34.3**	**-**	**-**	**-**	**-**
1/1	641	641	-	-	-	1.0	0.6	-	1.6	8.7	5.5	0.6	6.1
1/2	1055	1055	-	-	-	2.5	3.2	-	5.7	19.4	14.1	3.2	17.3
2/1	28	28	28	0	0	0.0	0.0	-	0.1	6.4	0.1	0.0	0.1
3/1	310	310	-	-	-	1.8	1.2	-	3.0	34.9	4.7	1.2	5.9
3/2	379	379	-	-	-	2.3	2.9	-	5.3	49.9	6.0	2.9	8.9
4/1	309	309	-	-	-	1.9	1.5	-	3.4	39.9	4.8	1.5	6.3
4/2	213	213	-	-	-	1.2	0.5	-	1.8	30.0	3.1	0.5	3.7
5/1	1319	1319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	116	116	116	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1319	1319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	656	656	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1157	1157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	324	324	-	-	-	1.3	1.8	-	3.1	34.9	5.2	1.8	7.1
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	915	915	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1060	1060	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	346	346	-	-	-	0.4	0.2	-	0.6	6.0	2.1	0.2	2.3
13/2	1081	1081	-	-	-	0.6	4.6	-	5.3	17.5	4.2	4.6	8.9
14/1	1080	1080	-	-	-	0.2	2.4	-	2.5	8.5	0.6	2.4	3.0

Full Input Data And Results

14/2	380	380	-	-	-	1.6	0.2	-	1.9	17.6	6.3	0.2	6.5
15/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	213	213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

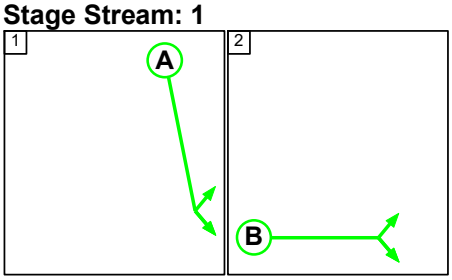
C1	Stream: 1 PRC for Signalled Lanes (%):	3.5	Total Delay for Signalled Lanes (pcuHr):	10.42	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-1.0	Total Delay for Signalled Lanes (pcuHr):	14.10	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	8.7	Total Delay for Signalled Lanes (pcuHr):	9.61	Cycle Time (s): 60
	PRC Over All Lanes (%):	-1.0	Total Delay Over All Lanes(pcuHr):	34.26	

Full Input Data And Results

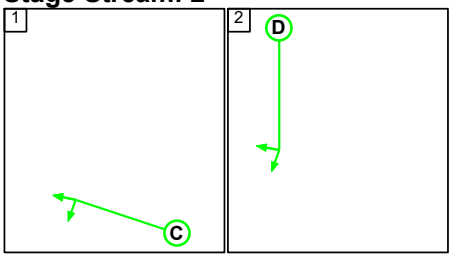
Scenario 11: '23EY 06:00-07:00' (FG11: '23EY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

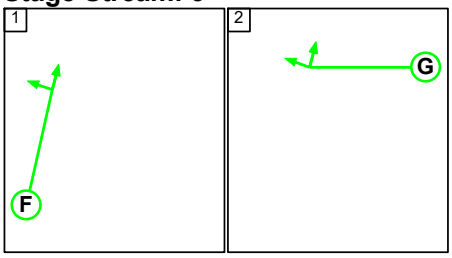
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

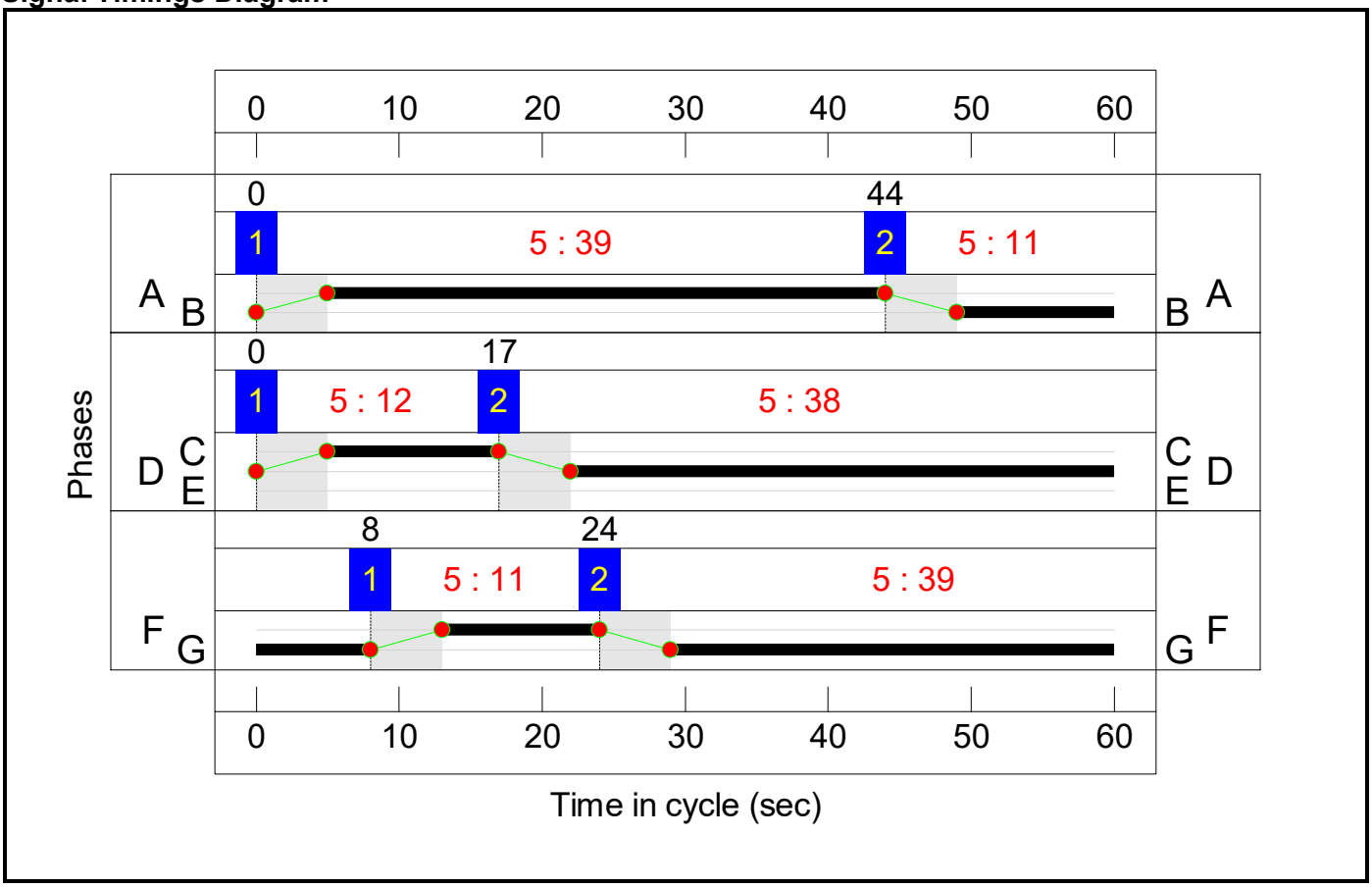
Stage	1	2
Duration	12	38
Change Point	0	17

Stage Stream: 3

Stage	1	2
Duration	11	39
Change Point	8	24

Full Input Data And Results

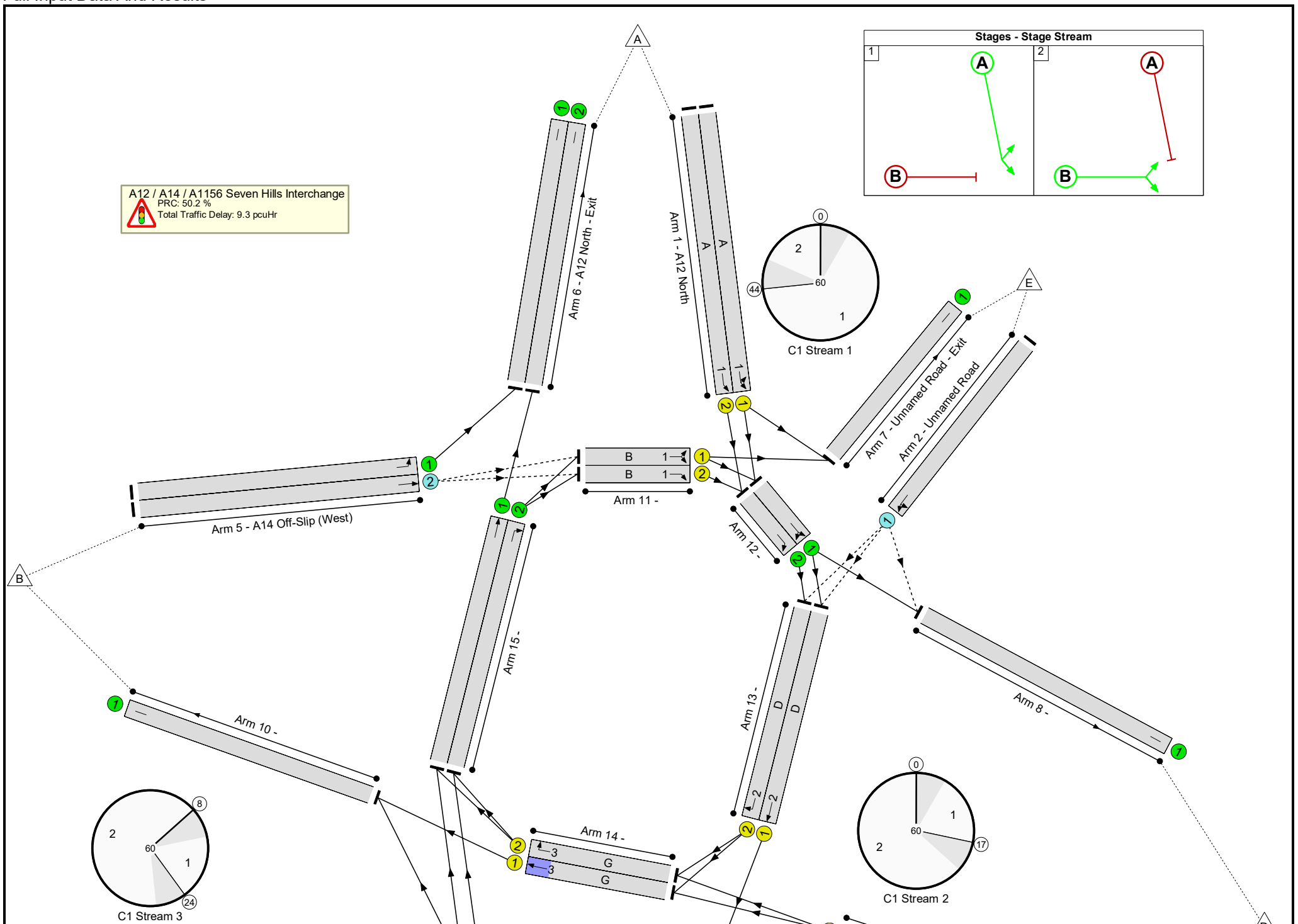
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**59.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**59.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	39	-	294	1866	1244	23.6%
1/2	A12 North Ahead	U	1	N/A	A		1	39	-	682	1866	1244	54.8%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	624	4.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	12	-	73	1877	407	18.0%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	12	-	187	1877	407	46.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	11	-	36	1878	376	9.6%
4/2	A1156 Ahead	U	3	N/A	F		1	11	-	140	1878	376	37.3%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	710	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	38	1871	879	4.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	710	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	214	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	158	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	729	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	11	-	168	1886	377	44.5%
11/2	Right	U	1	N/A	B		1	11	-	21	1886	377	5.6%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	437	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	703	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	38	-	85	1877	1220	7.0%
13/2	Right	U	2	N/A	D		1	38	-	731	1877	1220	59.9%
14/1	Ahead	U	3	N/A	G		1	39	-	722	2007	1338	54.0%
14/2	Right	U	3	N/A	G		1	39	-	196	1872	1248	15.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	214	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	151	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**67**	**0**	**0**	**5.7**	**3.6**	**0.0**	**9.3**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**67**	**0**	**0**	**5.7**	**3.6**	**0.0**	**9.3**	**-**	**-**	**-**	**-**
1/1	294	294	-	-	-	0.3	0.2	-	0.5	5.9	1.9	0.2	2.0
1/2	682	682	-	-	-	1.0	0.6	-	1.6	8.5	5.9	0.6	6.5
2/1	29	29	29	0	0	0.0	0.0	-	0.0	3.1	0.0	0.0	0.0
3/1	73	73	-	-	-	0.4	0.1	-	0.5	24.6	1.0	0.1	1.1
3/2	187	187	-	-	-	1.1	0.4	-	1.5	28.6	2.7	0.4	3.1
4/1	36	36	-	-	-	0.2	0.1	-	0.2	24.9	0.5	0.1	0.5
4/2	140	140	-	-	-	0.8	0.3	-	1.1	28.4	2.0	0.3	2.3
5/1	710	710	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	38	38	38	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.0
6/1	710	710	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	158	158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	729	729	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	168	168	-	-	-	0.5	0.4	-	0.9	19.3	2.5	0.4	2.9
11/2	21	21	-	-	-	0.1	0.0	-	0.1	24.7	0.3	0.0	0.3
12/1	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	703	703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	85	85	-	-	-	0.0	0.0	-	0.1	3.6	0.2	0.0	0.3
13/2	731	731	-	-	-	0.4	0.7	-	1.2	5.8	2.7	0.7	3.4
14/1	722	722	-	-	-	0.1	0.6	-	0.7	3.4	0.3	0.6	0.9

Full Input Data And Results

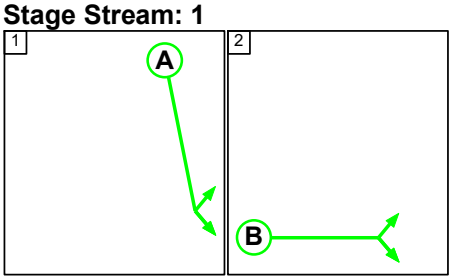
14/2	196	196	-	-	-	0.7	0.1	-	0.8	15.2	3.2	0.1	3.3
15/1	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	151	151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	64.2	Total Delay for Signalled Lanes (pcuHr):	3.12	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	50.2	Total Delay for Signalled Lanes (pcuHr):	3.24	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	66.8	Total Delay for Signalled Lanes (pcuHr):	2.87	Cycle Time (s):	60
	PRC Over All Lanes (%):	50.2	Total Delay Over All Lanes(pcuHr):	9.28		

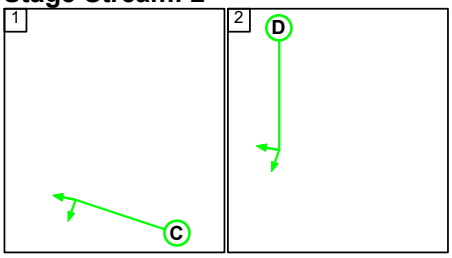
Full Input Data And Results
Scenario 12: '23EY 07:00-08:00' (FG12: '23EY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

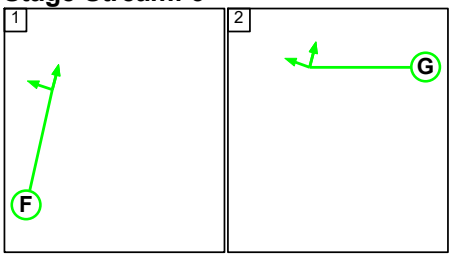
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	4	49

Stage Stream: 2

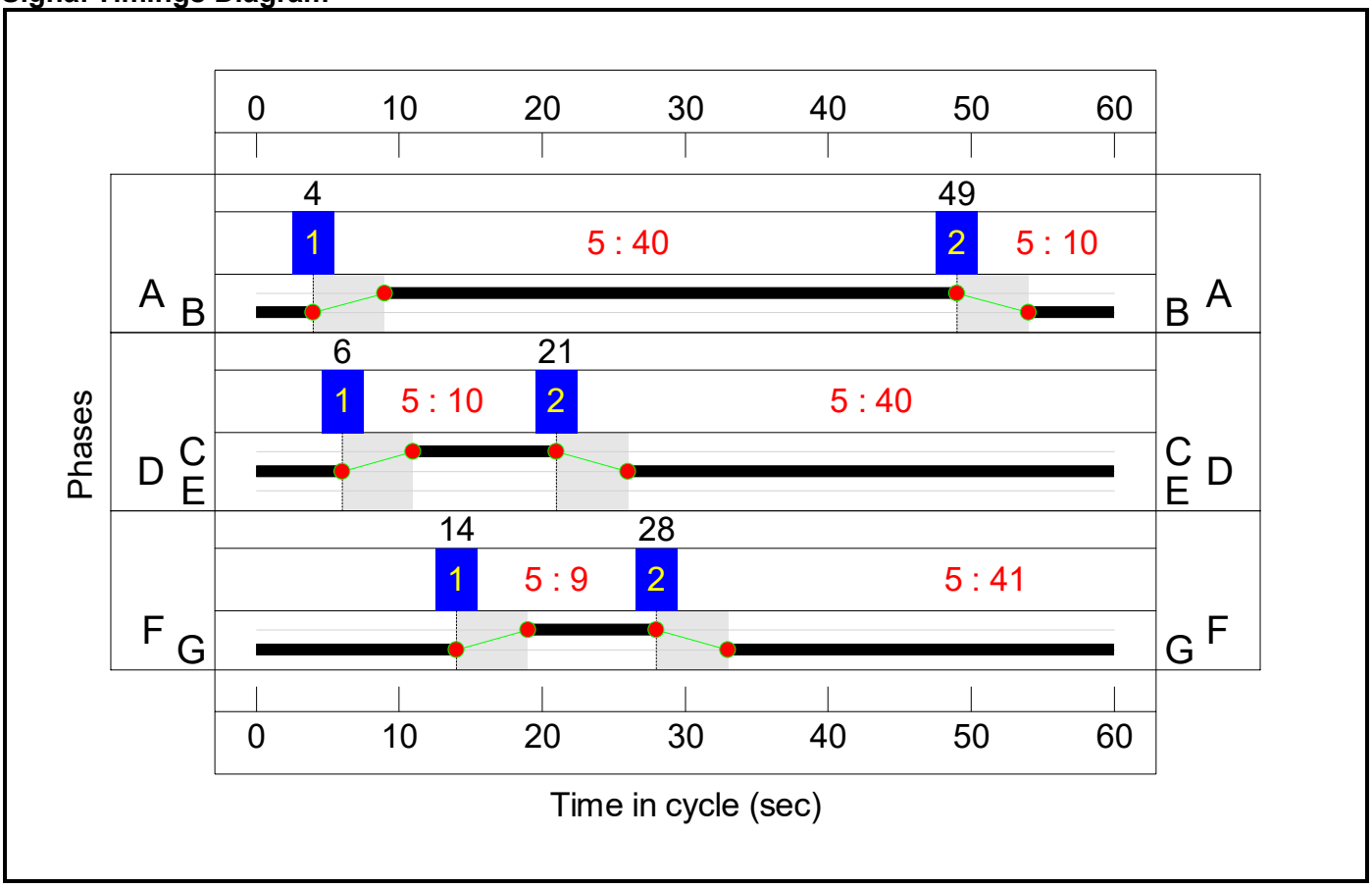
Stage	1	2
Duration	10	40
Change Point	6	21

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	14	28

Full Input Data And Results

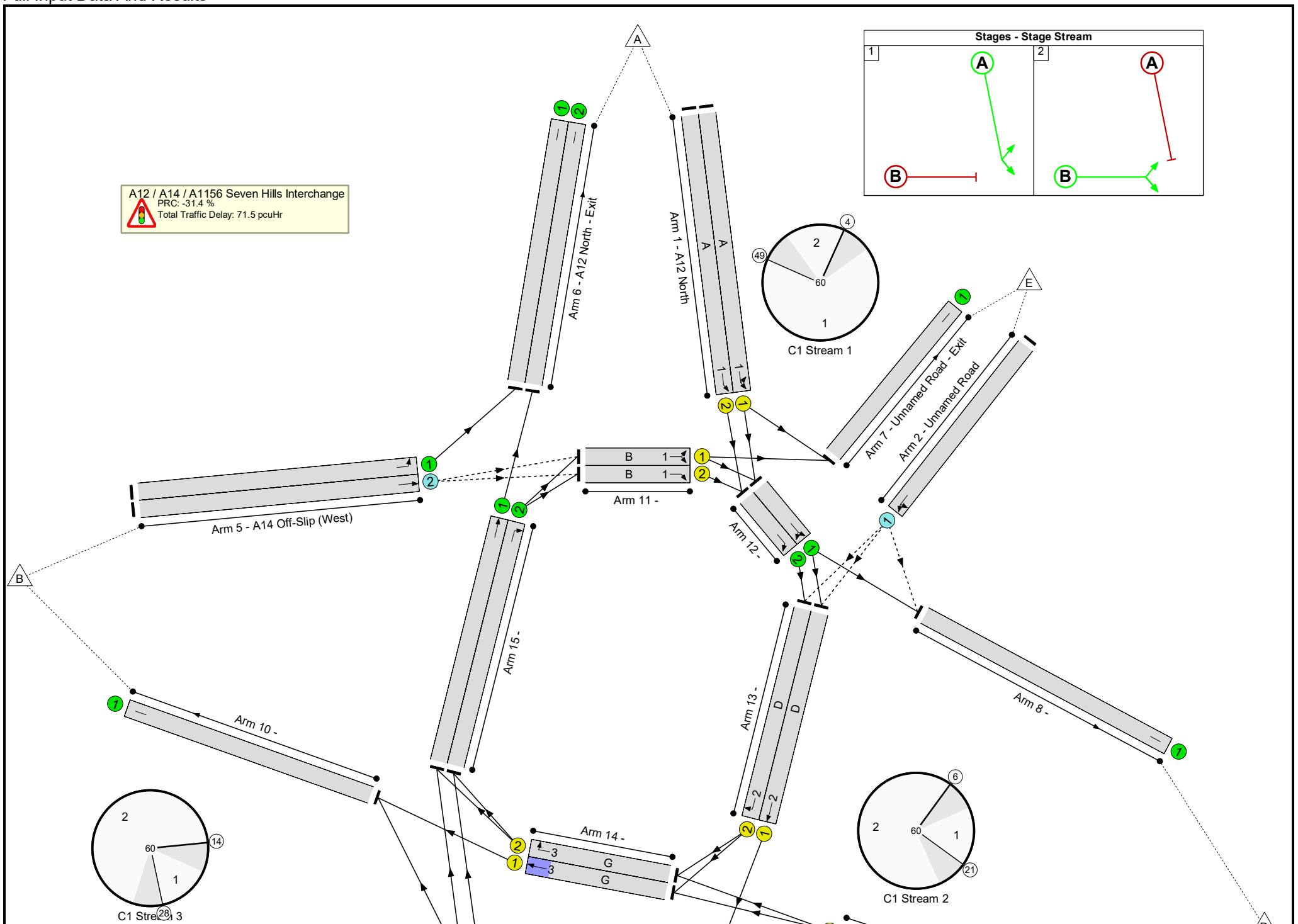
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.3%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.3%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	530	1866	1275	41.6%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1164	1866	1275	91.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	55	1871	373	14.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	189	1877	344	54.9%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	407	1877	344	118.3%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	227	1878	313	72.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	180	1878	313	57.5%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1440	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	113	1871	772	14.6%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1440	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	559	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1280	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	301	1886	346	86.4%
11/2	Right	U	1	N/A	B		1	10	-	6	1886	346	1.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	767	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1170	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	312	1877	1283	24.3%
13/2	Right	U	2	N/A	D		1	40	-	1219	1877	1283	95.0%
14/1	Ahead	U	3	N/A	G		1	41	-	1221	2007	1405	86.9%
14/2	Right	U	3	N/A	G		1	41	-	405	1872	1310	26.2%
15/1	Ahead	U	N/A	N/A	-		-	-	-	559	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**168**	**0**	**0**	**15.1**	**56.4**	**0.0**	**71.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**168**	**0**	**0**	**15.1**	**56.4**	**0.0**	**71.5**	**-**	**-**	**-**	**-**
1/1	530	530	-	-	-	0.6	0.4	-	1.0	6.6	3.8	0.4	4.2
1/2	1164	1164	-	-	-	2.6	4.8	-	7.4	22.9	16.2	4.8	21.0
2/1	55	55	55	0	0	0.0	0.1	-	0.1	6.3	0.2	0.1	0.2
3/1	189	189	-	-	-	1.2	0.6	-	1.8	33.8	2.8	0.6	3.4
3/2	407	344	-	-	-	4.6	34.4	-	39.0	344.5	7.8	34.4	42.2
4/1	227	227	-	-	-	1.5	1.3	-	2.8	44.0	3.5	1.3	4.8
4/2	180	180	-	-	-	1.2	0.7	-	1.8	36.5	2.8	0.7	3.4
5/1	1440	1440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	113	113	113	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
6/1	1440	1440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	62	62	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	501	501	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1279	1279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	299	299	-	-	-	1.3	2.8	-	4.1	50.0	4.9	2.8	7.7
11/2	6	6	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1170	1170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	312	312	-	-	-	0.2	0.2	-	0.4	4.6	1.7	0.2	1.8
13/2	1219	1219	-	-	-	0.6	7.7	-	8.3	24.5	8.4	7.7	16.1
14/1	1220	1220	-	-	-	0.2	3.2	-	3.4	10.0	0.7	3.2	3.9

Full Input Data And Results

14/2	343	343	-	-	-	1.2	0.2	-	1.4	14.3	5.7	0.2	5.9
15/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

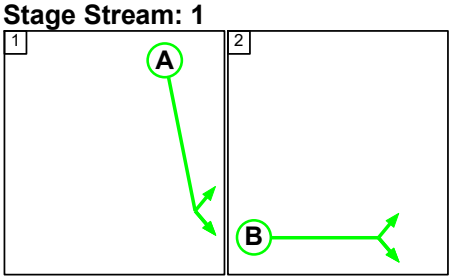
C1	Stream: 1 PRC for Signalled Lanes (%):	-1.4	Total Delay for Signalled Lanes (pcuHr):	12.57	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-31.4	Total Delay for Signalled Lanes (pcuHr):	49.41	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	3.6	Total Delay for Signalled Lanes (pcuHr):	9.35	Cycle Time (s):	60
	PRC Over All Lanes (%):	-31.4	Total Delay Over All Lanes(pcuHr):	71.51		

Full Input Data And Results

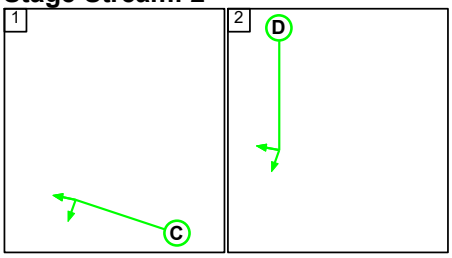
Scenario 13: '23EY 08:00-09:00' (FG13: '23EY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

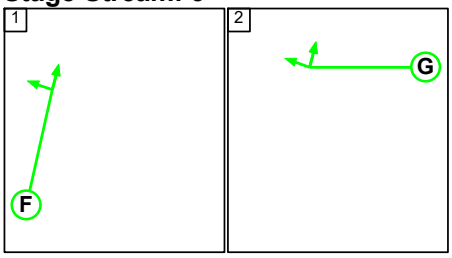
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	0	42

Stage Stream: 2

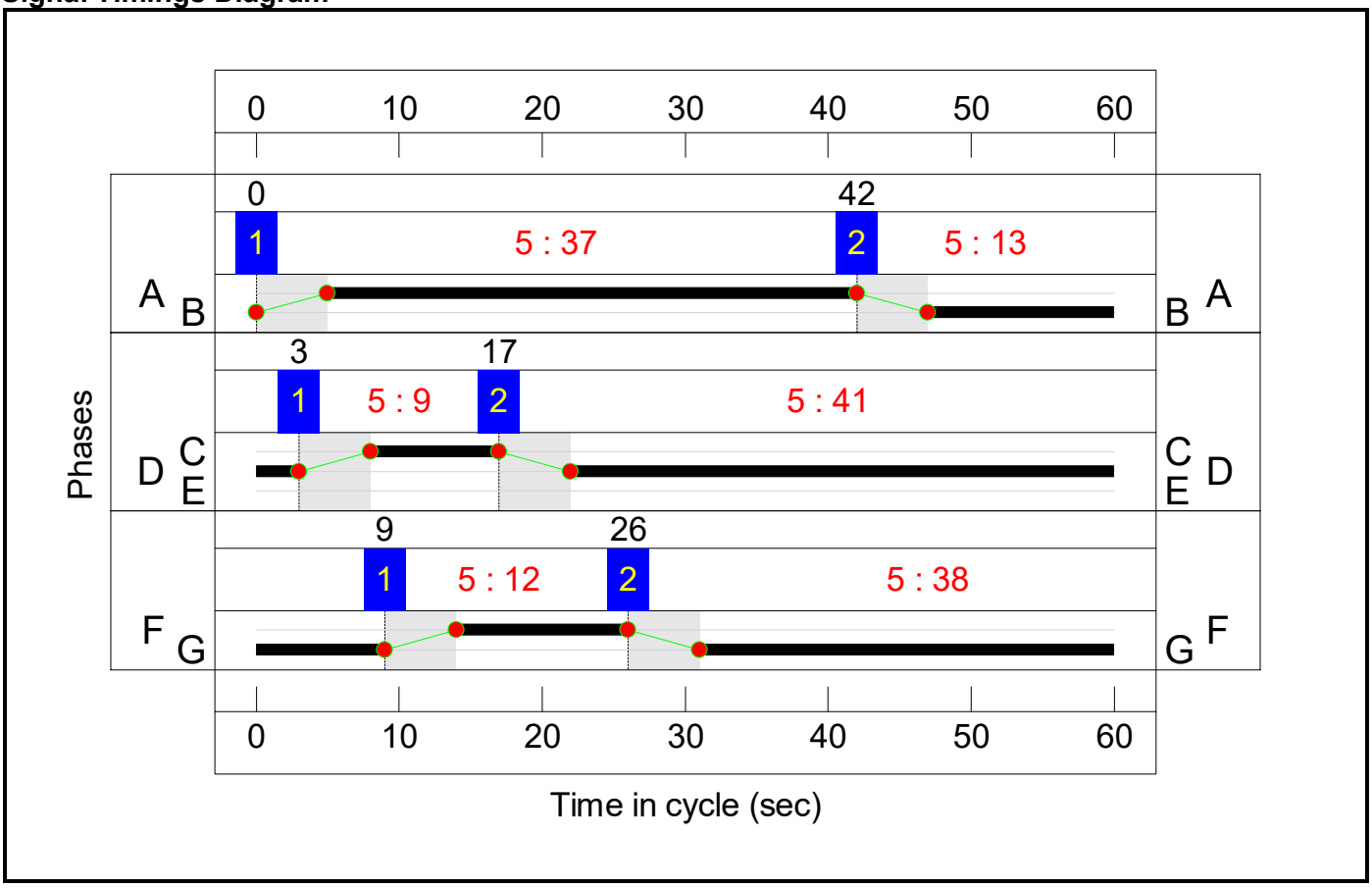
Stage	1	2
Duration	9	41
Change Point	3	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	9	26

Full Input Data And Results

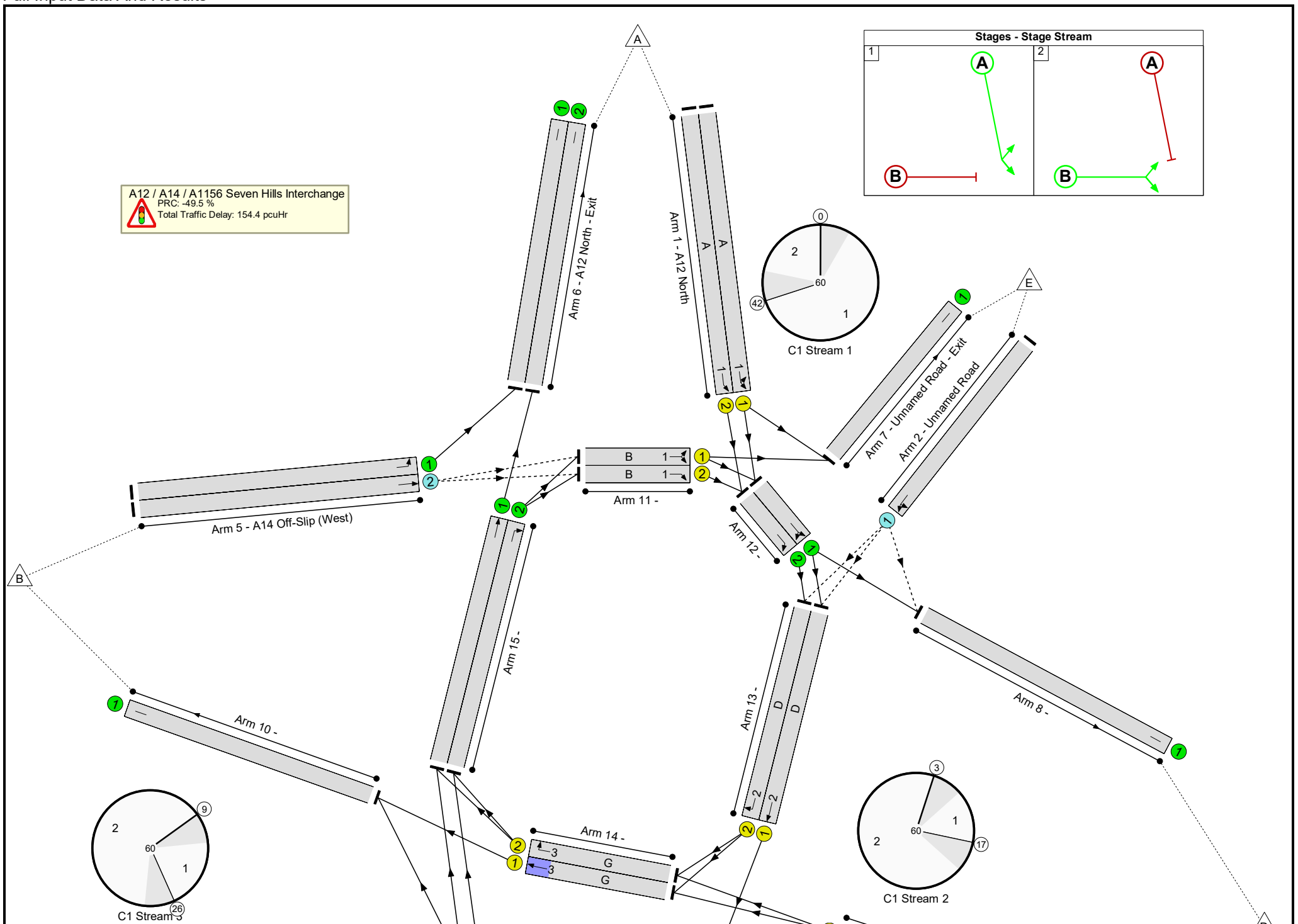
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**134.6%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**134.6%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	707	1866	1182	59.8%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1256	1866	1182	106.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	100	1871	288	34.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	251	1877	313	80.2%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	421	1877	313	134.6%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	367	1878	407	90.2%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	247	1878	407	60.7%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1683	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	143	1871	719	19.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1683	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	30	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	657	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1418	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	393	1886	440	88.4%
11/2	Right	U	1	N/A	B		1	13	-	12	1886	440	2.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1070	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1268	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	438	1877	1314	33.3%
13/2	Right	U	2	N/A	D		1	41	-	1343	1877	1314	96.6%
14/1	Ahead	U	3	N/A	G		1	38	-	1334	2007	1305	96.6%
14/2	Right	U	3	N/A	G		1	38	-	430	1872	1217	26.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	262	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**243**	**0**	**0**	**23.2**	**131.2**	**0.0**	**154.4**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**243**	**0**	**0**	**23.2**	**131.2**	**0.0**	**154.4**	**-**	**-**	**-**	**-**
1/1	707	707	-	-	-	1.3	0.7	-	2.0	10.3	6.9	0.7	7.6
1/2	1256	1182	-	-	-	5.8	44.2	-	50.0	143.3	22.2	44.2	66.4
2/1	100	100	100	0	0	0.1	0.3	-	0.4	14.5	1.0	0.3	1.3
3/1	251	251	-	-	-	1.7	1.9	-	3.6	51.5	4.0	1.9	5.9
3/2	421	313	-	-	-	6.1	56.0	-	62.1	530.7	8.8	56.0	64.8
4/1	367	367	-	-	-	2.3	3.9	-	6.2	60.7	5.9	3.9	9.8
4/2	247	247	-	-	-	1.5	0.8	-	2.2	32.4	3.7	0.8	4.5
5/1	1683	1683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	143	143	143	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
6/1	1683	1683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	26	26	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1344	1344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	389	389	-	-	-	1.5	3.4	-	4.9	45.1	6.3	3.4	9.7
11/2	12	12	-	-	-	0.1	0.0	-	0.1	22.2	0.2	0.0	0.2
12/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1194	1194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	438	438	-	-	-	0.4	0.2	-	0.7	5.5	2.7	0.2	3.0
13/2	1269	1269	-	-	-	0.5	9.8	-	10.3	29.2	11.1	9.8	20.9
14/1	1260	1260	-	-	-	0.7	9.8	-	10.5	30.0	5.3	9.8	15.1

Full Input Data And Results

14/2	322	322	-	-	-	1.2	0.2	-	1.4	15.4	5.3	0.2	5.5
15/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	258	258	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

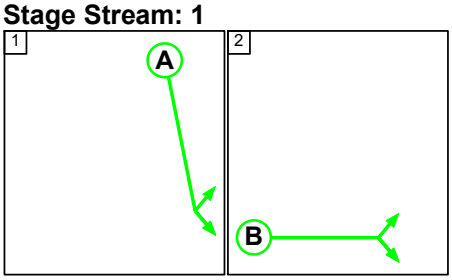
C1	Stream: 1 PRC for Signalled Lanes (%):	-18.1	Total Delay for Signalled Lanes (pcuHr):	56.96	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-49.5	Total Delay for Signalled Lanes (pcuHr):	76.61	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-7.3	Total Delay for Signalled Lanes (pcuHr):	20.29	Cycle Time (s): 60
	PRC Over All Lanes (%):	-49.5	Total Delay Over All Lanes(pcuHr):	154.39	

Full Input Data And Results

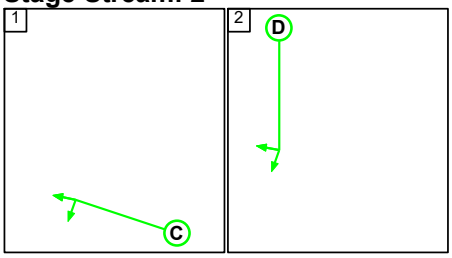
Scenario 14: '23EY 15:00-16:00' (FG14: '23EY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

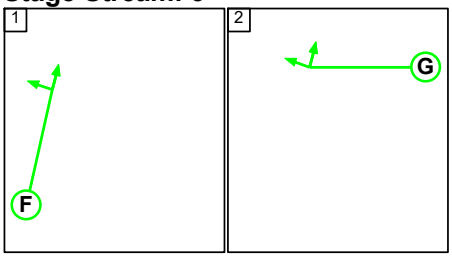
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	59	44

Stage Stream: 2

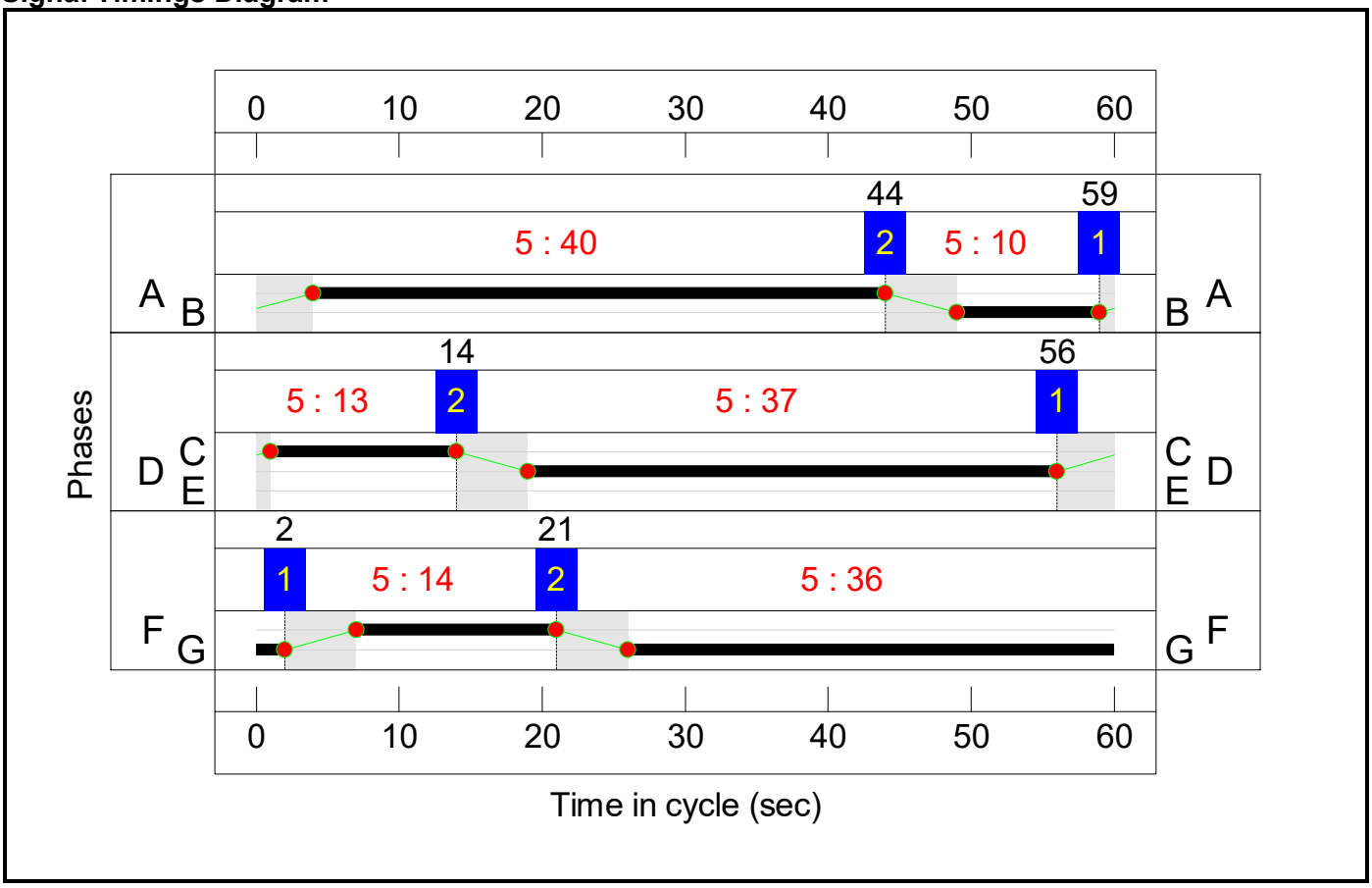
Stage	1	2
Duration	13	37
Change Point	56	14

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	2	21

Full Input Data And Results

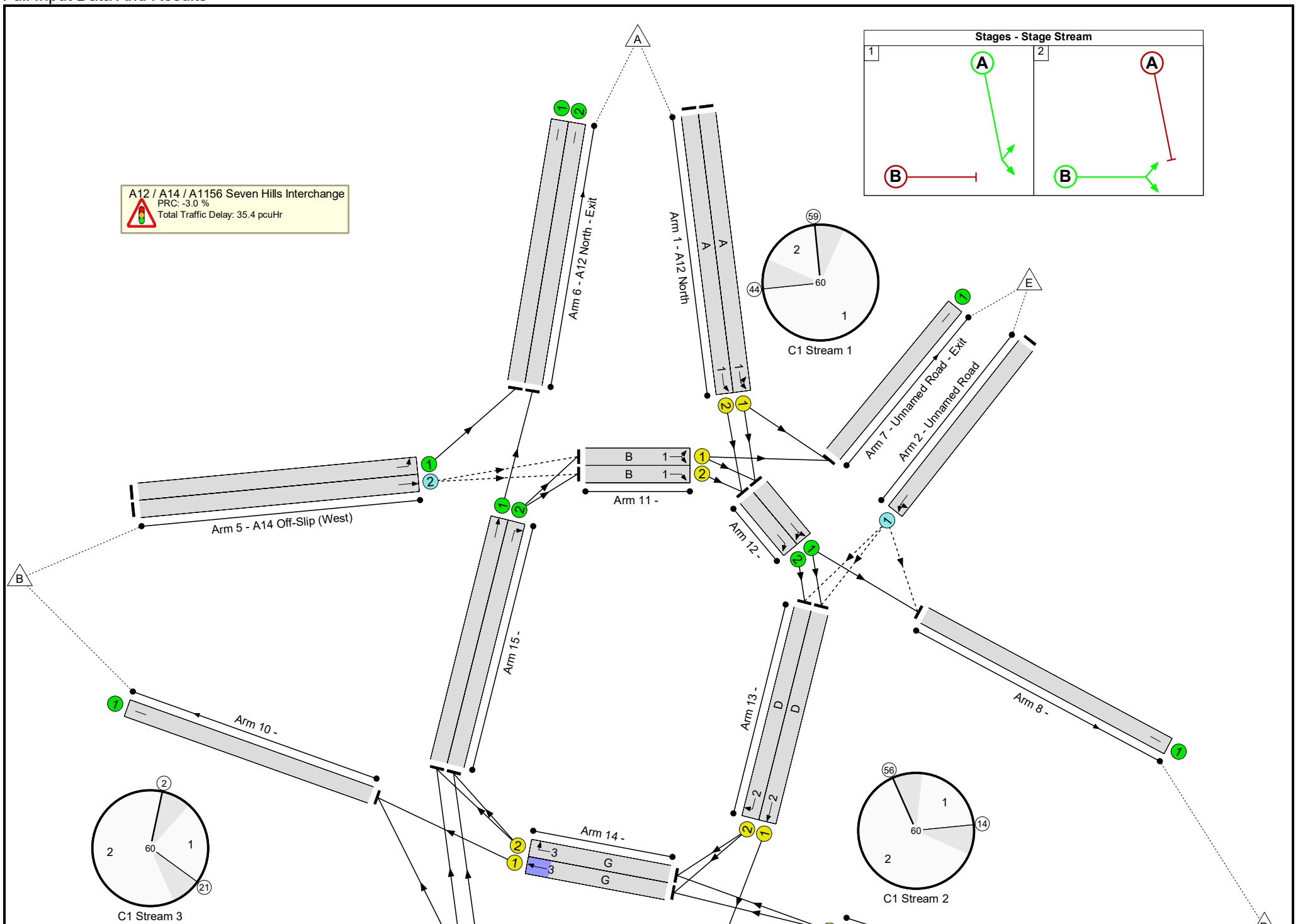
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.7%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	659	1866	1275	51.7%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1065	1866	1275	83.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	38	1871	386	9.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	226	1877	438	51.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	391	1877	438	89.3%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	384	1878	470	81.8%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	165	1878	470	35.1%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1301	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	95	1871	715	13.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1301	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	696	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1180	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	257	1886	346	74.3%
11/2	Right	U	1	N/A	B		1	10	-	4	1886	346	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	861	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1069	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	374	1877	1189	31.5%
13/2	Right	U	2	N/A	D		1	37	-	1102	1877	1189	92.7%
14/1	Ahead	U	3	N/A	G		1	36	-	1095	2007	1238	88.5%
14/2	Right	U	3	N/A	G		1	36	-	398	1872	1154	34.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	696	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**133**	**0**	**0**	**14.6**	**20.9**	**0.0**	**35.4**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**133**	**0**	**0**	**14.6**	**20.9**	**0.0**	**35.4**	**-**	**-**	**-**	**-**
1/1	659	659	-	-	-	0.9	0.5	-	1.4	7.6	5.3	0.5	5.8
1/2	1065	1065	-	-	-	2.1	2.5	-	4.5	15.4	13.0	2.5	15.5
2/1	38	38	38	0	0	0.0	0.1	-	0.1	6.4	0.1	0.1	0.2
3/1	226	226	-	-	-	1.3	0.5	-	1.8	28.5	3.3	0.5	3.8
3/2	391	391	-	-	-	2.4	3.6	-	6.0	55.5	6.3	3.6	9.9
4/1	384	384	-	-	-	2.3	2.1	-	4.4	41.3	6.0	2.1	8.1
4/2	165	165	-	-	-	0.8	0.3	-	1.1	24.4	2.2	0.3	2.5
5/1	1301	1301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	95	95	95	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1301	1301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	696	696	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1180	1180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	257	257	-	-	-	1.3	1.4	-	2.7	37.5	4.1	1.4	5.5
11/2	4	4	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	861	861	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1069	1069	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	374	374	-	-	-	0.3	0.2	-	0.6	5.4	1.7	0.2	1.9
13/2	1102	1102	-	-	-	1.1	5.6	-	6.7	21.9	7.3	5.6	13.0
14/1	1095	1095	-	-	-	0.4	3.7	-	4.1	13.5	1.6	3.7	5.3

Full Input Data And Results

14/2	398	398	-	-	-	1.7	0.3	-	2.0	17.7	6.6	0.3	6.8
15/1	696	696	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

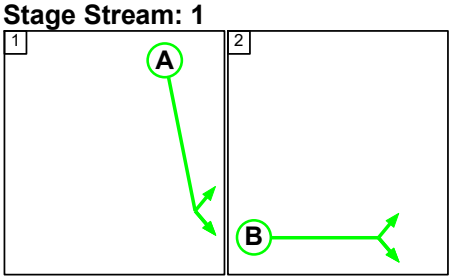
C1	Stream: 1 PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	8.64	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-3.0	Total Delay for Signalled Lanes (pcuHr):	15.08	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	1.7	Total Delay for Signalled Lanes (pcuHr):	11.58	Cycle Time (s): 60
	PRC Over All Lanes (%):	-3.0	Total Delay Over All Lanes(pcuHr):	35.45	

Full Input Data And Results

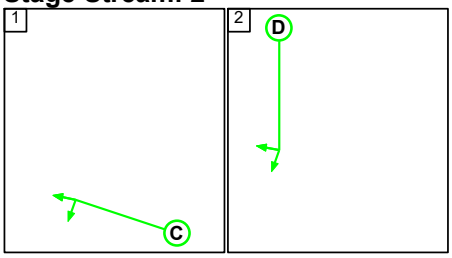
Scenario 15: '23EY 17:00-18:00' (FG15: '23EY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

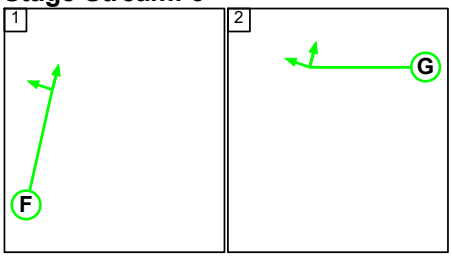
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

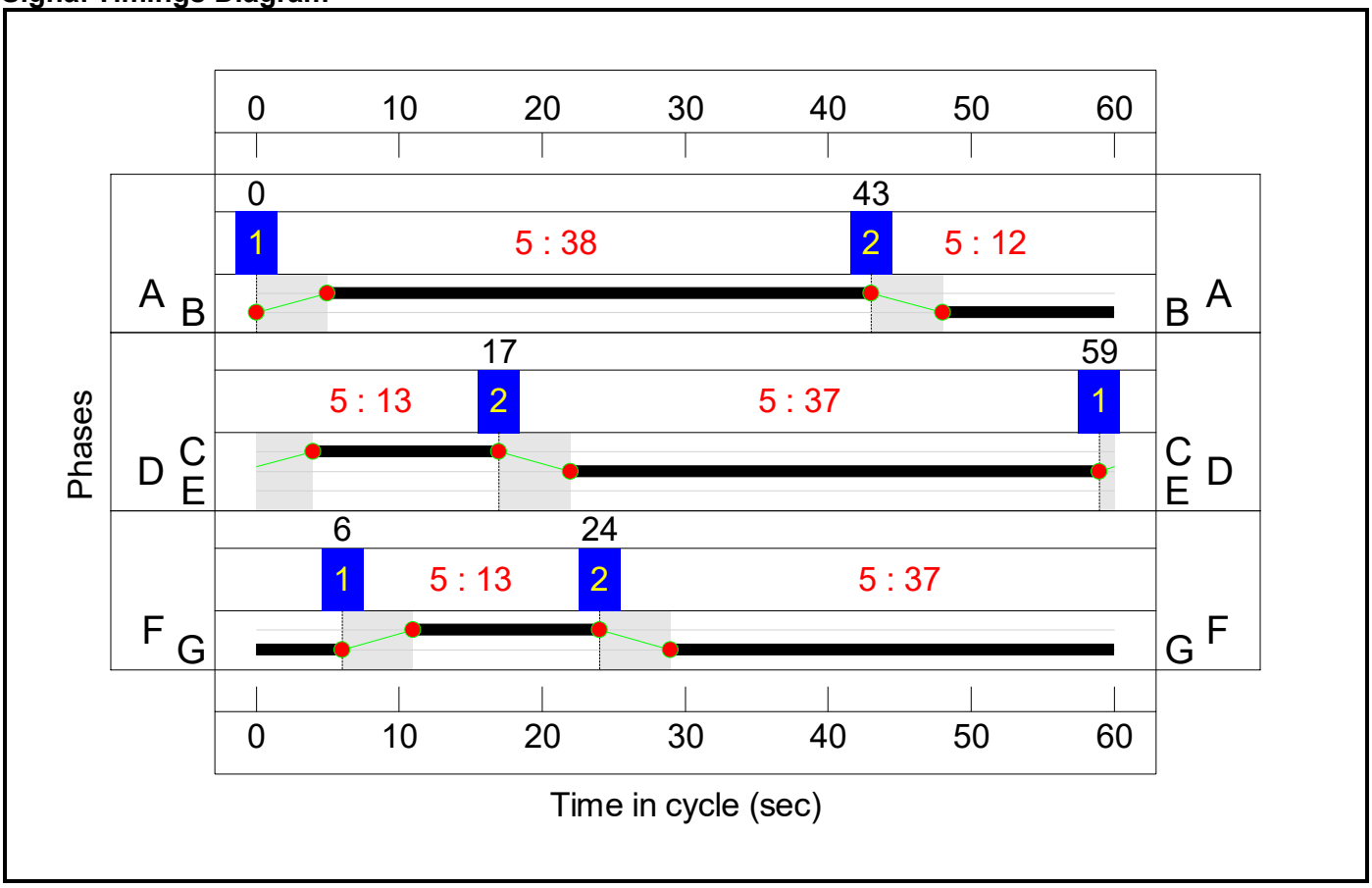
Stage	1	2
Duration	13	37
Change Point	59	17

Stage Stream: 3

Stage	1	2
Duration	13	37
Change Point	6	24

Full Input Data And Results

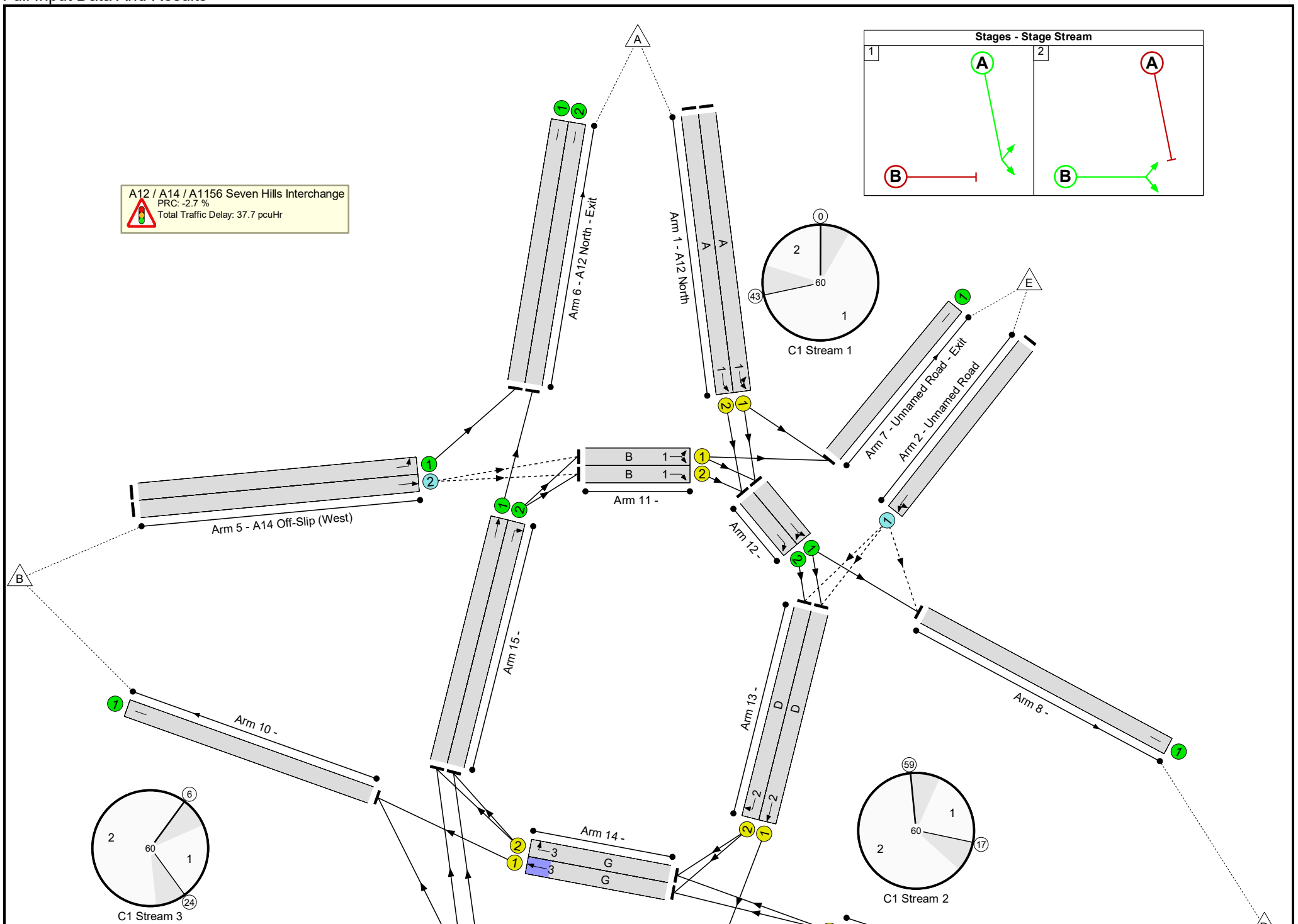
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	658	1866	1213	54.3%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1073	1866	1213	88.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	28	1871	363	7.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	309	1877	438	70.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	385	1877	438	87.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	13	-	353	1878	438	80.6%
4/2	A1156 Ahead	U	3	N/A	F		1	13	-	217	1878	438	49.5%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1311	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	116	1871	713	16.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1311	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	328	1886	409	80.3%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	936	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1078	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	345	1877	1189	29.0%
13/2	Right	U	2	N/A	D		1	37	-	1099	1877	1189	92.4%
14/1	Ahead	U	3	N/A	G		1	37	-	1098	2007	1271	86.4%
14/2	Right	U	3	N/A	G		1	37	-	386	1872	1186	32.6%
15/1	Ahead	U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	217	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**144**	**0**	**0**	**15.5**	**22.2**	**0.0**	**37.7**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**144**	**0**	**0**	**15.5**	**22.2**	**0.0**	**37.7**	**-**	**-**	**-**	**-**
1/1	658	658	-	-	-	1.0	0.6	-	1.6	8.9	5.8	0.6	6.4
1/2	1073	1073	-	-	-	2.6	3.6	-	6.2	20.9	14.6	3.6	18.2
2/1	28	28	28	0	0	0.0	0.0	-	0.1	6.8	0.1	0.0	0.2
3/1	309	309	-	-	-	1.8	1.2	-	3.0	34.8	4.7	1.2	5.9
3/2	385	385	-	-	-	2.4	3.2	-	5.6	52.5	6.1	3.2	9.3
4/1	353	353	-	-	-	2.1	2.0	-	4.1	41.9	5.5	2.0	7.5
4/2	217	217	-	-	-	1.2	0.5	-	1.7	28.0	3.1	0.5	3.6
5/1	1311	1311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	116	116	116	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1311	1311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1186	1186	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	328	328	-	-	-	1.4	1.9	-	3.3	36.2	5.3	1.9	7.3
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	936	936	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1078	1078	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	345	345	-	-	-	0.4	0.2	-	0.6	5.9	2.1	0.2	2.3
13/2	1099	1099	-	-	-	0.7	5.5	-	6.1	20.1	4.7	5.5	10.2
14/1	1098	1098	-	-	-	0.3	3.1	-	3.4	11.0	0.9	3.1	4.0

Full Input Data And Results

14/2	386	386	-	-	-	1.7	0.2	-	1.9	17.8	6.4	0.2	6.7
15/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	217	217	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

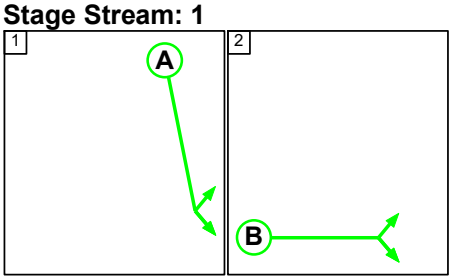
C1	Stream: 1 PRC for Signalled Lanes (%):	1.7	Total Delay for Signalled Lanes (pcuHr):	11.19	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-2.7	Total Delay for Signalled Lanes (pcuHr):	15.30	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	11.07	Cycle Time (s):	60
	PRC Over All Lanes (%):	-2.7	Total Delay Over All Lanes(pcuHr):	37.70		

Full Input Data And Results

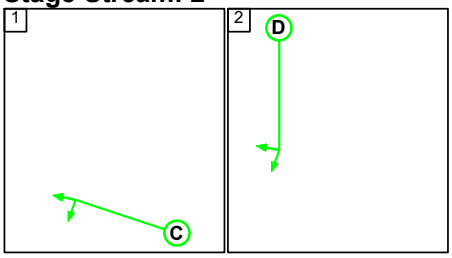
Scenario 16: '28RC 06:00-07:00' (FG16: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

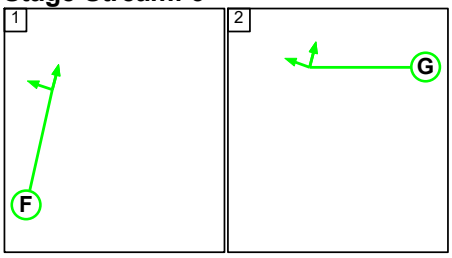
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

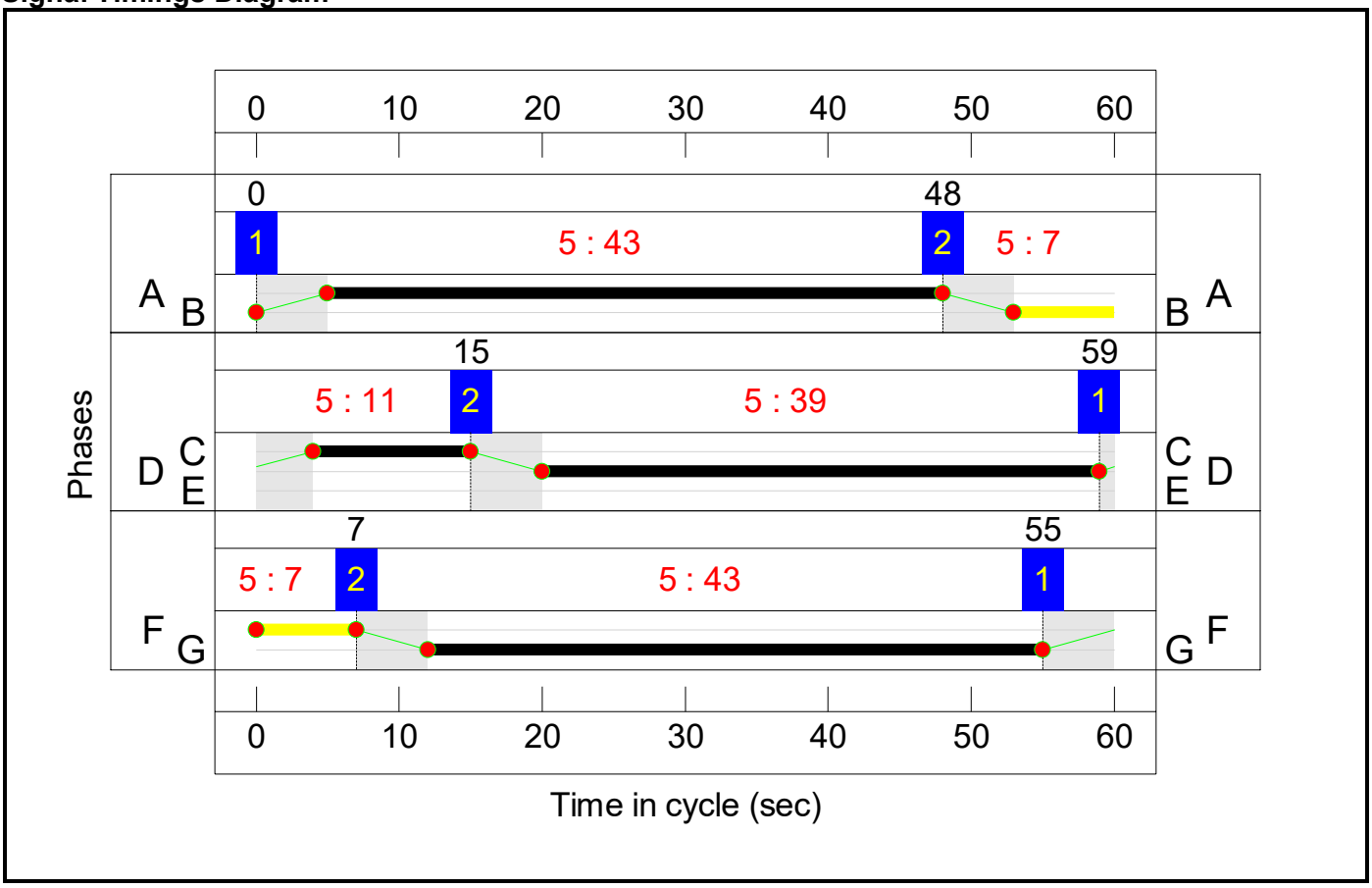
Stage	1	2
Duration	11	39
Change Point	59	15

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	55	7

Full Input Data And Results

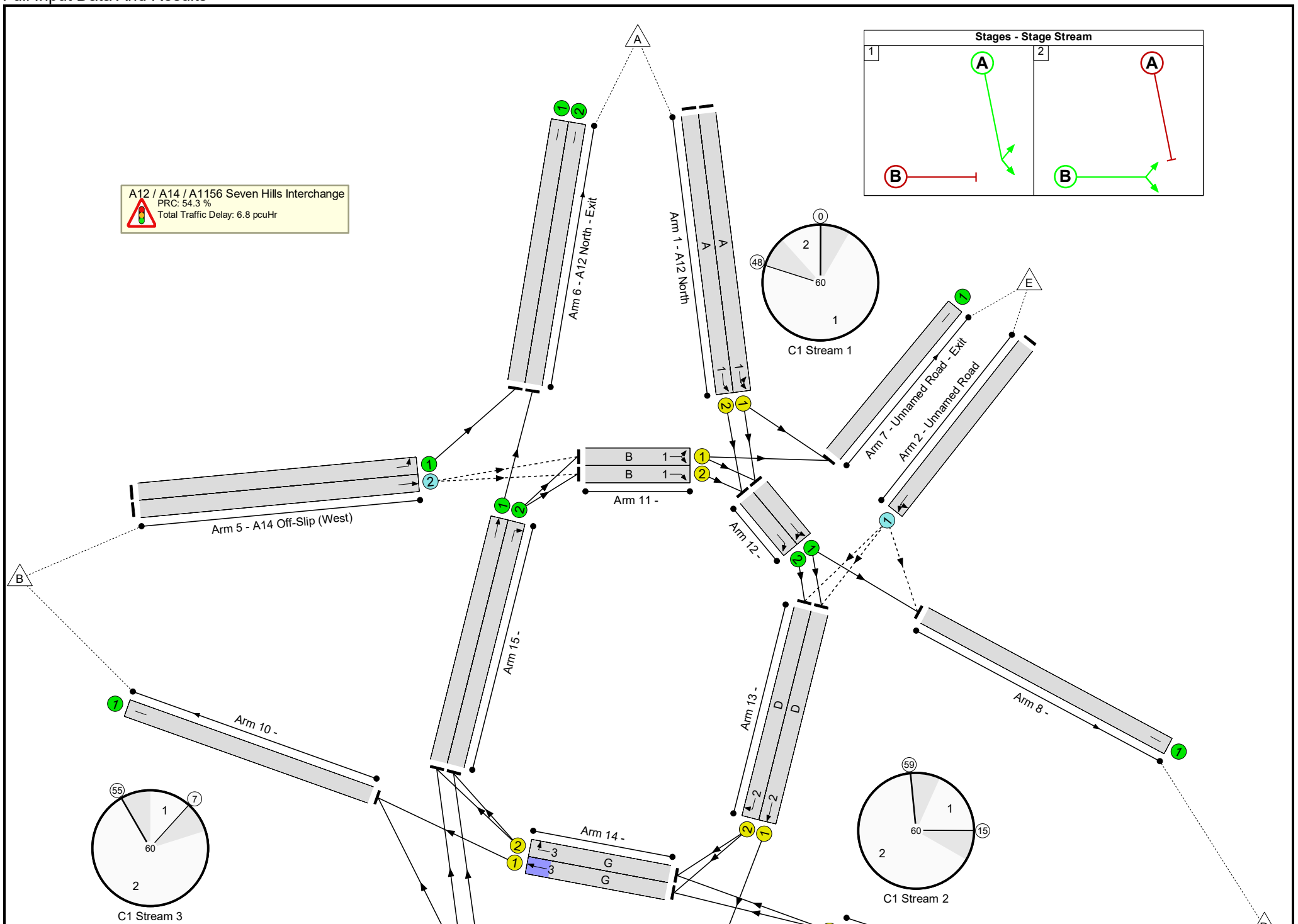
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.3%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.3%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	43	-	302	1866	1368	22.1%
1/2	A12 North Ahead	U	1	N/A	A		1	43	-	680	1866	1368	49.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	668	4.5%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	76	1877	375	20.2%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	179	1877	375	47.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	36	1878	250	14.4%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	36	1871	927	3.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	205	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	162	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	728	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	7	-	29	1886	251	11.5%
11/2	Right	U	1	N/A	B		1	7	-	21	1886	251	8.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	86	1877	1251	6.9%
13/2	Right	U	2	N/A	D		1	39	-	730	1877	1251	58.3%
14/1	Ahead	U	3	N/A	G		1	43	-	721	2007	1472	49.0%
14/2	Right	U	3	N/A	G		1	43	-	188	1872	1373	13.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	205	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**66**	**0**	**0**	**4.1**	**2.8**	**0.0**	**6.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**66**	**0**	**0**	**4.1**	**2.8**	**0.0**	**6.8**	**-**	**-**	**-**	**-**
1/1	302	302	-	-	-	0.2	0.1	-	0.4	4.2	1.6	0.1	1.7
1/2	680	680	-	-	-	0.6	0.5	-	1.1	6.0	4.7	0.5	5.2
2/1	30	30	30	0	0	0.0	0.0	-	0.0	2.8	0.0	0.0	0.0
3/1	76	76	-	-	-	0.4	0.1	-	0.5	26.0	1.1	0.1	1.2
3/2	179	179	-	-	-	1.1	0.5	-	1.5	30.4	2.6	0.5	3.1
4/1	36	36	-	-	-	0.2	0.1	-	0.3	31.4	0.5	0.1	0.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	36	36	36	0	0	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
6/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	205	205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	162	162	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	728	728	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	29	29	-	-	-	0.1	0.1	-	0.2	26.0	0.4	0.1	0.5
11/2	21	21	-	-	-	0.1	0.0	-	0.2	30.8	0.3	0.0	0.3
12/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	701	701	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	86	86	-	-	-	0.1	0.0	-	0.1	4.1	0.3	0.0	0.3
13/2	730	730	-	-	-	0.6	0.7	-	1.3	6.5	3.3	0.7	4.0
14/1	721	721	-	-	-	0.5	0.5	-	1.0	5.0	2.7	0.5	3.1

Full Input Data And Results

14/2	188	188	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	205	205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

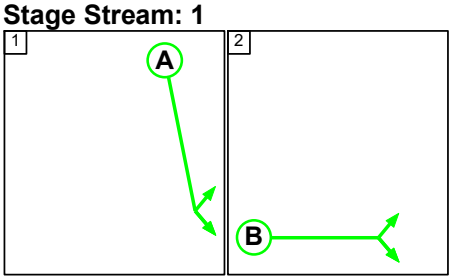
C1	Stream: 1 PRC for Signalled Lanes (%):	81.1	Total Delay for Signalled Lanes (pcuHr):	1.87	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	54.3	Total Delay for Signalled Lanes (pcuHr):	3.48	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	83.7	Total Delay for Signalled Lanes (pcuHr):	1.41	Cycle Time (s):	60
	PRC Over All Lanes (%):	54.3	Total Delay Over All Lanes(pcuHr):	6.80		

Full Input Data And Results

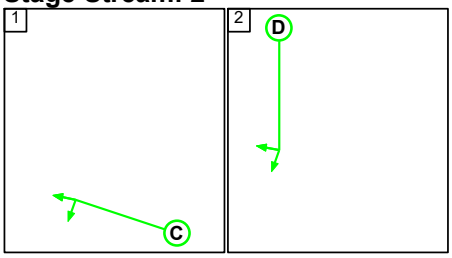
Scenario 17: '28RC 07:00-08:00' (FG17: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

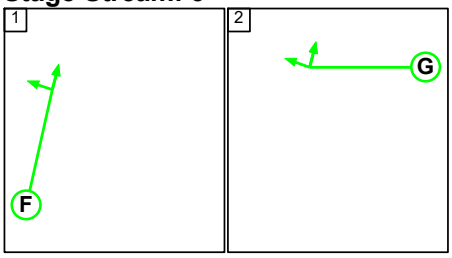
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	53	41

Stage Stream: 2

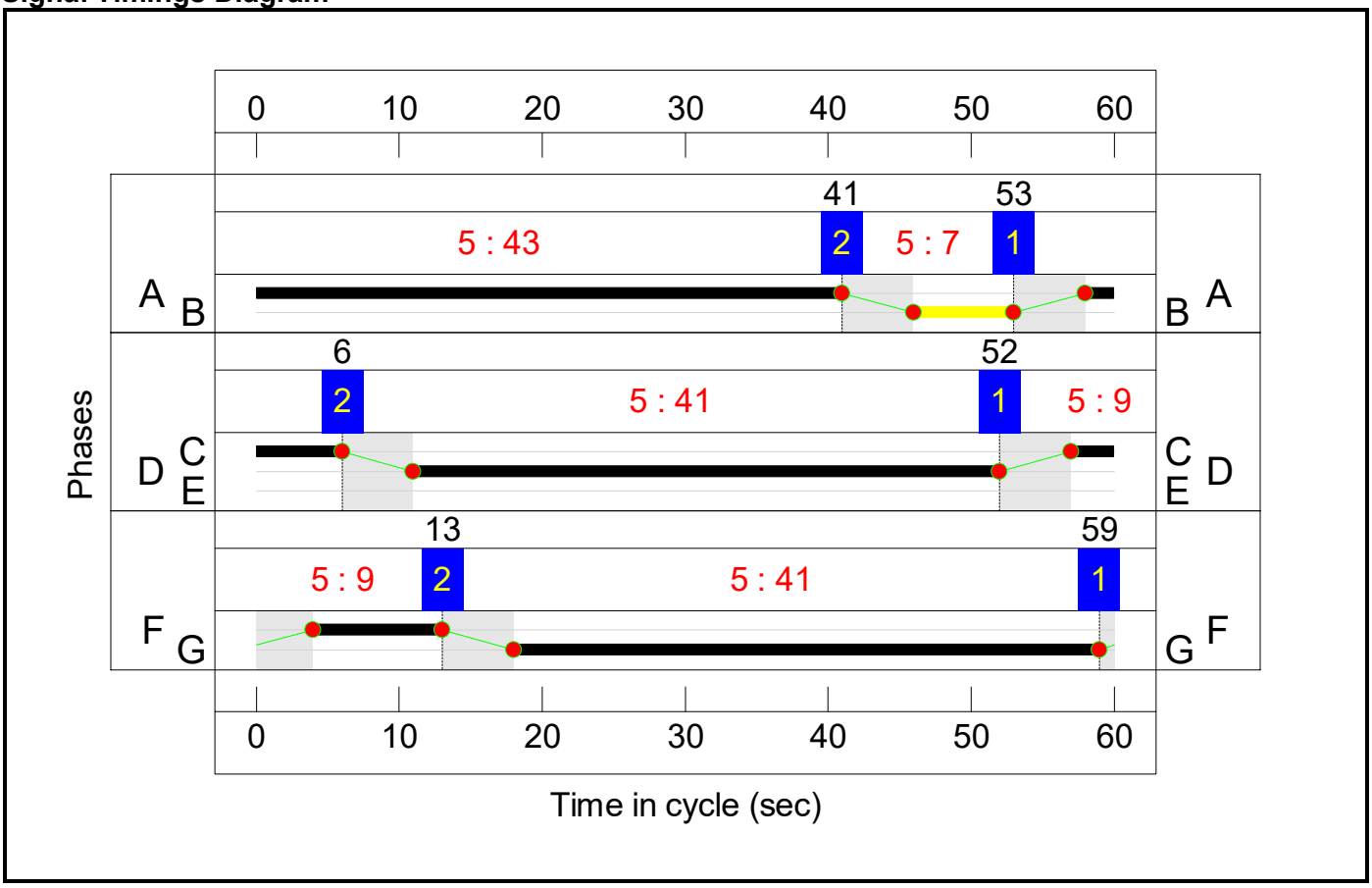
Stage	1	2
Duration	9	41
Change Point	52	6

Stage Stream: 3

Stage	1	2
Duration	9	41
Change Point	59	13

Full Input Data And Results

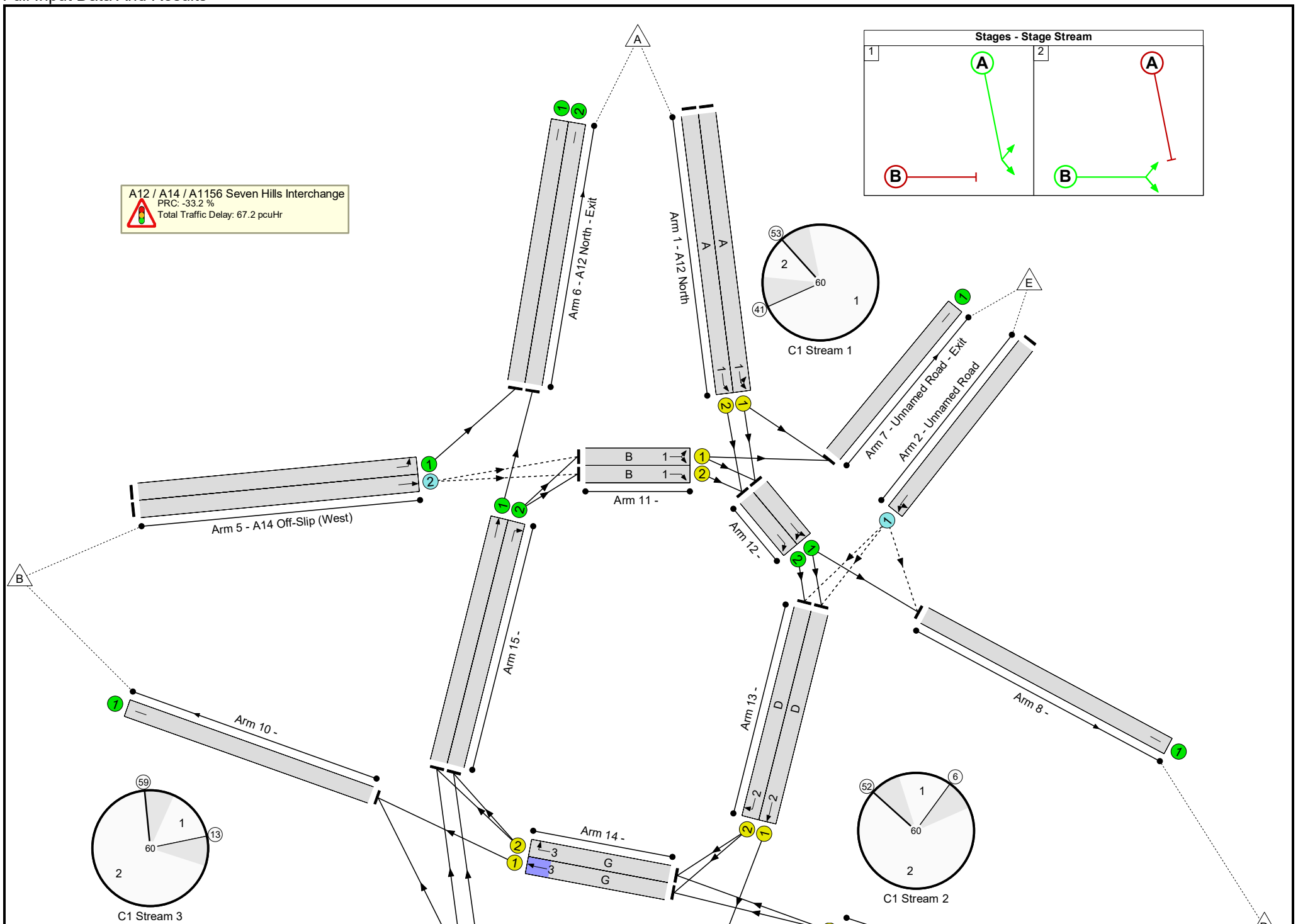
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**119.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**119.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	43	-	496	1866	1368	36.2%
1/2	A12 North Ahead	U	1	N/A	A		1	43	-	1190	1866	1368	87.0%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	59	1871	404	14.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	196	1877	313	62.7%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	375	1877	313	119.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	9	-	227	1878	313	72.5%
4/2	A1156 Ahead	U	3	N/A	F		1	9	-	82	1878	313	26.2%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1352	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	109	1871	814	13.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1352	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	465	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1309	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	7	-	200	1886	251	78.5%
11/2	Right	U	1	N/A	B		1	7	-	6	1886	251	2.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	627	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1196	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	269	1877	1314	20.5%
13/2	Right	U	2	N/A	D		1	41	-	1248	1877	1314	95.0%
14/1	Ahead	U	3	N/A	G		1	41	-	1250	2007	1405	88.9%
14/2	Right	U	3	N/A	G		1	41	-	373	1872	1310	23.8%
15/1	Ahead	U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	97	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**168**	**0**	**0**	**13.9**	**53.3**	**0.0**	**67.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**168**	**0**	**0**	**13.9**	**53.3**	**0.0**	**67.2**	**-**	**-**	**-**	**-**
1/1	496	496	-	-	-	0.4	0.3	-	0.7	5.0	2.9	0.3	3.2
1/2	1190	1190	-	-	-	1.9	3.2	-	5.2	15.6	14.5	3.2	17.8
2/1	59	59	59	0	0	0.0	0.1	-	0.1	5.6	0.1	0.1	0.2
3/1	196	196	-	-	-	1.3	0.8	-	2.1	38.5	3.0	0.8	3.8
3/2	375	313	-	-	-	4.6	33.9	-	38.5	369.3	7.4	33.9	41.2
4/1	227	227	-	-	-	1.5	1.3	-	2.8	44.0	3.5	1.3	4.8
4/2	82	82	-	-	-	0.5	0.2	-	0.7	29.6	1.2	0.2	1.4
5/1	1352	1352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	109	109	109	0	0	0.0	0.1	-	0.1	2.6	0.0	0.1	0.1
6/1	1352	1352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	465	465	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1308	1308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	198	198	-	-	-	1.1	1.7	-	2.9	52.0	3.2	1.7	4.9
11/2	6	6	-	-	-	0.0	0.0	-	0.1	30.3	0.1	0.0	0.1
12/1	627	627	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1196	1196	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	269	269	-	-	-	0.2	0.1	-	0.3	4.1	1.3	0.1	1.5
13/2	1248	1248	-	-	-	1.1	7.7	-	8.7	25.2	6.8	7.7	14.5
14/1	1249	1249	-	-	-	0.3	3.8	-	4.1	11.8	1.4	3.8	5.3

Full Input Data And Results

14/2	311	311	-	-	-	1.0	0.2	-	1.1	13.3	5.2	0.2	5.3
15/1	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	95	95	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

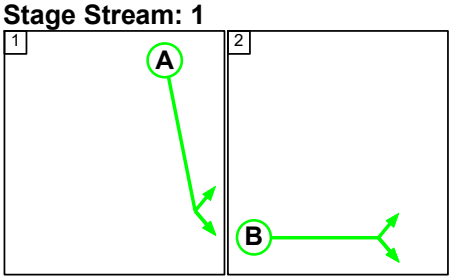
C1	Stream: 1 PRC for Signalled Lanes (%):	3.5	Total Delay for Signalled Lanes (pcuHr):	8.75	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-33.2	Total Delay for Signalled Lanes (pcuHr):	49.60	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	1.2	Total Delay for Signalled Lanes (pcuHr):	8.70	Cycle Time (s): 60
	PRC Over All Lanes (%):	-33.2	Total Delay Over All Lanes(pcuHr):	67.22	

Full Input Data And Results

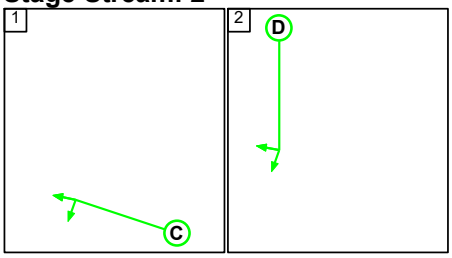
Scenario 18: '28RC 08:00-09:00' (FG18: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

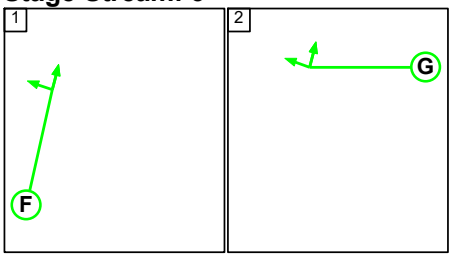
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	36	14
Change Point	58	39

Stage Stream: 2

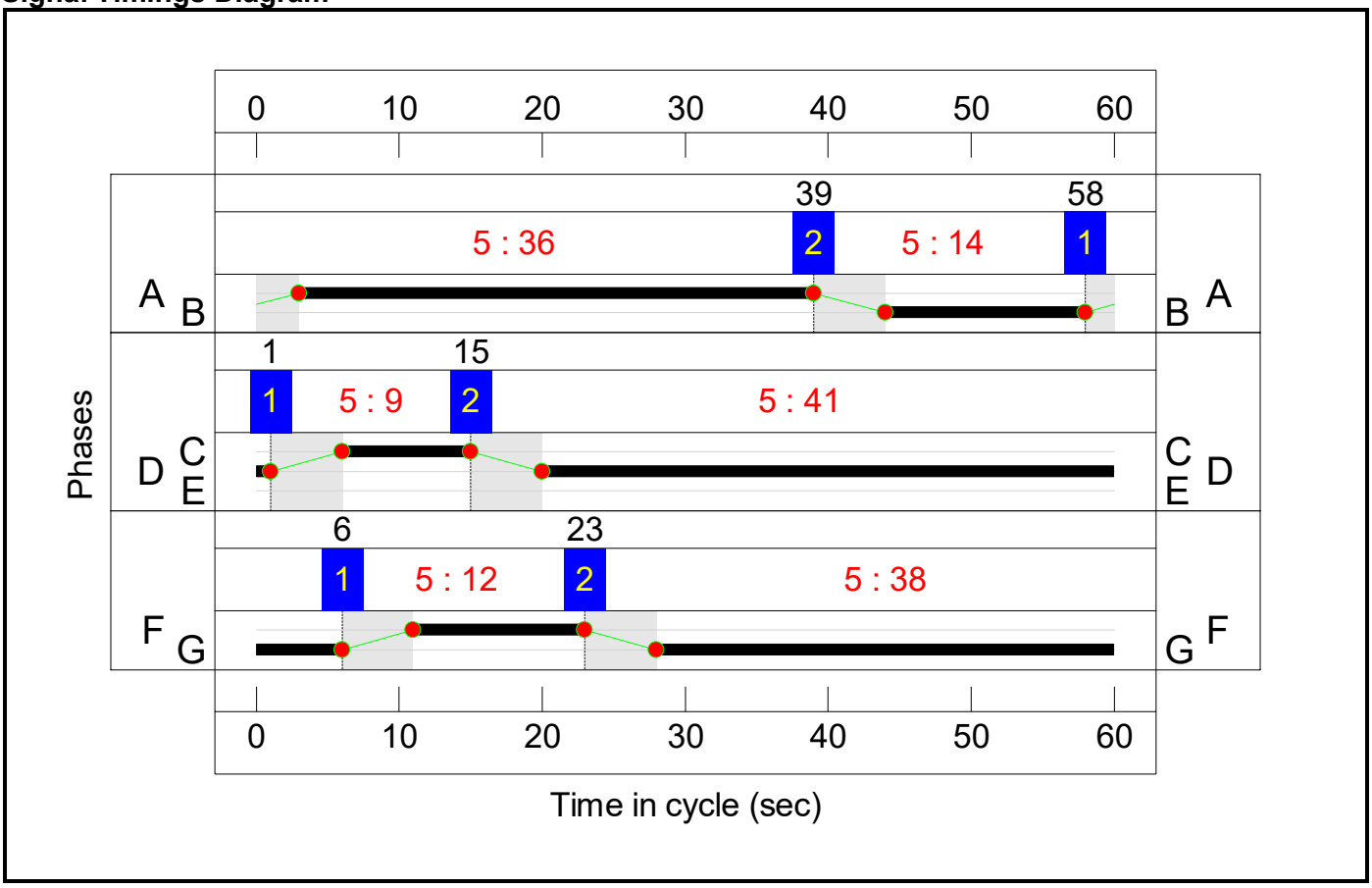
Stage	1	2
Duration	9	41
Change Point	1	15

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	6	23

Full Input Data And Results

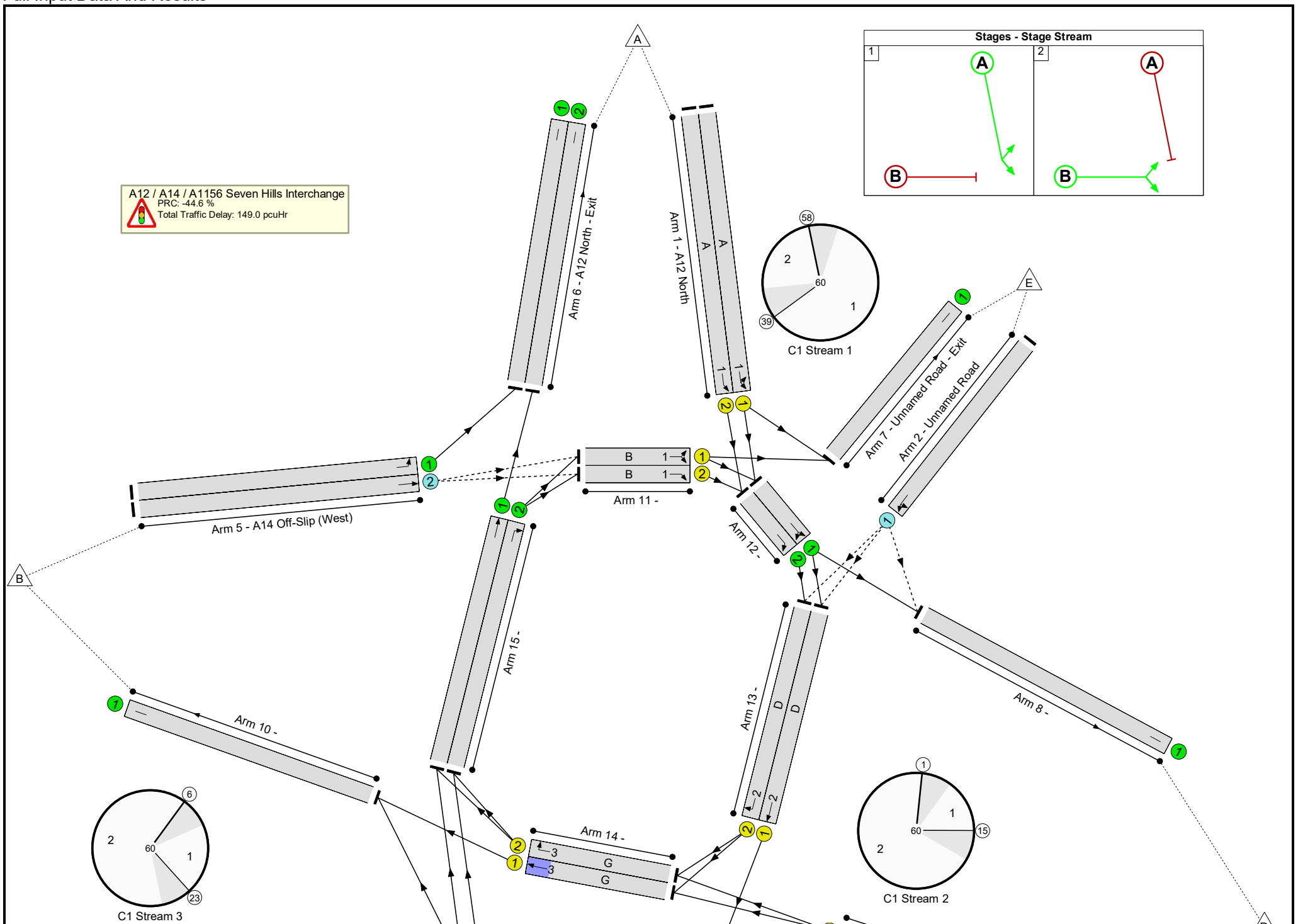
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**130.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**130.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	36	-	771	1866	1151	67.0%
1/2	A12 North Ahead	U	1	N/A	A		1	36	-	1248	1866	1151	108.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	106	1871	331	32.1%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	259	1877	313	82.8%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	407	1877	313	130.1%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	364	1878	407	89.5%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	126	1878	407	31.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1647	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	136	1871	759	17.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1647	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	33	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	536	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	754	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1411	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	14	-	266	1886	471	55.6%
11/2	Right	U	1	N/A	B		1	14	-	12	1886	471	2.5%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1260	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	495	1877	1314	37.7%
13/2	Right	U	2	N/A	D		1	41	-	1339	1877	1314	94.5%
14/1	Ahead	U	3	N/A	G		1	38	-	1330	2007	1305	94.5%
14/2	Right	U	3	N/A	G		1	38	-	416	1872	1217	26.4%
15/1	Ahead	U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	142	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**242**	**0**	**0**	**22.6**	**126.4**	**0.0**	**149.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**242**	**0**	**0**	**22.6**	**126.4**	**0.0**	**149.0**	**-**	**-**	**-**	**-**
1/1	771	771	-	-	-	1.6	1.0	-	2.6	12.2	8.4	1.0	9.4
1/2	1248	1151	-	-	-	6.6	54.4	-	61.0	175.9	22.4	54.4	76.8
2/1	106	106	106	0	0	0.2	0.2	-	0.5	15.3	1.1	0.2	1.3
3/1	259	259	-	-	-	1.7	2.2	-	4.0	55.1	4.2	2.2	6.4
3/2	407	313	-	-	-	5.6	49.2	-	54.8	484.6	8.4	49.2	57.5
4/1	364	364	-	-	-	2.3	3.6	-	5.9	58.7	5.9	3.6	9.5
4/2	126	126	-	-	-	0.7	0.2	-	0.9	26.2	1.8	0.2	2.0
5/1	1647	1647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	136	136	136	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1647	1647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	29	29	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	536	536	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	754	754	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1314	1314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	262	262	-	-	-	1.0	0.6	-	1.6	22.6	3.9	0.6	4.5
11/2	12	12	-	-	-	0.1	0.0	-	0.1	21.2	0.2	0.0	0.2
12/1	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	495	495	-	-	-	0.4	0.3	-	0.7	5.4	2.7	0.3	3.0
13/2	1242	1242	-	-	-	0.4	7.2	-	7.6	22.0	8.9	7.2	16.1
14/1	1233	1233	-	-	-	0.7	7.2	-	7.8	22.9	4.2	7.2	11.3

Full Input Data And Results

14/2	322	322	-	-	-	1.1	0.2	-	1.3	14.5	5.3	0.2	5.5
15/1	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	138	138	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

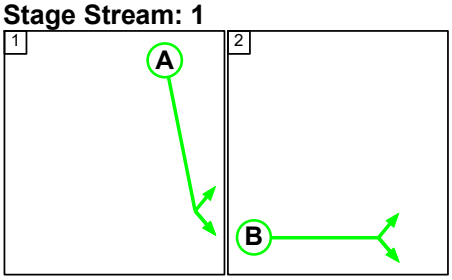
C1	Stream: 1 PRC for Signalled Lanes (%):	-20.5	Total Delay for Signalled Lanes (pcuHr):	65.33	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-44.6	Total Delay for Signalled Lanes (pcuHr):	67.10	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-5.0	Total Delay for Signalled Lanes (pcuHr):	15.99	Cycle Time (s): 60
	PRC Over All Lanes (%):	-44.6	Total Delay Over All Lanes(pcuHr):	148.99	

Full Input Data And Results

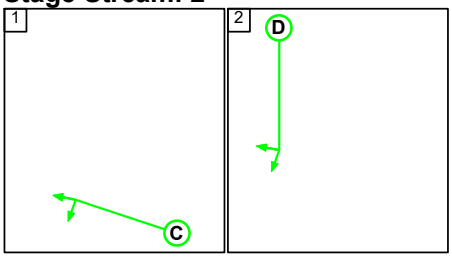
Scenario 19: '28RC 15:00-16:00' (FG19: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

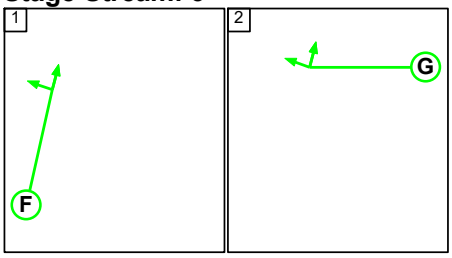
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	2	49

Stage Stream: 2

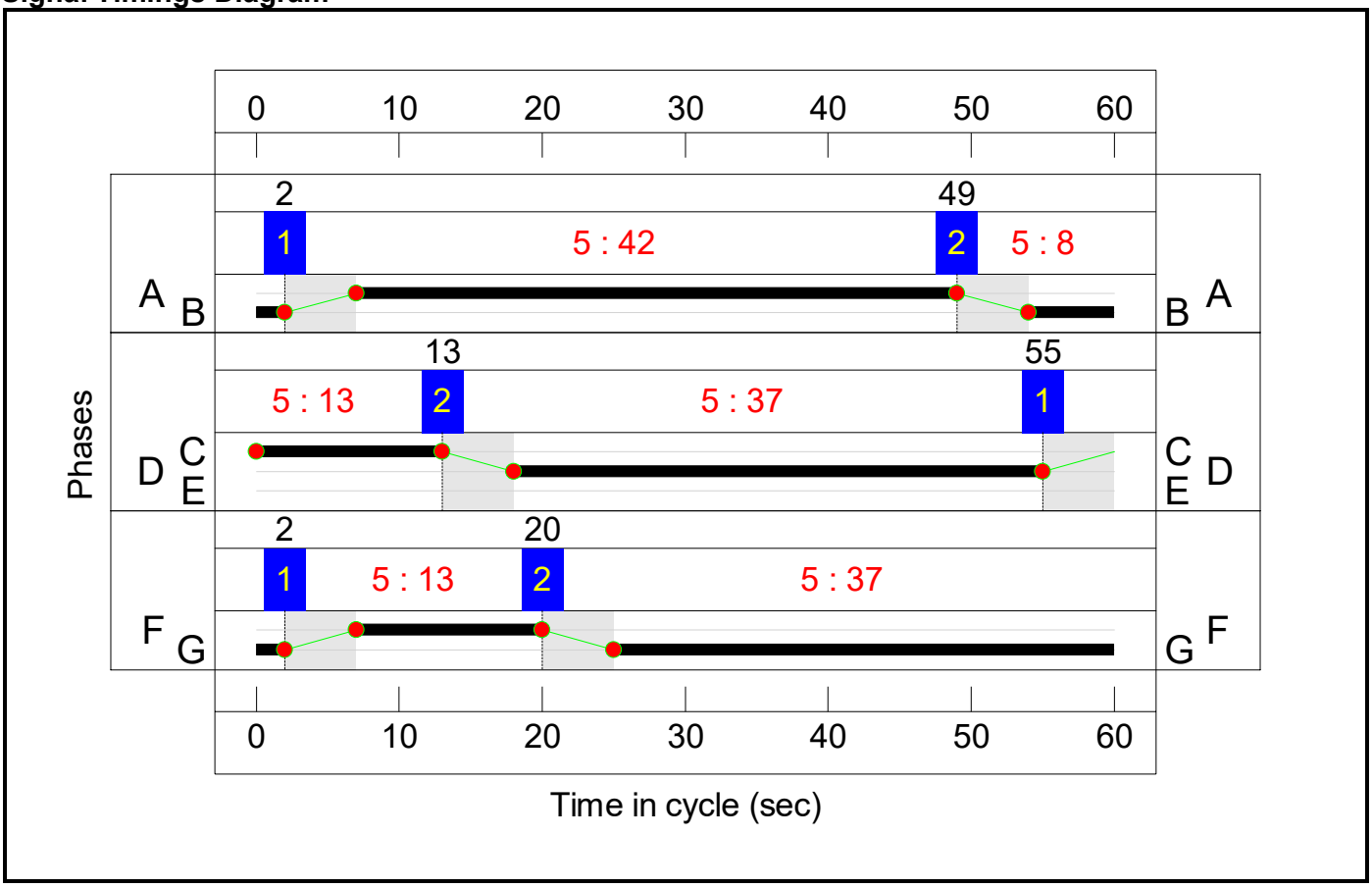
Stage	1	2
Duration	13	37
Change Point	55	13

Stage Stream: 3

Stage	1	2
Duration	13	37
Change Point	2	20

Full Input Data And Results

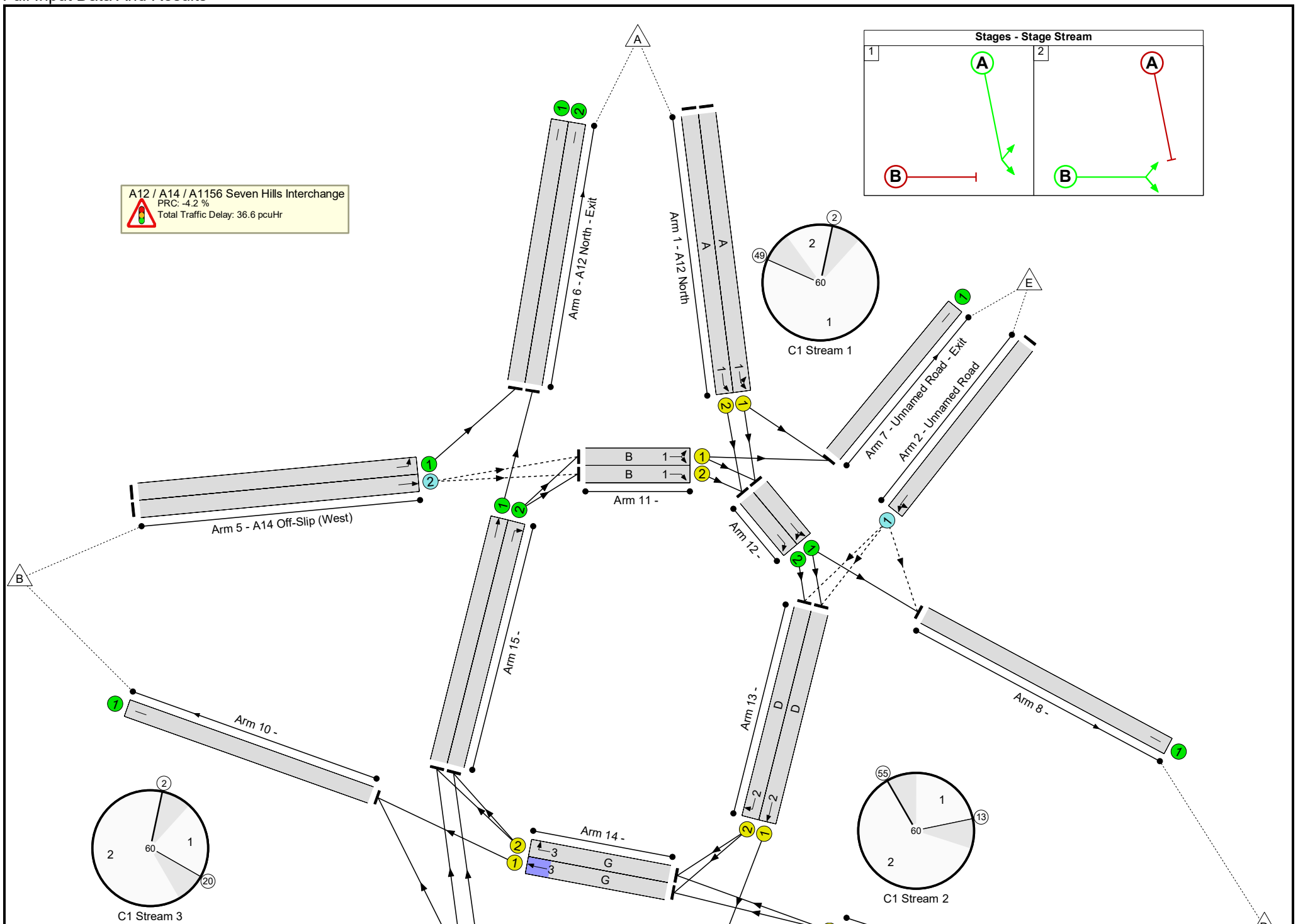
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.8%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.8%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	42	-	681	1866	1337	50.9%
1/2	A12 North Ahead	U	1	N/A	A		1	42	-	1076	1866	1337	80.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	41	1871	390	10.5%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	254	1877	438	58.0%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	393	1877	438	89.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	13	-	382	1878	438	87.2%
4/2	A1156 Ahead	U	3	N/A	F		1	13	-	118	1878	438	26.9%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1309	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	96	1871	730	13.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1309	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	438	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1191	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	8	-	211	1886	283	74.6%
11/2	Right	U	1	N/A	B		1	8	-	4	1886	283	1.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	833	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1080	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	401	1877	1189	33.7%
13/2	Right	U	2	N/A	D		1	37	-	1115	1877	1189	93.8%
14/1	Ahead	U	3	N/A	G		1	37	-	1108	2007	1271	87.2%
14/2	Right	U	3	N/A	G		1	37	-	400	1872	1186	33.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	119	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**137**	**0**	**0**	**14.6**	**22.0**	**0.0**	**36.6**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**137**	**0**	**0**	**14.6**	**22.0**	**0.0**	**36.6**	**-**	**-**	**-**	**-**
1/1	681	681	-	-	-	0.7	0.5	-	1.2	6.5	4.9	0.5	5.4
1/2	1076	1076	-	-	-	1.7	2.0	-	3.7	12.5	12.0	2.0	14.0
2/1	41	41	41	0	0	0.0	0.1	-	0.1	6.3	0.2	0.1	0.2
3/1	254	254	-	-	-	1.4	0.7	-	2.1	30.1	3.7	0.7	4.4
3/2	393	393	-	-	-	2.4	3.7	-	6.2	56.6	6.3	3.7	10.1
4/1	382	382	-	-	-	2.3	3.1	-	5.4	51.0	6.0	3.1	9.1
4/2	118	118	-	-	-	0.6	0.2	-	0.8	24.4	1.6	0.2	1.8
5/1	1309	1309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	96	96	96	0	0	0.0	0.1	-	0.1	2.8	0.0	0.1	0.1
6/1	1309	1309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	698	698	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	438	438	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1191	1191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	211	211	-	-	-	1.3	1.4	-	2.7	45.7	3.4	1.4	4.8
11/2	4	4	-	-	-	0.0	0.0	-	0.0	28.6	0.1	0.0	0.1
12/1	833	833	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1080	1080	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	401	401	-	-	-	0.4	0.3	-	0.7	6.1	2.0	0.3	2.3
13/2	1115	1115	-	-	-	1.6	6.4	-	8.0	26.0	7.9	6.4	14.3
14/1	1108	1108	-	-	-	0.3	3.3	-	3.6	11.6	0.9	3.3	4.2

Full Input Data And Results

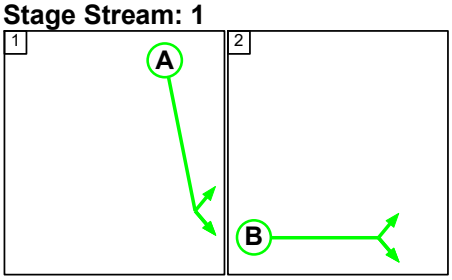
14/2	400	400	-	-	-	1.7	0.3	-	2.0	17.6	6.6	0.3	6.9
15/1	698	698	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	119	119	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	11.9	Total Delay for Signalled Lanes (pcuHr):	7.68	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-4.2	Total Delay for Signalled Lanes (pcuHr):	17.03	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	3.2	Total Delay for Signalled Lanes (pcuHr):	11.75	Cycle Time (s): 60
	PRC Over All Lanes (%):	-4.2	Total Delay Over All Lanes(pcuHr):	36.61	

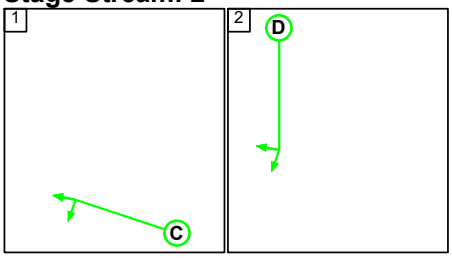
Full Input Data And Results
Scenario 20: '28RC 17:00-18:00' (FG20: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

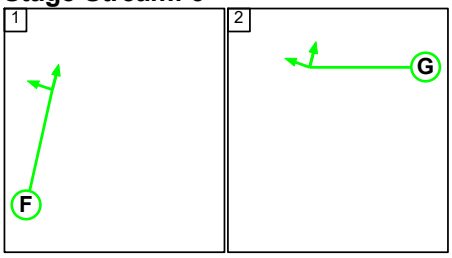
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	59	44

Stage Stream: 2

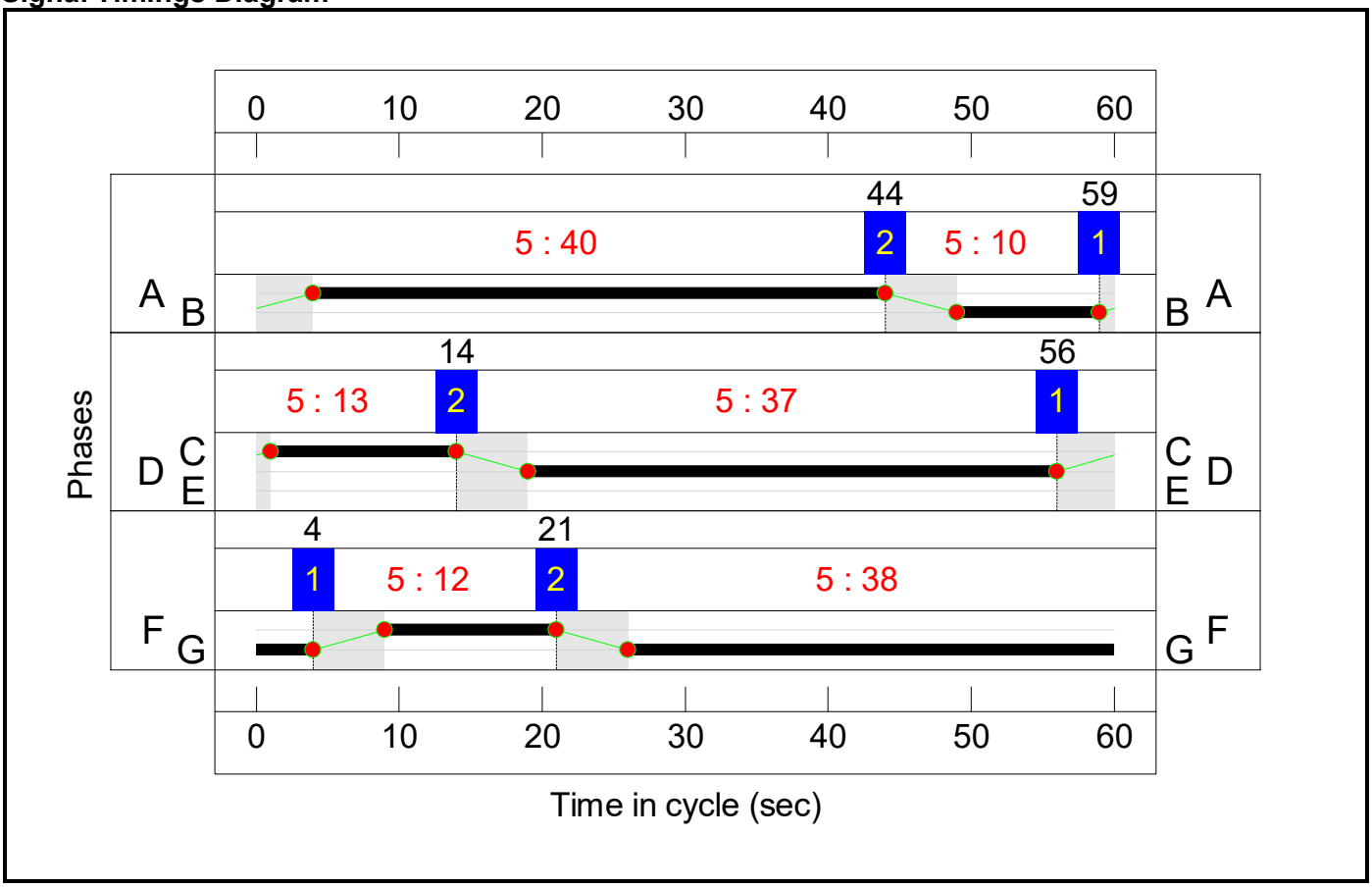
Stage	1	2
Duration	13	37
Change Point	56	14

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	4	21

Full Input Data And Results

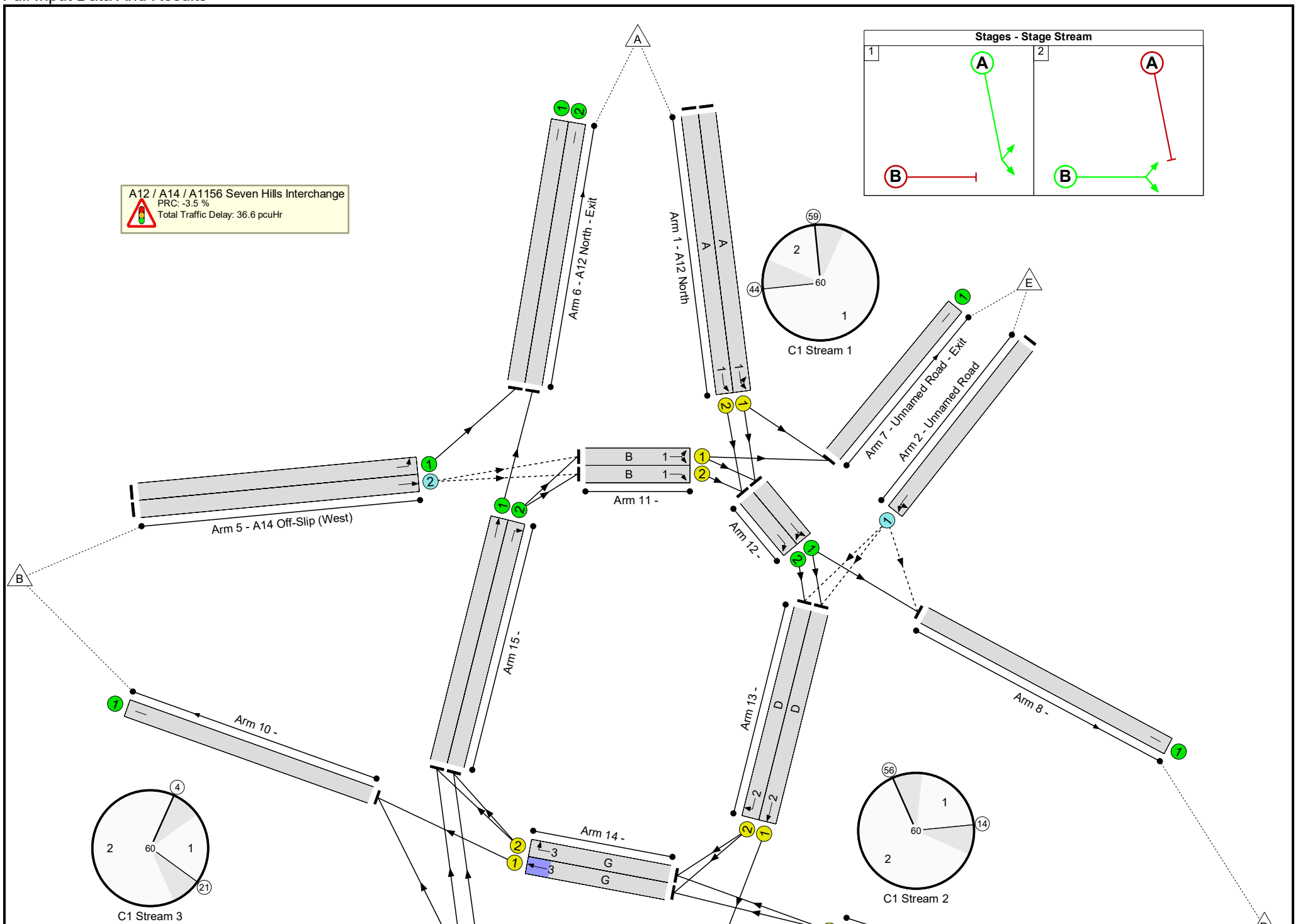
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.1%**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**93.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	691	1866	1275	54.2%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1080	1866	1275	84.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	364	8.0%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	337	1877	438	76.9%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	385	1877	438	87.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	309	1878	407	75.9%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	173	1878	407	42.5%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1423	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	117	1871	739	15.8%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1423	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	618	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	52	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	540	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	728	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1183	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	285	1886	346	82.4%
11/2	Right	U	1	N/A	B		1	10	-	5	1886	346	1.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	924	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1085	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	391	1877	1189	32.9%
13/2	Right	U	2	N/A	D		1	37	-	1107	1877	1189	93.1%
14/1	Ahead	U	3	N/A	G		1	38	-	1106	2007	1305	84.8%
14/2	Right	U	3	N/A	G		1	38	-	386	1872	1217	31.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	618	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	173	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**146**	**0**	**0**	**15.1**	**21.5**	**0.0**	**36.6**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**146**	**0**	**0**	**15.1**	**21.5**	**0.0**	**36.6**	**-**	**-**	**-**	**-**
1/1	691	691	-	-	-	0.9	0.6	-	1.5	7.9	5.8	0.6	6.3
1/2	1080	1080	-	-	-	2.1	2.7	-	4.8	16.1	13.5	2.7	16.2
2/1	29	29	29	0	0	0.0	0.0	-	0.1	6.8	0.1	0.0	0.2
3/1	337	337	-	-	-	2.0	1.6	-	3.6	38.8	5.2	1.6	6.9
3/2	385	385	-	-	-	2.4	3.2	-	5.6	52.5	6.1	3.2	9.3
4/1	309	309	-	-	-	1.9	1.5	-	3.4	39.9	4.8	1.5	6.3
4/2	173	173	-	-	-	1.0	0.4	-	1.3	28.0	2.5	0.4	2.8
5/1	1423	1423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	117	117	117	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1423	1423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	618	618	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	728	728	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1183	1183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	285	285	-	-	-	1.4	2.2	-	3.6	45.3	4.6	2.2	6.8
11/2	5	5	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	924	924	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1085	1085	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	391	391	-	-	-	0.4	0.2	-	0.6	6.0	2.3	0.2	2.5
13/2	1107	1107	-	-	-	1.1	5.9	-	7.0	22.7	7.3	5.9	13.2
14/1	1106	1106	-	-	-	0.2	2.7	-	2.9	9.5	0.6	2.7	3.3

Full Input Data And Results

14/2	386	386	-	-	-	1.7	0.2	-	1.9	17.7	6.4	0.2	6.7
15/1	618	618	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	173	173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

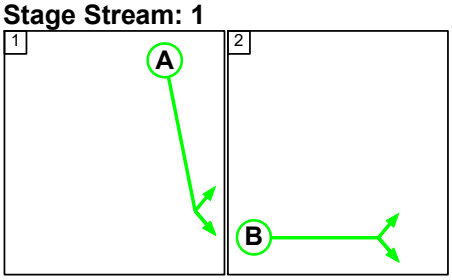
C1	Stream: 1 PRC for Signalled Lanes (%):	6.3	Total Delay for Signalled Lanes (pcuHr):	9.96	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-3.5	Total Delay for Signalled Lanes (pcuHr):	16.88	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	6.2	Total Delay for Signalled Lanes (pcuHr):	9.57	Cycle Time (s): 60
	PRC Over All Lanes (%):	-3.5	Total Delay Over All Lanes(pcuHr):	36.56	

Full Input Data And Results

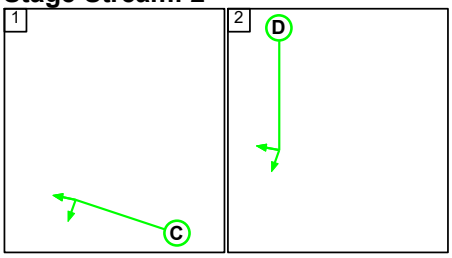
Scenario 21: '28PC 06:00-07:00' (FG21: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

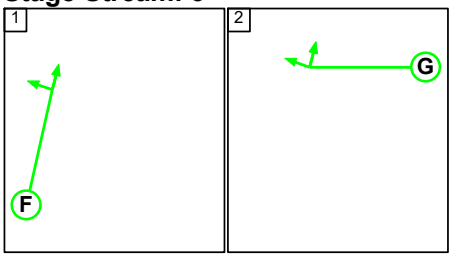
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	0	45

Stage Stream: 2

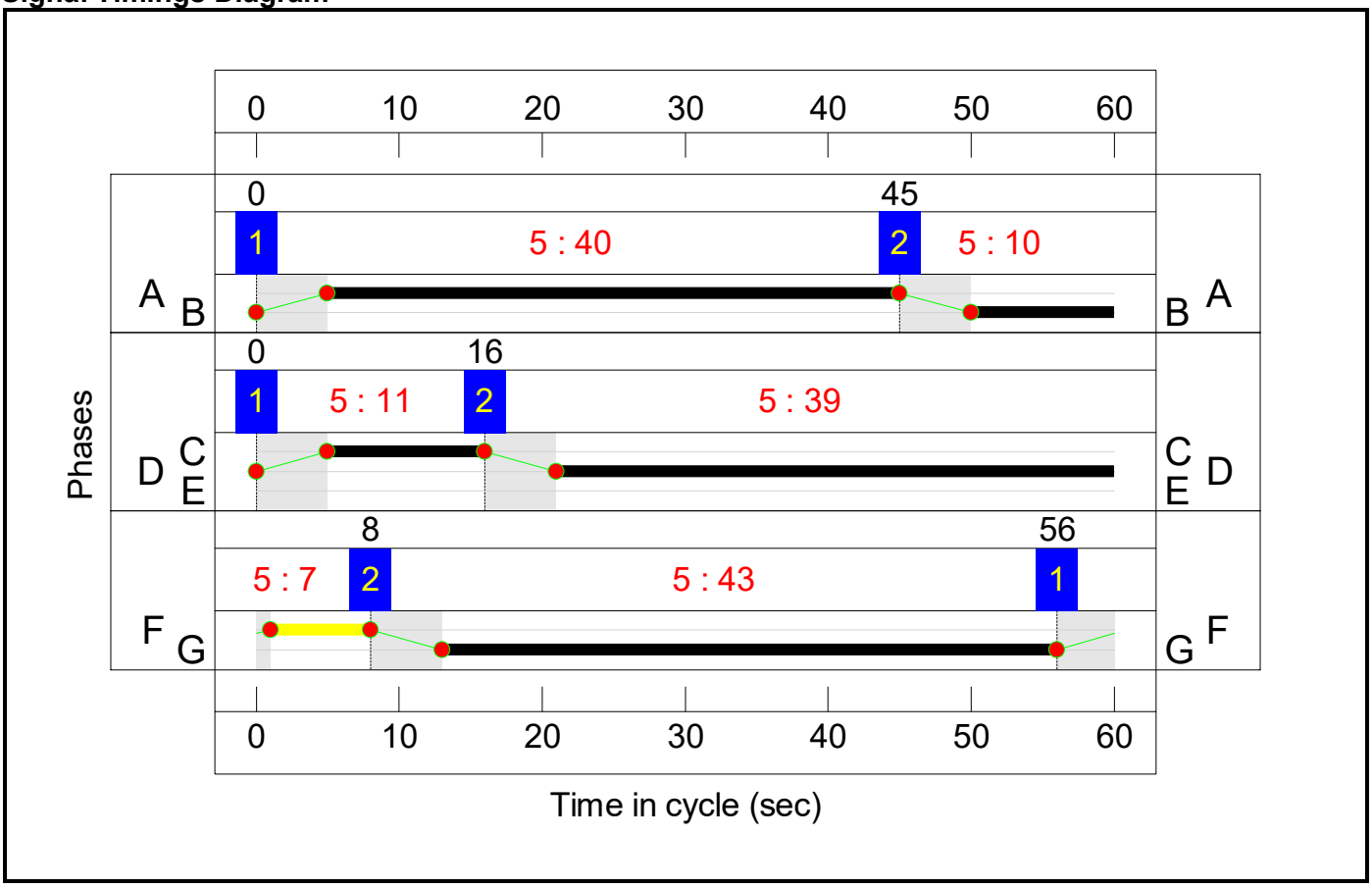
Stage	1	2
Duration	11	39
Change Point	0	16

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	56	8

Full Input Data And Results

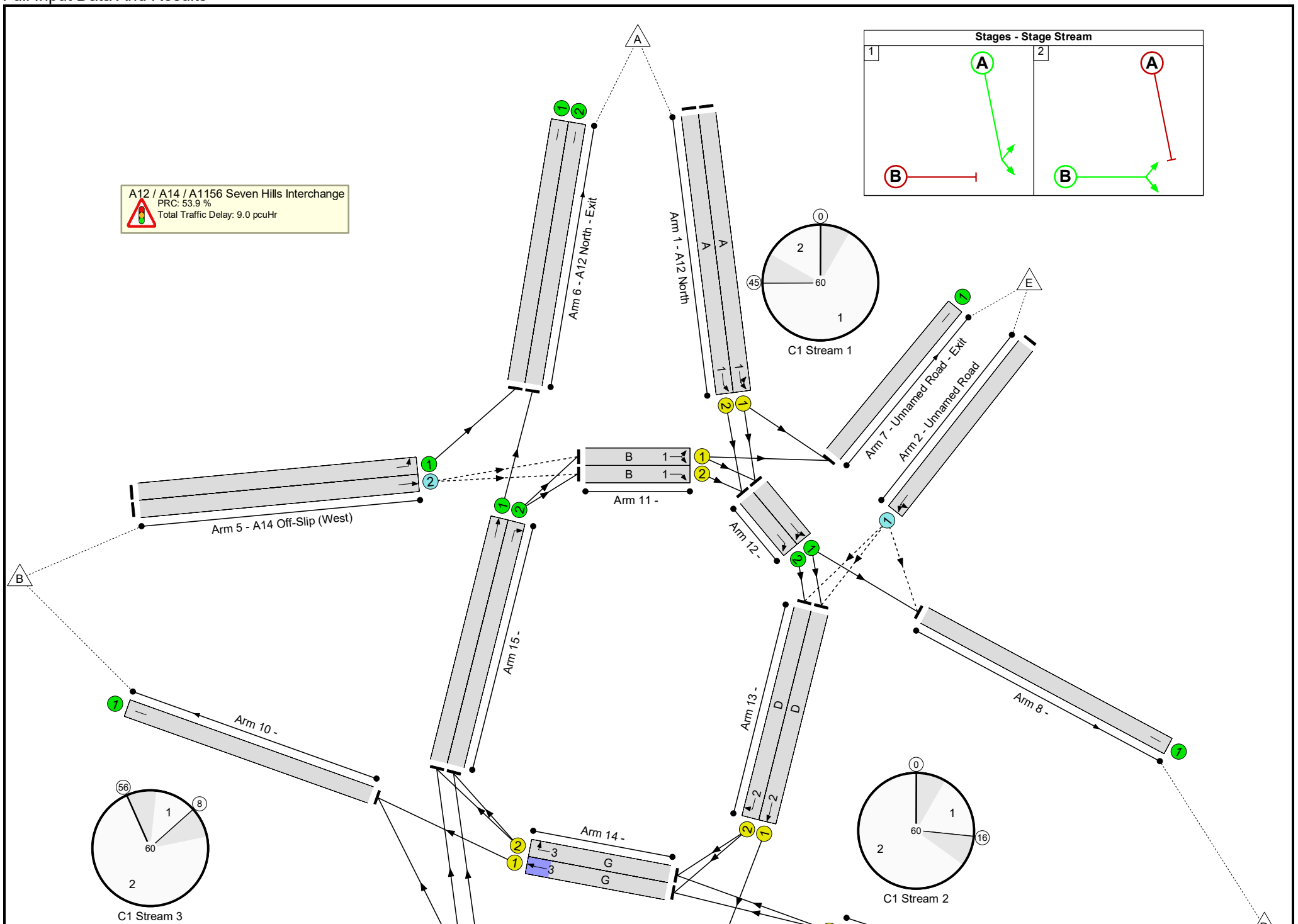
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.5%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.5%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	302	1866	1275	23.7%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	682	1866	1275	53.5%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	631	4.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	77	1877	375	20.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	191	1877	375	50.9%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	86	1878	250	34.3%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	741	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	146	1871	907	16.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	741	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	267	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	730	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	139	1886	346	40.2%
11/2	Right	U	1	N/A	B		1	10	-	21	1886	346	6.1%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	414	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	703	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	196	1877	1251	15.7%
13/2	Right	U	2	N/A	D		1	39	-	732	1877	1251	58.5%
14/1	Ahead	U	3	N/A	G		1	43	-	723	2007	1472	49.1%
14/2	Right	U	3	N/A	G		1	43	-	200	1872	1373	14.6%
15/1	Ahead	U	N/A	N/A	-		-	-	-	267	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**176**	**0**	**0**	**5.5**	**3.5**	**0.0**	**9.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**176**	**0**	**0**	**5.5**	**3.5**	**0.0**	**9.0**	**-**	**-**	**-**	**-**
1/1	302	302	-	-	-	0.3	0.2	-	0.5	5.4	1.8	0.2	2.0
1/2	682	682	-	-	-	0.9	0.6	-	1.5	7.8	5.5	0.6	6.1
2/1	30	30	30	0	0	0.0	0.0	-	0.0	3.0	0.0	0.0	0.0
3/1	77	77	-	-	-	0.4	0.1	-	0.6	26.1	1.1	0.1	1.2
3/2	191	191	-	-	-	1.1	0.5	-	1.7	31.1	2.8	0.5	3.3
4/1	86	86	-	-	-	0.6	0.3	-	0.8	34.6	1.3	0.3	1.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	741	741	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	146	146	146	0	0	0.0	0.1	-	0.1	2.4	0.0	0.1	0.1
6/1	741	741	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	267	267	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	730	730	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	139	139	-	-	-	0.8	0.3	-	1.1	29.2	2.0	0.3	2.4
11/2	21	21	-	-	-	0.1	0.0	-	0.2	26.0	0.3	0.0	0.3
12/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	703	703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	196	196	-	-	-	0.3	0.1	-	0.4	7.0	2.0	0.1	2.1
13/2	732	732	-	-	-	0.4	0.7	-	1.1	5.6	2.3	0.7	3.0
14/1	723	723	-	-	-	0.5	0.5	-	1.0	5.0	2.7	0.5	3.2

Full Input Data And Results

14/2	200	200	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	267	267	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

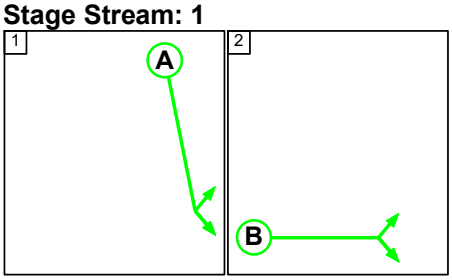
C1	Stream: 1 PRC for Signalled Lanes (%):	68.3	Total Delay for Signalled Lanes (pcuHr):	3.21	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	53.9	Total Delay for Signalled Lanes (pcuHr):	3.73	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	83.2	Total Delay for Signalled Lanes (pcuHr):	1.94	Cycle Time (s):	60
	PRC Over All Lanes (%):	53.9	Total Delay Over All Lanes(pcuHr):	9.00		

Full Input Data And Results

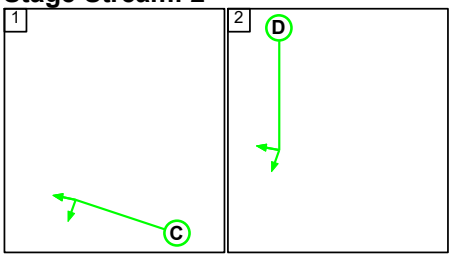
Scenario 22: '28PC 07:00-08:00' (FG22: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

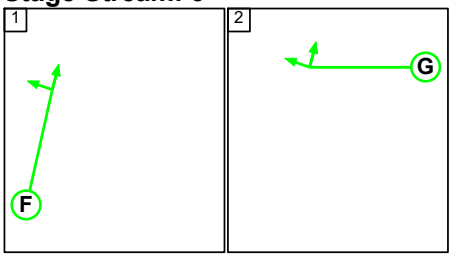
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	0	45

Stage Stream: 2

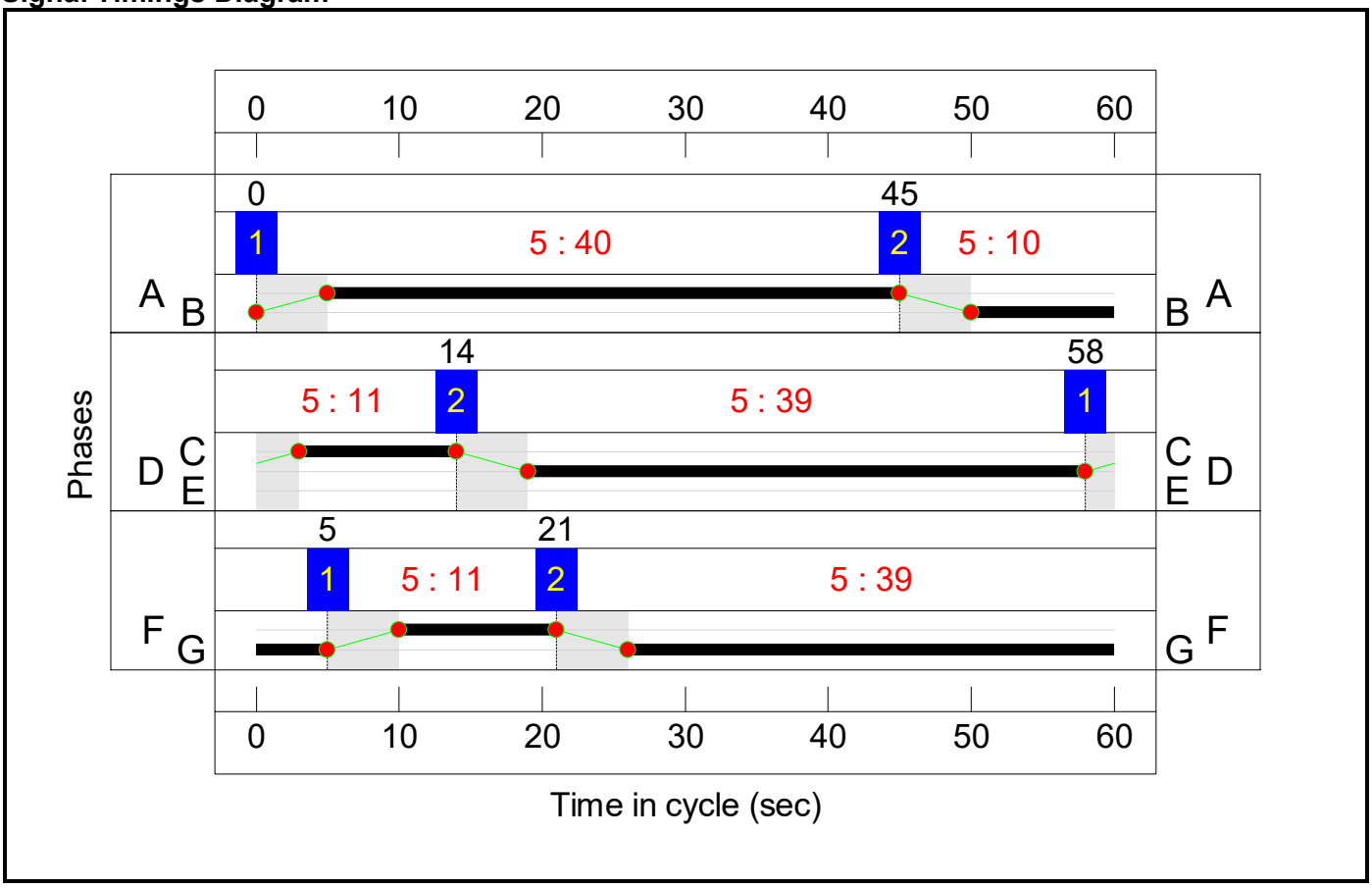
Stage	1	2
Duration	11	39
Change Point	58	14

Stage Stream: 3

Stage	1	2
Duration	11	39
Change Point	5	21

Full Input Data And Results

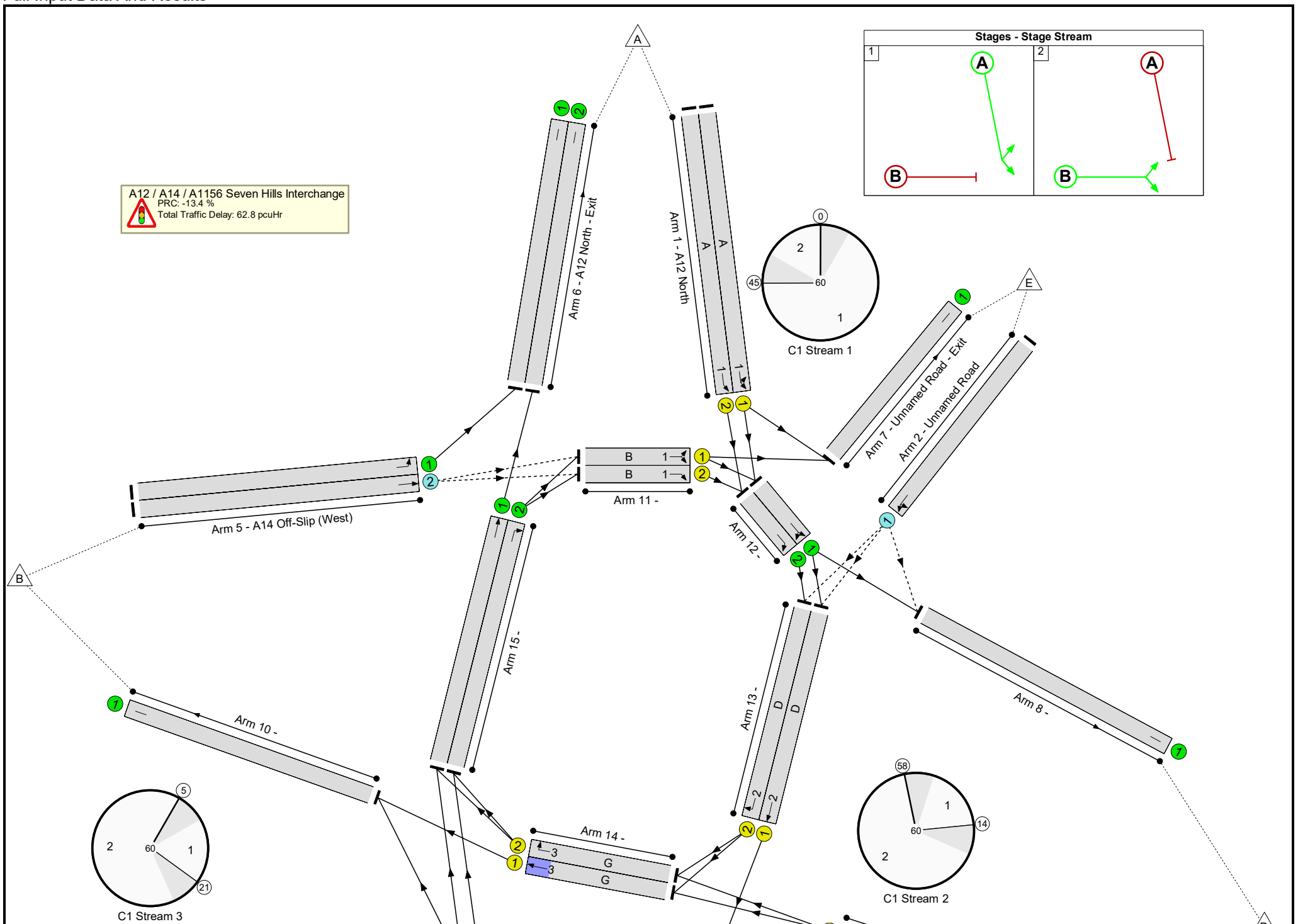
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.0%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.0%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	493	1866	1275	38.7%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1181	1866	1275	92.6%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	59	1871	379	15.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	196	1877	375	52.2%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	383	1877	375	102.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	11	-	351	1878	376	93.5%
4/2	A1156 Ahead	U	3	N/A	F		1	11	-	80	1878	376	21.3%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1399	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	212	1871	754	28.1%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1399	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	360	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1300	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	301	1886	346	87.0%
11/2	Right	U	1	N/A	B		1	10	-	6	1886	346	1.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1187	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	372	1877	1251	29.7%
13/2	Right	U	2	N/A	D		1	39	-	1239	1877	1251	99.0%
14/1	Ahead	U	3	N/A	G		1	39	-	1241	2007	1338	92.7%
14/2	Right	U	3	N/A	G		1	39	-	381	1872	1248	29.9%
15/1	Ahead	U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	95	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**271**	**0**	**0**	**15.1**	**47.7**	**0.0**	**62.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**271**	**0**	**0**	**15.1**	**47.7**	**0.0**	**62.8**	**-**	**-**	**-**	**-**
1/1	493	493	-	-	-	0.6	0.3	-	0.9	6.4	3.4	0.3	3.7
1/2	1181	1181	-	-	-	2.7	5.6	-	8.3	25.3	16.7	5.6	22.3
2/1	59	59	59	0	0	0.0	0.1	-	0.1	6.2	0.1	0.1	0.2
3/1	196	196	-	-	-	1.2	0.5	-	1.7	31.4	2.9	0.5	3.4
3/2	383	375	-	-	-	2.8	11.9	-	14.7	137.7	6.5	11.9	18.4
4/1	351	351	-	-	-	2.3	5.1	-	7.4	75.5	5.8	5.1	10.8
4/2	80	80	-	-	-	0.4	0.1	-	0.6	26.2	1.1	0.1	1.2
5/1	1399	1399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	212	212	212	0	0	0.0	0.2	-	0.2	3.3	0.0	0.2	0.2
6/1	1399	1399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1300	1300	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	301	301	-	-	-	1.8	3.0	-	4.7	56.5	4.9	3.0	7.8
11/2	6	6	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	725	725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1187	1187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	372	372	-	-	-	0.4	0.2	-	0.6	5.9	3.3	0.2	3.5
13/2	1239	1239	-	-	-	1.1	14.8	-	15.9	46.2	9.4	14.8	24.2
14/1	1241	1241	-	-	-	0.4	5.7	-	6.1	17.7	1.7	5.7	7.4

Full Input Data And Results

14/2	373	373	-	-	-	1.4	0.2	-	1.6	15.5	6.2	0.2	6.4
15/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	95	95	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

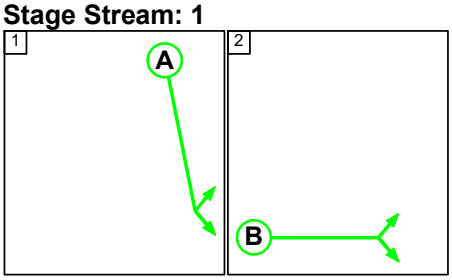
C1	Stream: 1 PRC for Signalled Lanes (%):	-2.9	Total Delay for Signalled Lanes (pcuHr):	13.94	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-13.4	Total Delay for Signalled Lanes (pcuHr):	32.87	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-3.8	Total Delay for Signalled Lanes (pcuHr):	15.65	Cycle Time (s): 60
	PRC Over All Lanes (%):	-13.4	Total Delay Over All Lanes(pcuHr):	62.76	

Full Input Data And Results

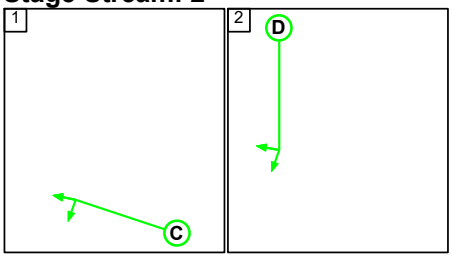
Scenario 23: '28PC 08:00-09:00' (FG23: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

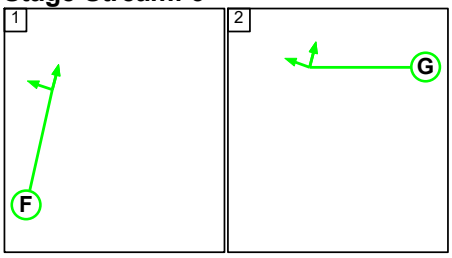
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	33	17
Change Point	7	45

Stage Stream: 2

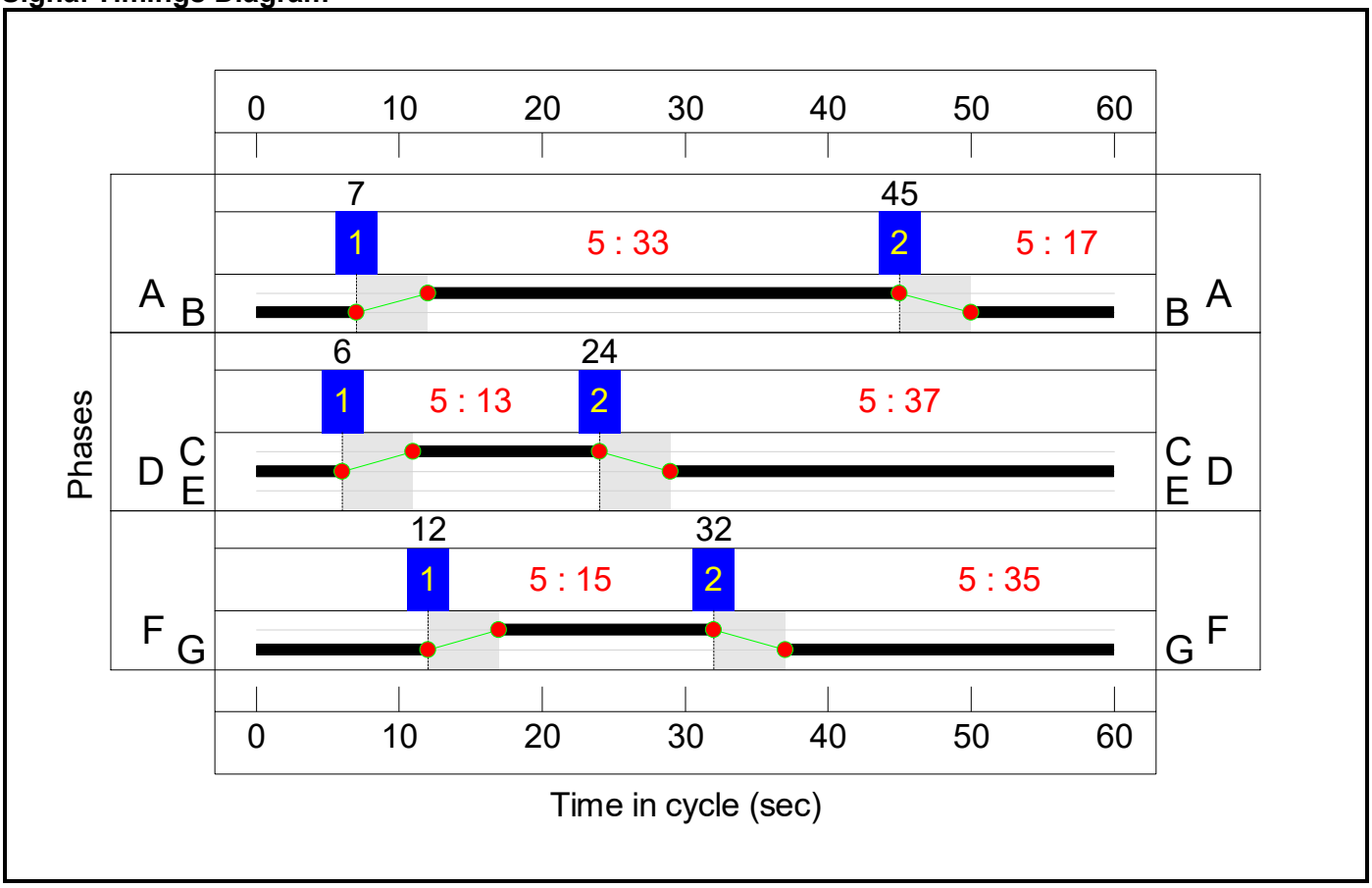
Stage	1	2
Duration	13	37
Change Point	6	24

Stage Stream: 3

Stage	1	2
Duration	15	35
Change Point	12	32

Full Input Data And Results

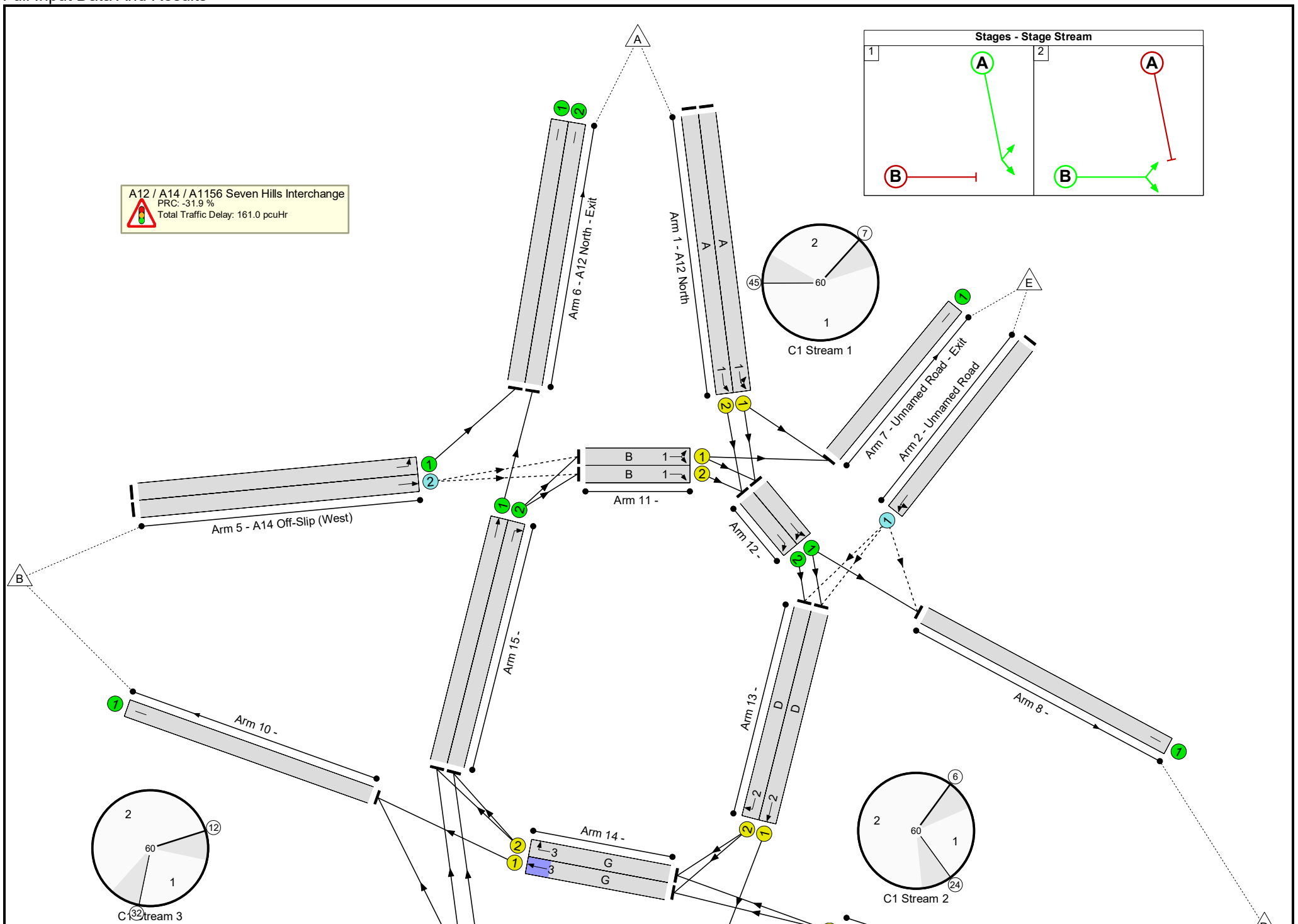
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	33	-	760	1866	1057	71.9%
1/2	A12 North Ahead	U	1	N/A	A		1	33	-	1255	1866	1057	118.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	106	1871	358	29.6%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	259	1877	438	59.1%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	408	1877	438	93.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	15	-	491	1878	501	98.0%
4/2	A1156 Ahead	U	3	N/A	F		1	15	-	102	1878	501	20.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1614	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	200	1871	693	28.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1614	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	811	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	33	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	521	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1418	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	17	-	306	1886	566	54.1%
11/2	Right	U	1	N/A	B		1	17	-	12	1886	566	2.1%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1033	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1267	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	539	1877	1189	45.3%
13/2	Right	U	2	N/A	D		1	37	-	1346	1877	1189	96.6%
14/1	Ahead	U	3	N/A	G		1	35	-	1337	2007	1204	94.6%
14/2	Right	U	3	N/A	G		1	35	-	417	1872	1123	37.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	811	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	118	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**306**	**0**	**0**	**24.5**	**136.5**	**0.0**	**161.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**306**	**0**	**0**	**24.5**	**136.5**	**0.0**	**161.0**	**-**	**-**	**-**	**-**
1/1	760	760	-	-	-	2.0	1.3	-	3.3	15.5	9.1	1.3	10.3
1/2	1255	1057	-	-	-	9.4	101.9	-	111.3	319.3	24.2	101.9	126.1
2/1	106	106	106	0	0	0.2	0.2	-	0.4	14.2	1.0	0.2	1.2
3/1	259	259	-	-	-	1.5	0.7	-	2.2	30.4	3.8	0.7	4.5
3/2	408	408	-	-	-	2.6	5.1	-	7.6	67.4	6.6	5.1	11.7
4/1	491	491	-	-	-	3.0	8.9	-	11.9	87.1	8.0	8.9	16.9
4/2	102	102	-	-	-	0.5	0.1	-	0.6	21.6	1.3	0.1	1.4
5/1	1614	1614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	200	200	200	0	0	0.0	0.2	-	0.2	3.6	0.0	0.2	0.2
6/1	1614	1614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	811	811	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	33	33	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	521	521	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1220	1220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	306	306	-	-	-	1.3	0.6	-	1.8	21.6	4.3	0.6	4.9
11/2	12	12	-	-	-	0.1	0.0	-	0.1	18.3	0.1	0.0	0.2
12/1	1033	1033	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1069	1069	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	539	539	-	-	-	0.9	0.4	-	1.3	8.6	4.4	0.4	4.8
13/2	1148	1148	-	-	-	0.7	9.6	-	10.3	32.3	6.3	9.6	15.9
14/1	1139	1139	-	-	-	0.6	7.2	-	7.8	24.7	2.9	7.2	10.1

Full Input Data And Results

14/2	417	417	-	-	-	1.9	0.3	-	2.2	19.0	6.9	0.3	7.2
15/1	811	811	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	118	118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

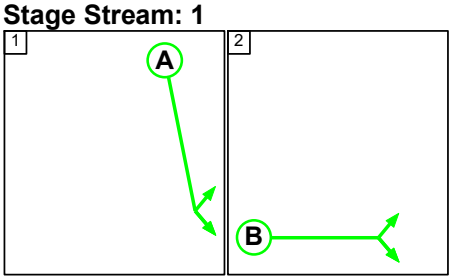
C1	Stream: 1 PRC for Signalled Lanes (%):	-31.9	Total Delay for Signalled Lanes (pcuHr):	116.50	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-7.3	Total Delay for Signalled Lanes (pcuHr):	21.40	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	-8.9	Total Delay for Signalled Lanes (pcuHr):	22.51	Cycle Time (s):	60
	PRC Over All Lanes (%):	-31.9	Total Delay Over All Lanes(pcuHr):	161.03		

Full Input Data And Results

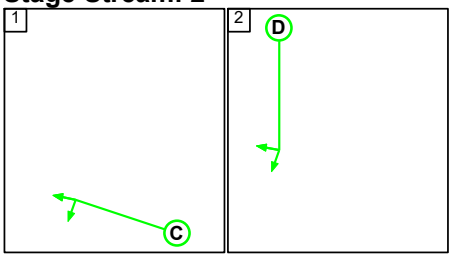
Scenario 24: '28PC 15:00-16:00' (FG24: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

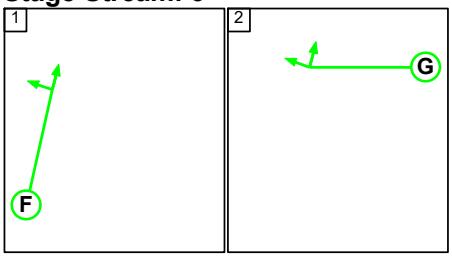
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

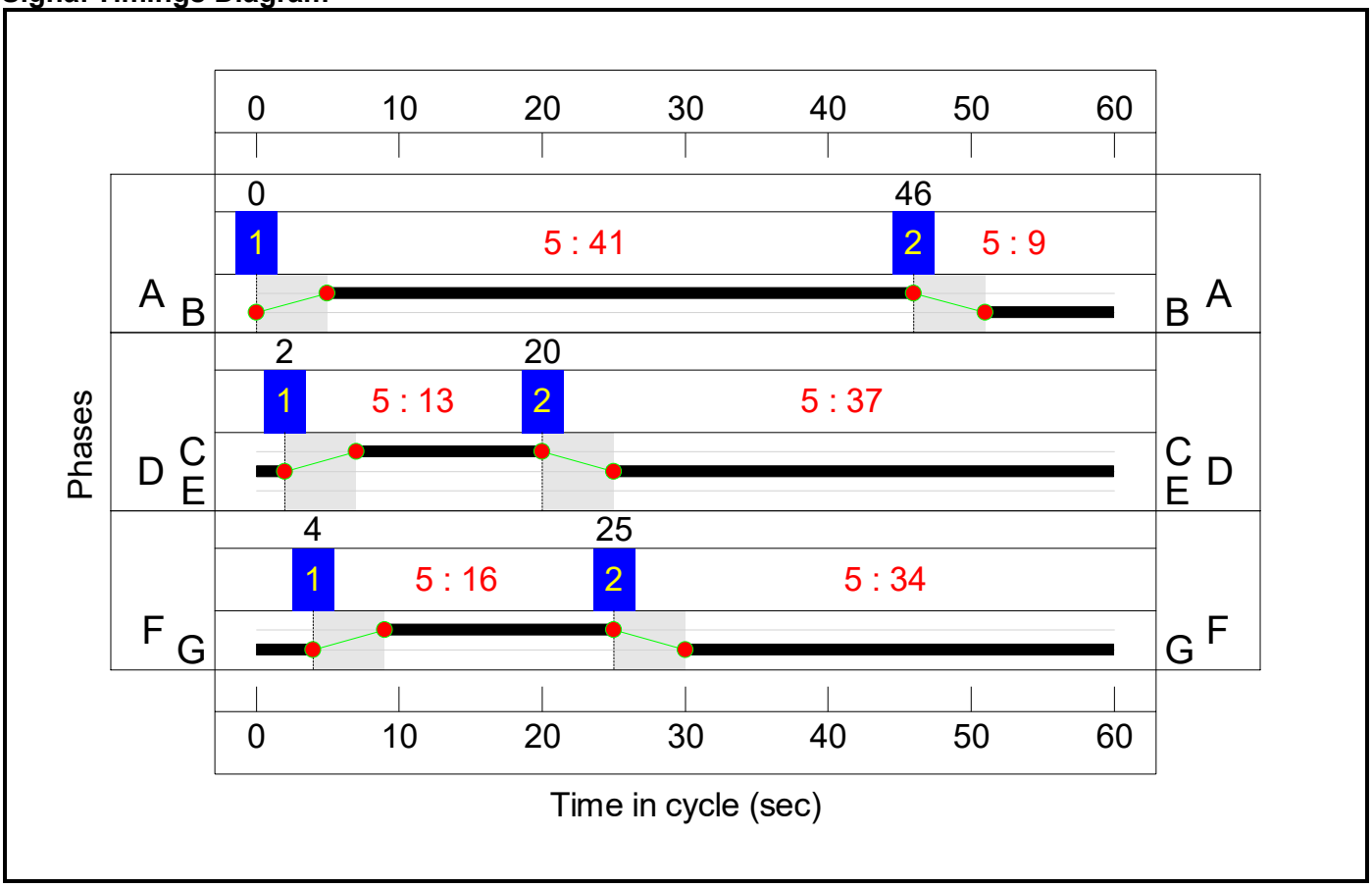
Stage	1	2
Duration	13	37
Change Point	2	20

Stage Stream: 3

Stage	1	2
Duration	16	34
Change Point	4	25

Full Input Data And Results

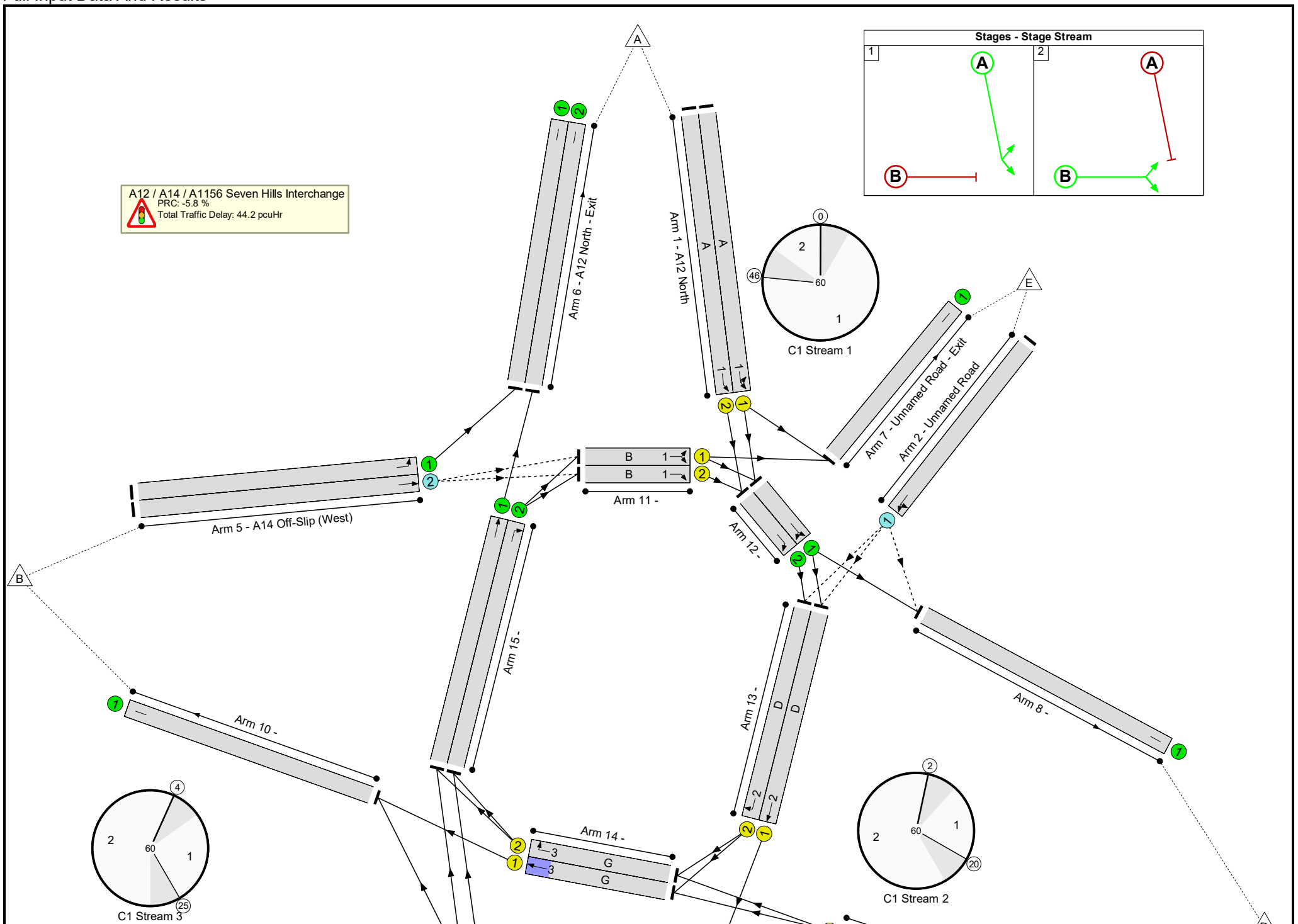
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.2%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.2%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	686	1866	1306	52.5%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	1083	1866	1306	82.9%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	41	1871	379	10.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	253	1877	438	57.8%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	394	1877	438	90.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	16	-	481	1878	532	90.4%
4/2	A1156 Ahead	U	3	N/A	F		1	16	-	111	1878	532	20.9%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1278	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	131	1871	699	18.7%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1278	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	679	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1198	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	239	1886	314	76.0%
11/2	Right	U	1	N/A	B		1	9	-	4	1886	314	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	866	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	426	1877	1189	35.8%
13/2	Right	U	2	N/A	D		1	37	-	1122	1877	1189	94.4%
14/1	Ahead	U	3	N/A	G		1	34	-	1115	2007	1171	95.2%
14/2	Right	U	3	N/A	G		1	34	-	401	1872	1092	36.7%
15/1	Ahead	U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**172**	**0**	**0**	**15.6**	**28.7**	**0.0**	**44.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**172**	**0**	**0**	**15.6**	**28.7**	**0.0**	**44.2**	**-**	**-**	**-**	**-**
1/1	686	686	-	-	-	0.8	0.6	-	1.4	7.2	5.3	0.6	5.9
1/2	1083	1083	-	-	-	1.9	2.4	-	4.3	14.3	12.6	2.4	15.0
2/1	41	41	41	0	0	0.0	0.1	-	0.1	6.7	0.2	0.1	0.2
3/1	253	253	-	-	-	1.4	0.7	-	2.1	30.0	3.7	0.7	4.4
3/2	394	394	-	-	-	2.4	3.8	-	6.3	57.2	6.3	3.8	10.2
4/1	481	481	-	-	-	2.8	4.1	-	6.8	51.1	7.6	4.1	11.7
4/2	111	111	-	-	-	0.5	0.1	-	0.6	20.7	1.4	0.1	1.5
5/1	1278	1278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	131	131	131	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
6/1	1278	1278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	679	679	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1198	1198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	239	239	-	-	-	1.3	1.5	-	2.8	42.8	3.9	1.5	5.4
11/2	4	4	-	-	-	0.0	0.0	-	0.0	27.0	0.1	0.0	0.1
12/1	866	866	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1087	1087	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	426	426	-	-	-	0.4	0.3	-	0.7	6.2	3.2	0.3	3.5
13/2	1122	1122	-	-	-	1.2	7.0	-	8.2	26.3	16.7	7.0	23.7
14/1	1115	1115	-	-	-	1.1	7.8	-	9.0	28.9	3.5	7.8	11.3

Full Input Data And Results

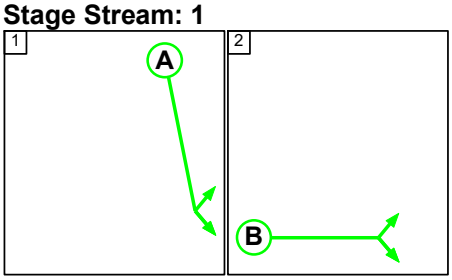
14/2	401	401	-	-	-	1.5	0.3	-	1.8	16.0	6.6	0.3	6.9
15/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	8.5	Total Delay for Signalled Lanes (pcuHr):	8.55	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-4.9	Total Delay for Signalled Lanes (pcuHr):	17.29	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	-5.8	Total Delay for Signalled Lanes (pcuHr):	18.21	Cycle Time (s): 60
	PRC Over All Lanes (%):	-5.8	Total Delay Over All Lanes(pcuHr):	44.23	

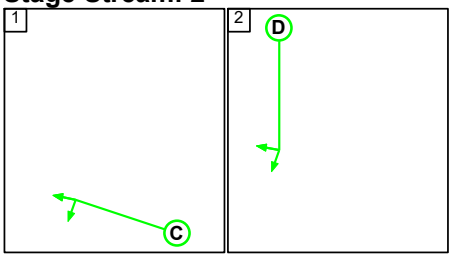
Full Input Data And Results
Scenario 25: '28PC 17:00-18:00' (FG25: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

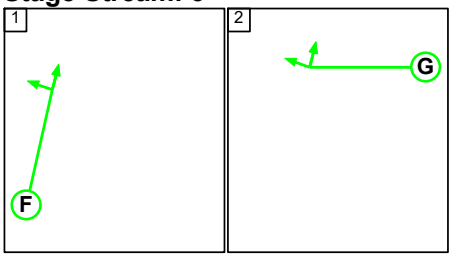
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	0	45

Stage Stream: 2

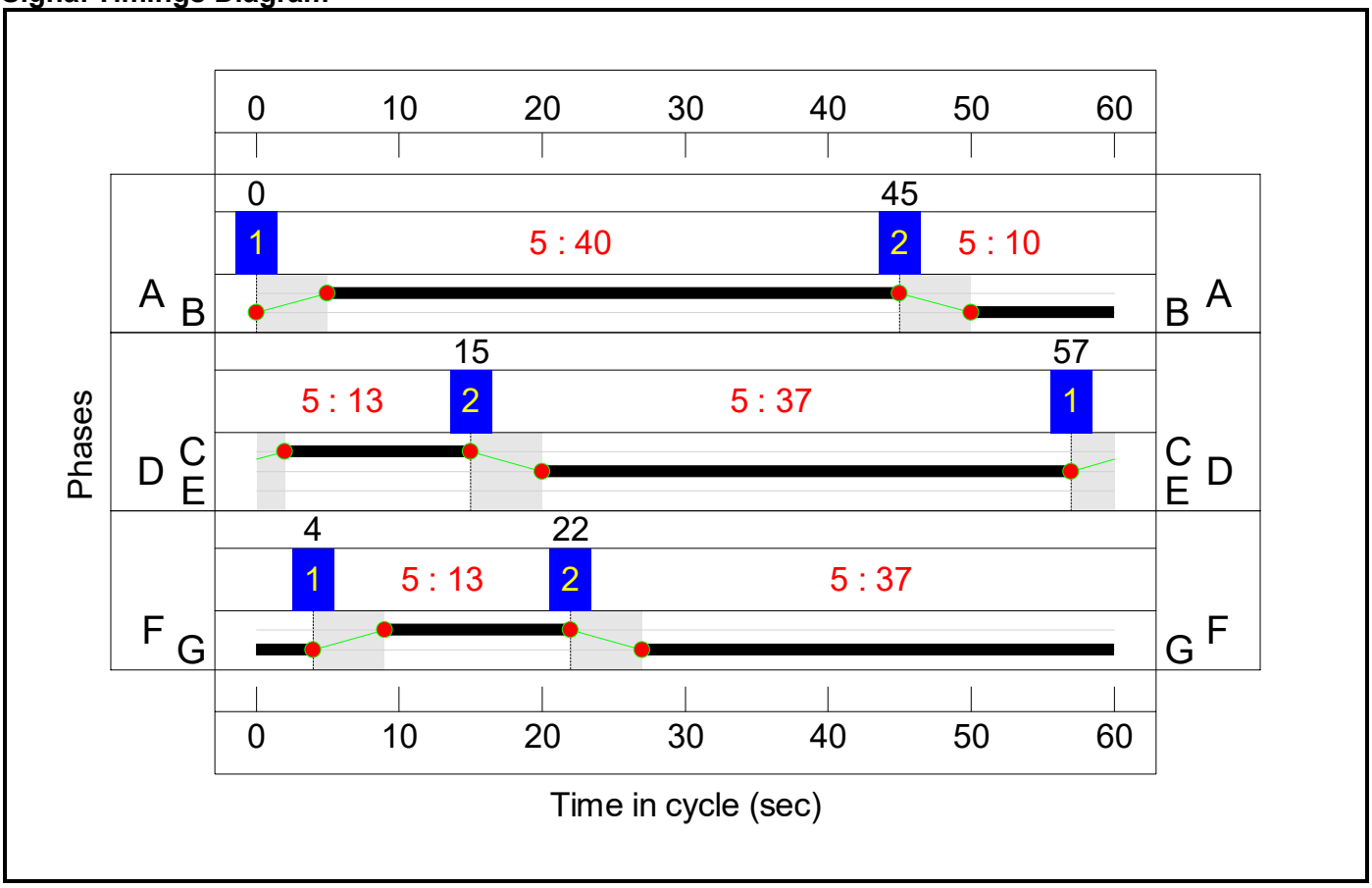
Stage	1	2
Duration	13	37
Change Point	57	15

Stage Stream: 3

Stage	1	2
Duration	13	37
Change Point	4	22

Full Input Data And Results

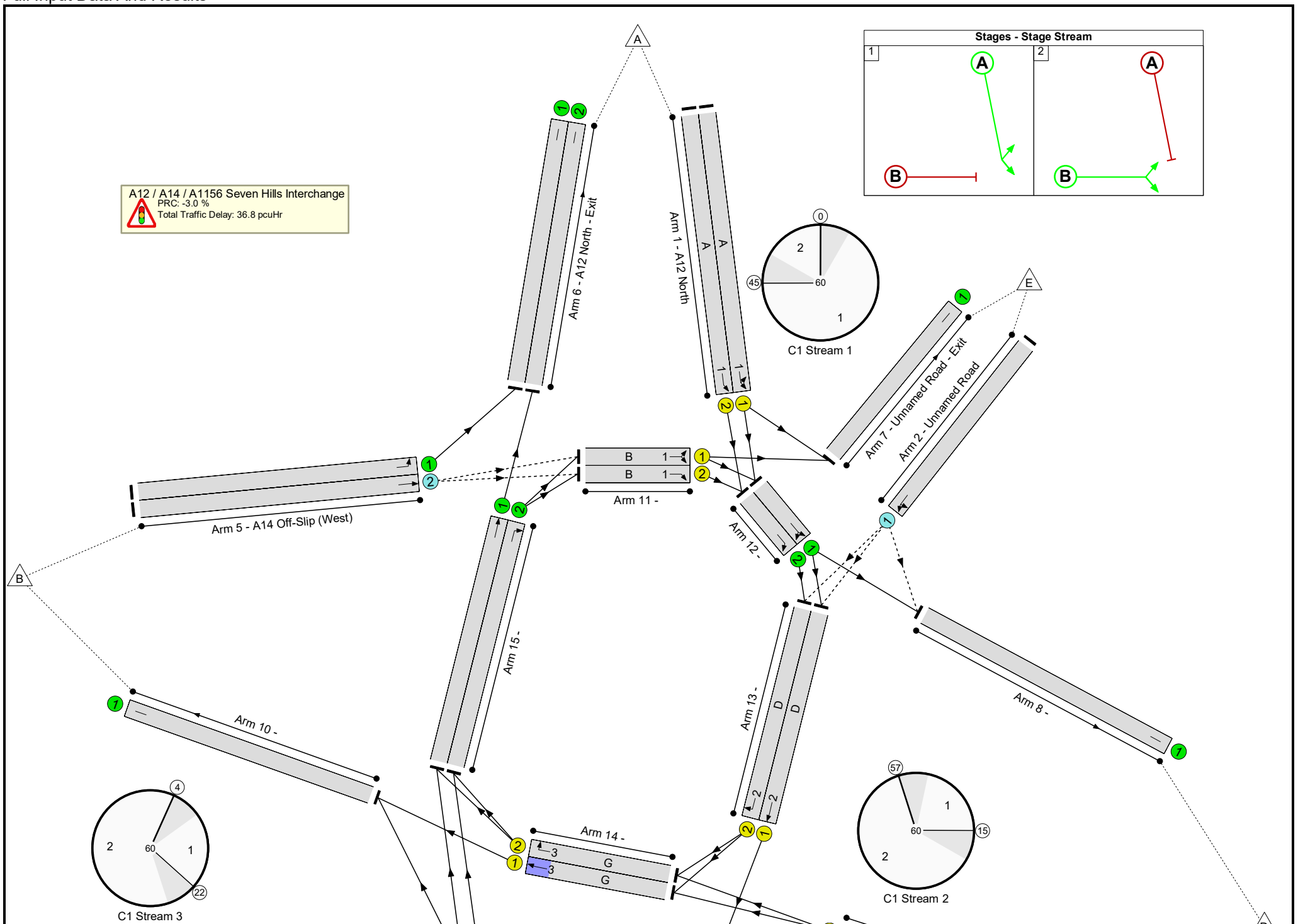
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	40	-	669	1866	1275	52.5%
1/2	A12 North Ahead	U	1	N/A	A		1	40	-	1075	1866	1275	84.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	29	1871	371	7.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	342	1877	438	78.1%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	386	1877	438	88.1%
4/1	A1156 Left Ahead	U	3	N/A	F		1	13	-	337	1878	438	76.9%
4/2	A1156 Ahead	U	3	N/A	F		1	13	-	164	1878	438	37.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1412	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	124	1871	732	16.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1412	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	647	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	52	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	540	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1178	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	10	-	283	1886	346	81.8%
11/2	Right	U	1	N/A	B		1	10	-	5	1886	346	1.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1080	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	367	1877	1189	30.9%
13/2	Right	U	2	N/A	D		1	37	-	1102	1877	1189	92.7%
14/1	Ahead	U	3	N/A	G		1	37	-	1101	2007	1271	86.6%
14/2	Right	U	3	N/A	G		1	37	-	387	1872	1186	32.6%
15/1	Ahead	U	N/A	N/A	-		-	-	-	647	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	164	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**153**	**0**	**0**	**15.2**	**21.6**	**0.0**	**36.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**153**	**0**	**0**	**15.2**	**21.6**	**0.0**	**36.8**	**-**	**-**	**-**	**-**
1/1	669	669	-	-	-	0.9	0.6	-	1.4	7.7	5.4	0.6	5.9
1/2	1075	1075	-	-	-	2.1	2.6	-	4.7	15.9	13.1	2.6	15.8
2/1	29	29	29	0	0	0.0	0.0	-	0.1	6.5	0.1	0.0	0.1
3/1	342	342	-	-	-	2.0	1.7	-	3.8	39.7	5.3	1.7	7.0
3/2	386	386	-	-	-	2.4	3.3	-	5.7	52.9	6.1	3.3	9.4
4/1	337	337	-	-	-	2.0	1.6	-	3.6	38.7	5.2	1.6	6.9
4/2	164	164	-	-	-	0.9	0.3	-	1.2	25.9	2.3	0.3	2.6
5/1	1412	1412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	124	124	124	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1412	1412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1178	1178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	283	283	-	-	-	1.4	2.1	-	3.6	45.2	4.6	2.1	6.7
11/2	5	5	-	-	-	0.0	0.0	-	0.0	25.7	0.1	0.0	0.1
12/1	900	900	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1080	1080	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	367	367	-	-	-	0.4	0.2	-	0.6	6.0	2.3	0.2	2.5
13/2	1102	1102	-	-	-	1.1	5.6	-	6.7	21.8	6.8	5.6	12.4
14/1	1101	1101	-	-	-	0.3	3.1	-	3.4	11.2	0.9	3.1	4.0

Full Input Data And Results

14/2	387	387	-	-	-	1.7	0.2	-	1.9	17.8	6.4	0.2	6.7
15/1	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

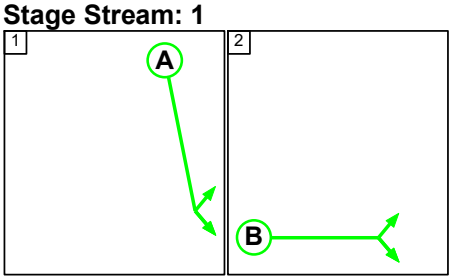
C1	Stream: 1 PRC for Signalled Lanes (%):	6.8	Total Delay for Signalled Lanes (pcuHr):	9.75	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-3.0	Total Delay for Signalled Lanes (pcuHr):	16.74	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	3.9	Total Delay for Signalled Lanes (pcuHr):	10.14	Cycle Time (s): 60
	PRC Over All Lanes (%):	-3.0	Total Delay Over All Lanes(pcuHr):	36.78	

Full Input Data And Results

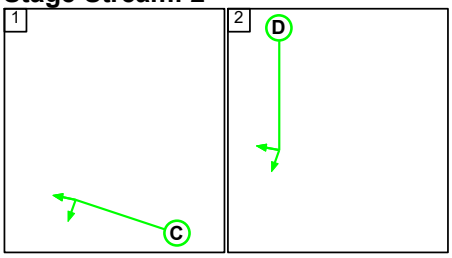
Scenario 26: '34RC 06:00-07:00' (FG26: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

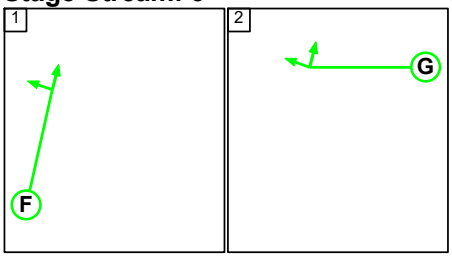
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

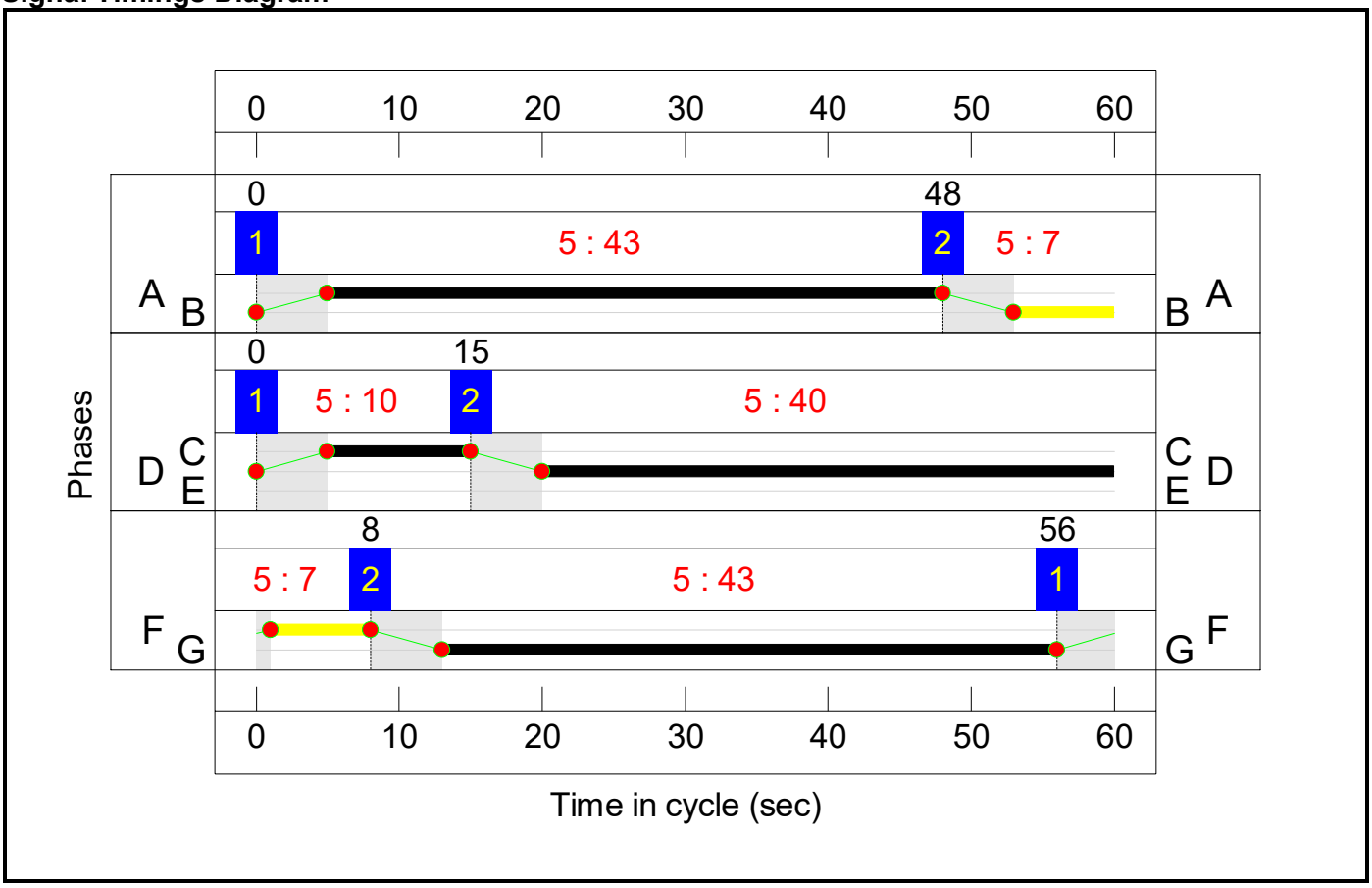
Stage	1	2
Duration	10	40
Change Point	0	15

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	56	8

Full Input Data And Results

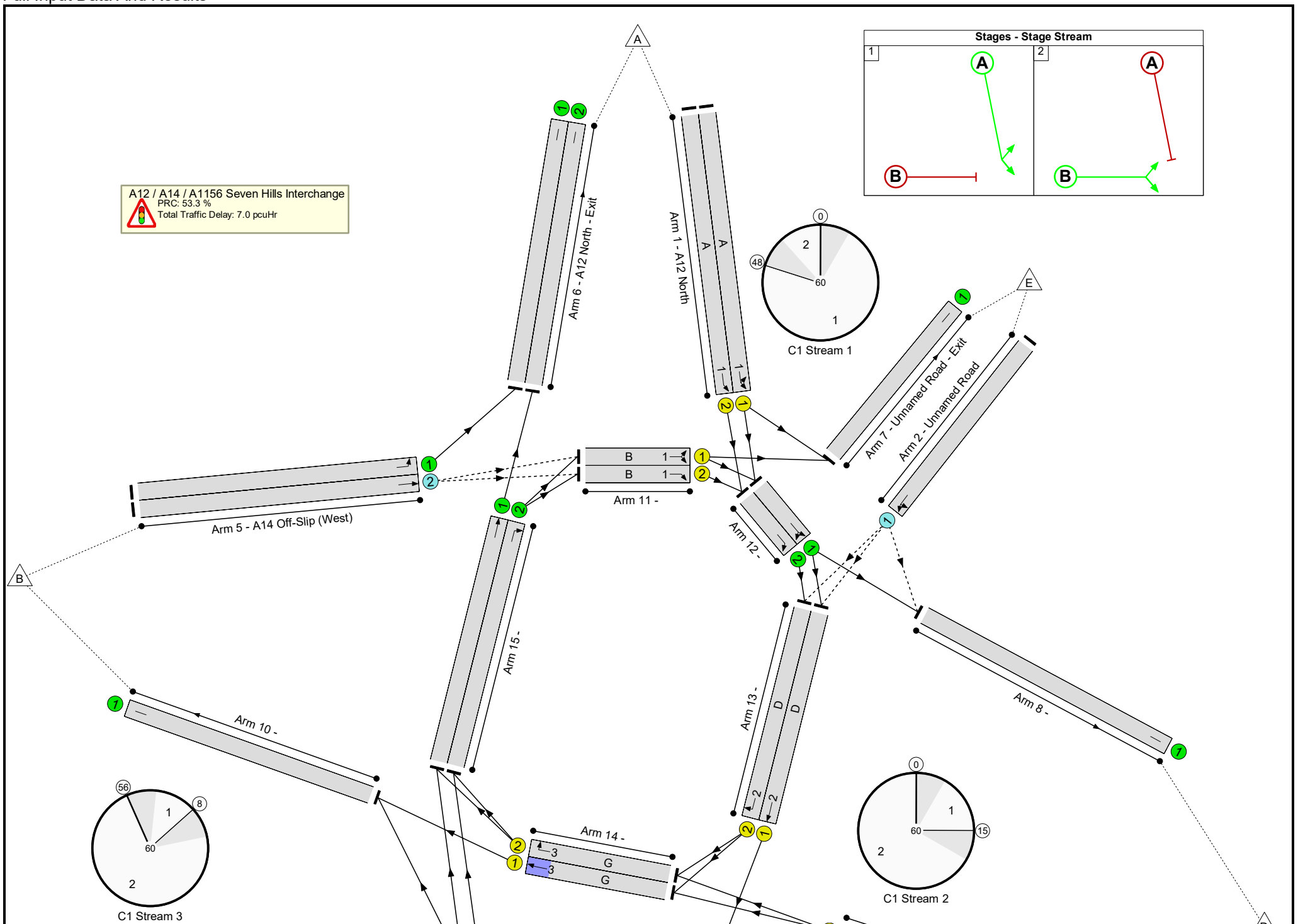
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	43	-	308	1866	1368	22.5%
1/2	A12 North Ahead	U	1	N/A	A		1	43	-	702	1866	1368	51.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	31	1871	659	4.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	71	1877	344	20.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	183	1877	344	53.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	36	1878	250	14.4%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	36	1871	926	3.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	157	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	7	-	29	1886	251	11.5%
11/2	Right	U	1	N/A	B		1	7	-	21	1886	251	8.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	310	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	723	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	86	1877	1283	6.7%
13/2	Right	U	2	N/A	D		1	40	-	753	1877	1283	58.7%
14/1	Ahead	U	3	N/A	G		1	43	-	743	2007	1472	50.5%
14/2	Right	U	3	N/A	G		1	43	-	193	1872	1373	14.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**67**	**0**	**0**	**4.1**	**2.9**	**0.0**	**7.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**67**	**0**	**0**	**4.1**	**2.9**	**0.0**	**7.0**	**-**	**-**	**-**	**-**
1/1	308	308	-	-	-	0.2	0.1	-	0.4	4.3	1.6	0.1	1.8
1/2	702	702	-	-	-	0.7	0.5	-	1.2	6.1	4.9	0.5	5.4
2/1	31	31	31	0	0	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
3/1	71	71	-	-	-	0.4	0.1	-	0.5	27.4	1.0	0.1	1.1
3/2	183	183	-	-	-	1.1	0.6	-	1.7	33.3	2.7	0.6	3.3
4/1	36	36	-	-	-	0.2	0.1	-	0.3	31.4	0.5	0.1	0.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	36	36	36	0	0	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
6/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	157	157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	29	29	-	-	-	0.1	0.1	-	0.2	25.7	0.4	0.1	0.5
11/2	21	21	-	-	-	0.1	0.0	-	0.2	30.8	0.3	0.0	0.3
12/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	86	86	-	-	-	0.1	0.0	-	0.1	3.7	0.3	0.0	0.3
13/2	753	753	-	-	-	0.6	0.7	-	1.3	6.1	3.2	0.7	3.9
14/1	743	743	-	-	-	0.5	0.5	-	1.0	5.0	2.7	0.5	3.2

Full Input Data And Results

14/2	193	193	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

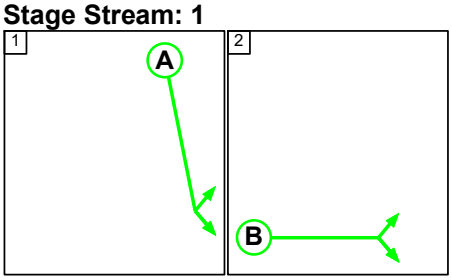
C1	Stream: 1 PRC for Signalled Lanes (%):	75.4	Total Delay for Signalled Lanes (pcuHr):	1.94	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	53.3	Total Delay for Signalled Lanes (pcuHr):	3.59	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	78.3	Total Delay for Signalled Lanes (pcuHr):	1.46	Cycle Time (s): 60
	PRC Over All Lanes (%):	53.3	Total Delay Over All Lanes(pcuHr):	7.04	

Full Input Data And Results

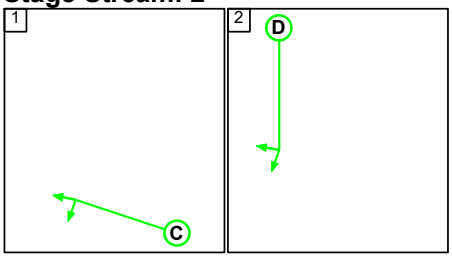
Scenario 27: '34RC 07:00-08:00' (FG27: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

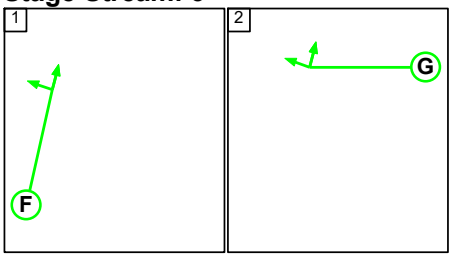
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	36	14
Change Point	7	48

Stage Stream: 2

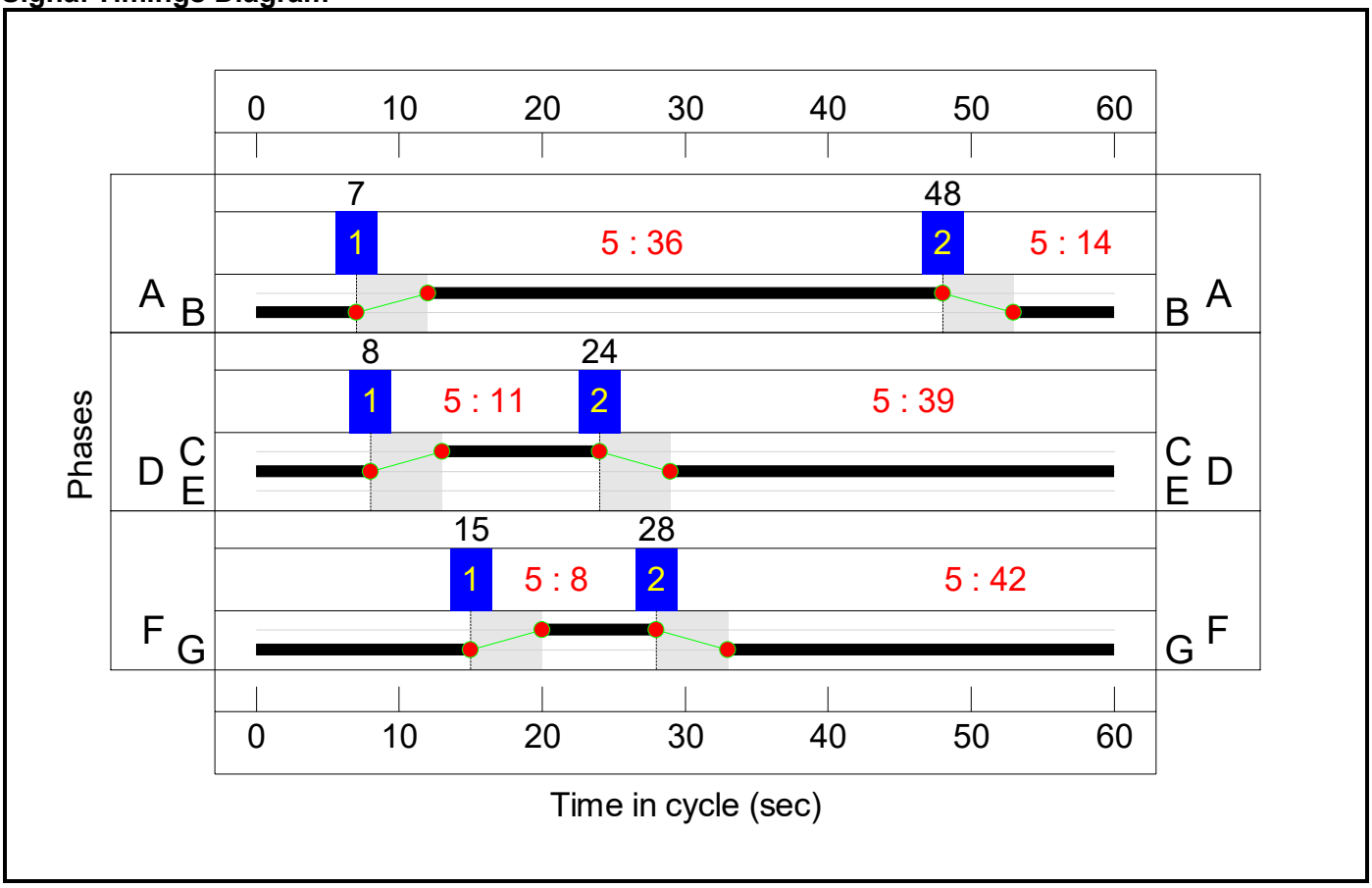
Stage	1	2
Duration	11	39
Change Point	8	24

Stage Stream: 3

Stage	1	2
Duration	8	42
Change Point	15	28

Full Input Data And Results

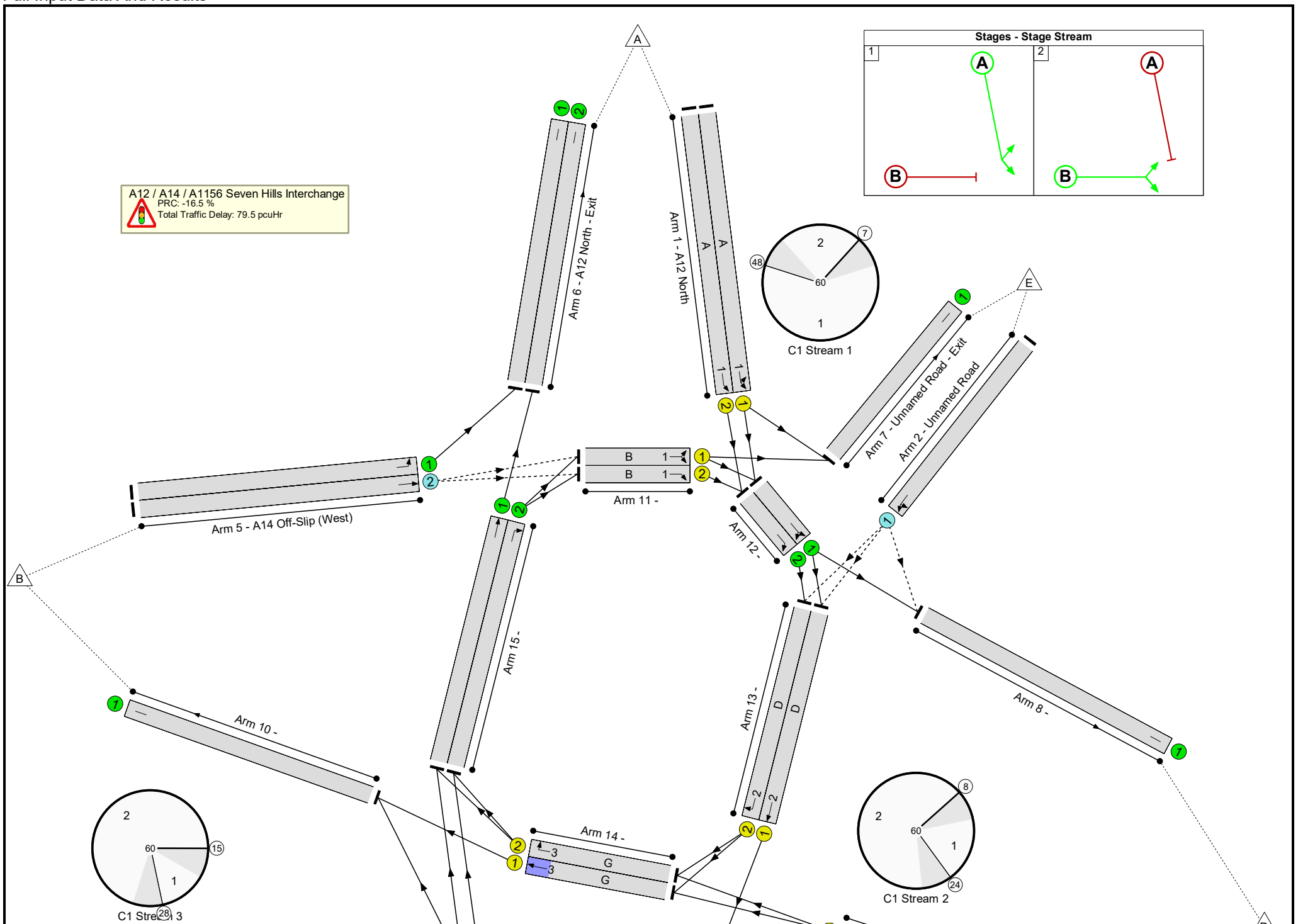
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**104.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**104.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	36	-	505	1866	1151	43.9%
1/2	A12 North Ahead	U	1	N/A	A		1	36	-	1207	1866	1151	104.9%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	60	1871	420	14.3%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	11	-	208	1877	375	55.4%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	11	-	381	1877	375	101.5%
4/1	A1156 Left Ahead	U	3	N/A	F		1	8	-	227	1878	282	80.6%
4/2	A1156 Ahead	U	3	N/A	F		1	8	-	94	1878	282	33.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1391	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	110	1871	790	13.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1391	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	71	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	386	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1327	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	14	-	214	1886	471	45.3%
11/2	Right	U	1	N/A	B		1	14	-	6	1886	471	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	648	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1213	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	39	-	269	1877	1251	21.5%
13/2	Right	U	2	N/A	D		1	39	-	1266	1877	1251	96.7%
14/1	Ahead	U	3	N/A	G		1	42	-	1268	2007	1438	84.2%
14/2	Right	U	3	N/A	G		1	42	-	379	1872	1342	27.8%
15/1	Ahead	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	110	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**170**	**0**	**0**	**15.2**	**64.3**	**0.0**	**79.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**170**	**0**	**0**	**15.2**	**64.3**	**0.0**	**79.5**	**-**	**-**	**-**	**-**
1/1	505	505	-	-	-	0.8	0.4	-	1.2	8.8	4.3	0.4	4.7
1/2	1207	1151	-	-	-	5.2	36.4	-	41.7	124.3	21.1	36.4	57.5
2/1	60	60	60	0	0	0.0	0.1	-	0.1	5.8	0.2	0.1	0.3
3/1	208	208	-	-	-	1.2	0.6	-	1.9	32.3	3.1	0.6	3.7
3/2	381	375	-	-	-	2.7	11.3	-	14.0	131.9	6.4	11.3	17.7
4/1	227	227	-	-	-	1.6	1.9	-	3.5	55.4	3.7	1.9	5.6
4/2	94	94	-	-	-	0.6	0.2	-	0.8	32.4	1.4	0.2	1.6
5/1	1391	1391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	110	110	110	0	0	0.0	0.1	-	0.1	2.6	0.0	0.1	0.1
6/1	1391	1391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	71	71	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1271	1271	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	214	214	-	-	-	0.8	0.4	-	1.2	20.7	3.0	0.4	3.4
11/2	6	6	-	-	-	0.0	0.0	-	0.0	21.1	0.1	0.0	0.1
12/1	648	648	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1157	1157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	269	269	-	-	-	0.3	0.1	-	0.4	5.2	1.3	0.1	1.5
13/2	1210	1210	-	-	-	0.5	9.9	-	10.4	30.9	12.1	9.9	21.9
14/1	1212	1212	-	-	-	0.3	2.6	-	2.9	8.6	1.2	2.6	3.8

Full Input Data And Results

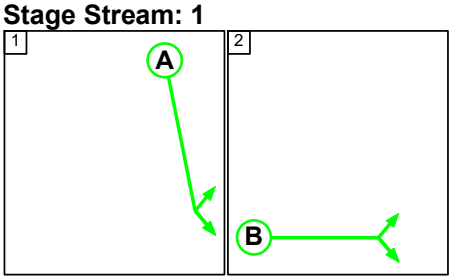
14/2	373	373	-	-	-	1.1	0.2	-	1.3	12.3	6.2	0.2	6.4
15/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	110	110	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-16.5	Total Delay for Signalled Lanes (pcuHr):	44.17	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-12.8	Total Delay for Signalled Lanes (pcuHr):	26.60	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	6.8	Total Delay for Signalled Lanes (pcuHr):	8.51	Cycle Time (s):	60
	PRC Over All Lanes (%):	-16.5	Total Delay Over All Lanes(pcuHr):	79.45		

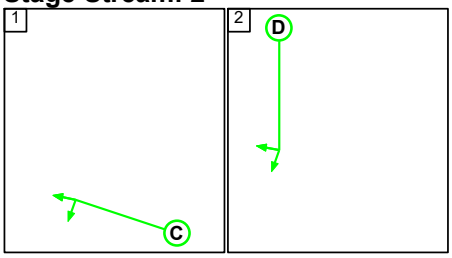
Full Input Data And Results
Scenario 28: '34RC 08:00-09:00' (FG28: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

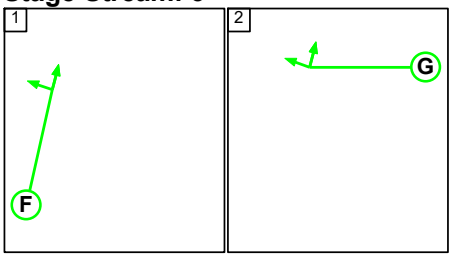
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	3	45

Stage Stream: 2

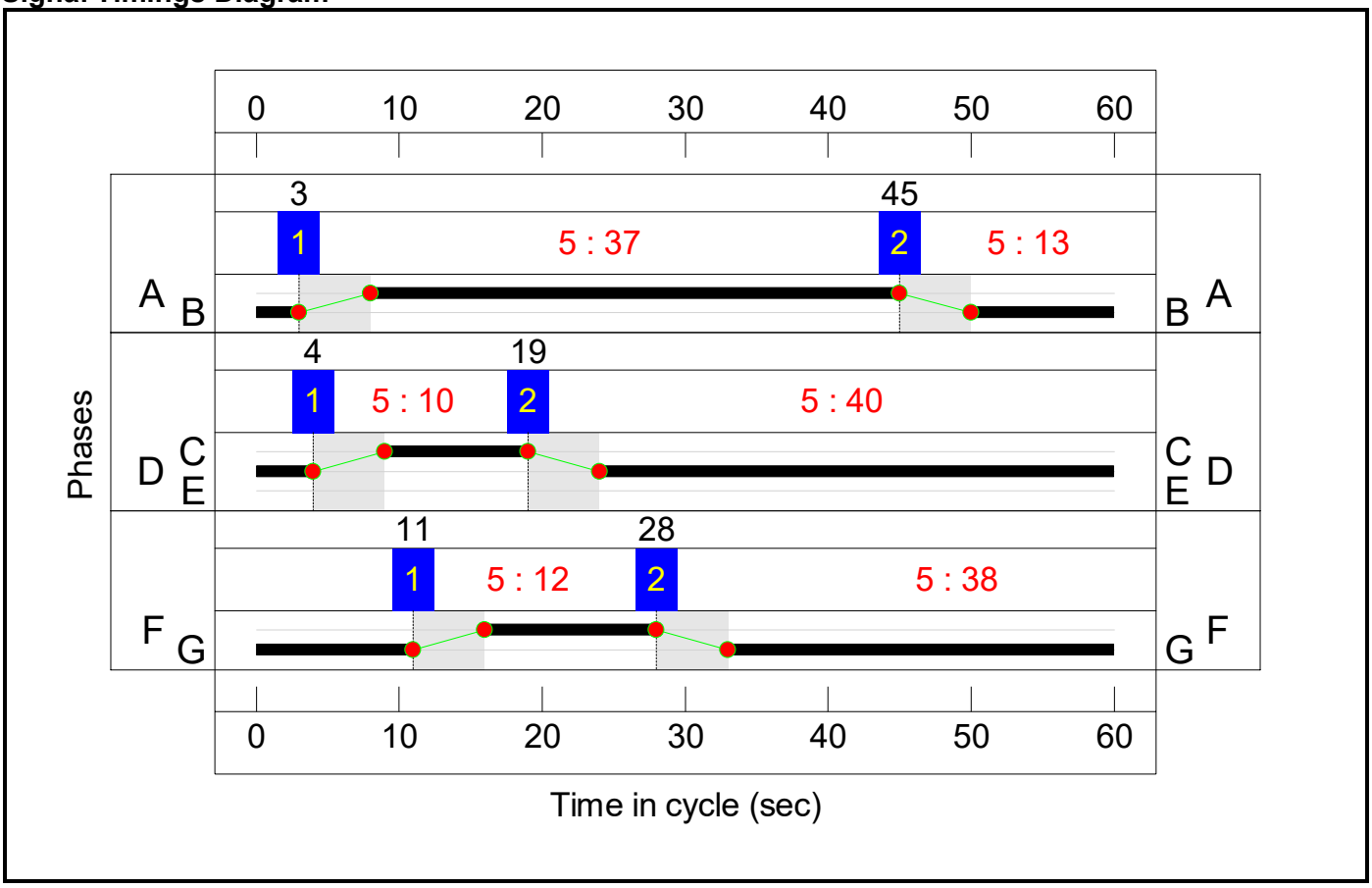
Stage	1	2
Duration	10	40
Change Point	4	19

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	11	28

Full Input Data And Results

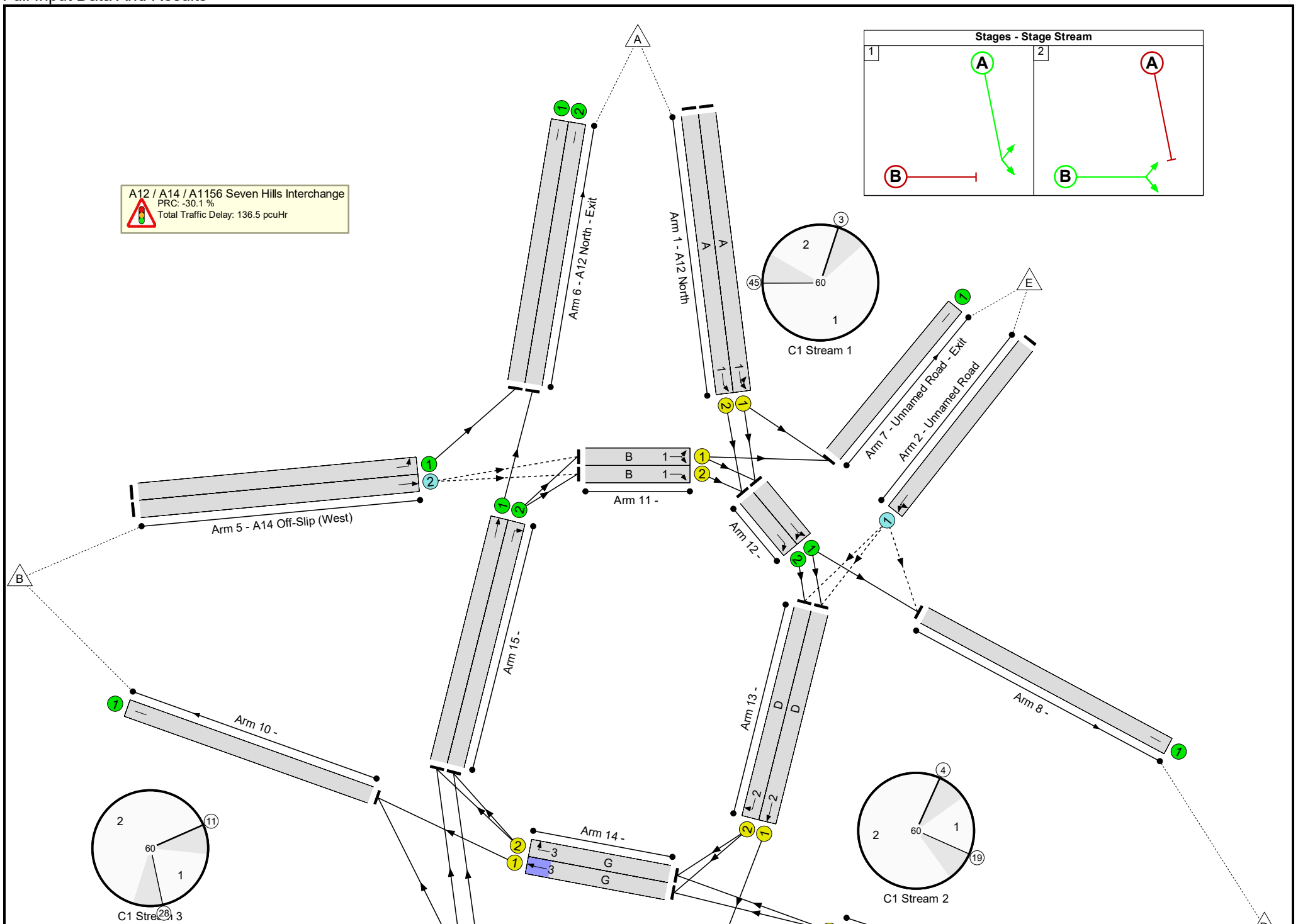
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.1%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.1%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	803	1866	1182	67.9%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1262	1866	1182	106.8%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	110	1871	307	35.8%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	283	1877	344	82.2%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	403	1877	344	117.1%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	362	1878	407	89.0%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	139	1878	407	34.2%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1638	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	136	1871	744	18.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1638	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	34	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	544	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	816	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1427	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	280	1886	440	63.1%
11/2	Right	U	1	N/A	B		1	13	-	12	1886	440	2.7%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1274	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	533	1877	1283	41.6%
13/2	Right	U	2	N/A	D		1	40	-	1356	1877	1283	99.5%
14/1	Ahead	U	3	N/A	G		1	38	-	1346	2007	1305	97.0%
14/2	Right	U	3	N/A	G		1	38	-	413	1872	1217	29.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**246**	**0**	**0**	**21.6**	**115.0**	**0.0**	**136.5**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**246**	**0**	**0**	**21.6**	**115.0**	**0.0**	**136.5**	**-**	**-**	**-**	**-**
1/1	803	803	-	-	-	1.6	1.1	-	2.6	11.8	8.5	1.1	9.5
1/2	1262	1182	-	-	-	5.9	46.8	-	52.7	150.4	22.4	46.8	69.2
2/1	110	110	110	0	0	0.3	0.3	-	0.5	17.3	1.2	0.3	1.5
3/1	283	283	-	-	-	1.9	2.2	-	4.0	51.1	4.5	2.2	6.6
3/2	403	344	-	-	-	4.4	32.5	-	37.0	330.4	7.7	32.5	40.2
4/1	362	362	-	-	-	2.3	3.5	-	5.8	57.5	5.8	3.5	9.3
4/2	139	139	-	-	-	0.8	0.3	-	1.0	26.6	1.9	0.3	2.2
5/1	1638	1638	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	136	136	136	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1638	1638	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	32	32	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	816	816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1347	1347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	278	278	-	-	-	1.2	0.8	-	2.0	25.9	4.2	0.8	5.1
11/2	12	12	-	-	-	0.1	0.0	-	0.1	22.2	0.2	0.0	0.2
12/1	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1194	1194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	533	533	-	-	-	0.5	0.4	-	0.8	5.6	2.8	0.4	3.2
13/2	1276	1276	-	-	-	0.8	16.2	-	17.0	48.1	9.0	16.2	25.2
14/1	1266	1266	-	-	-	0.6	10.6	-	11.2	31.8	3.7	10.6	14.2

Full Input Data And Results

14/2	354	354	-	-	-	1.4	0.2	-	1.6	16.4	5.9	0.2	6.1
15/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	154	154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

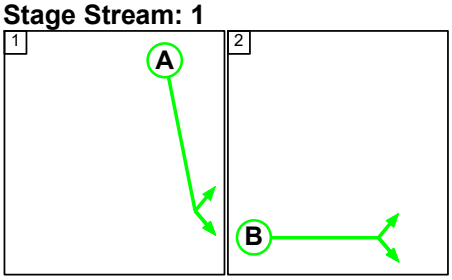
C1 Stream: 1 PRC for Signalled Lanes (%):	-18.7	Total Delay for Signalled Lanes (pcuHr):	57.44	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):	-30.1	Total Delay for Signalled Lanes (pcuHr):	58.85	Cycle Time (s):	60
C1 Stream: 3 PRC for Signalled Lanes (%):	-7.8	Total Delay for Signalled Lanes (pcuHr):	19.60	Cycle Time (s):	60
PRC Over All Lanes (%):	-30.1	Total Delay Over All Lanes(pcuHr):	136.54		

Full Input Data And Results

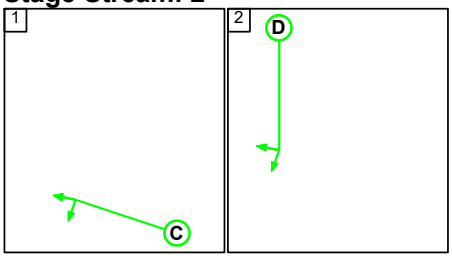
Scenario 29: '34RC 15:00-16:00' (FG29: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

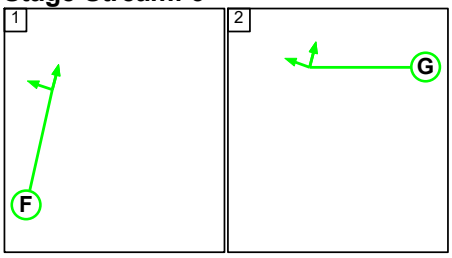
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

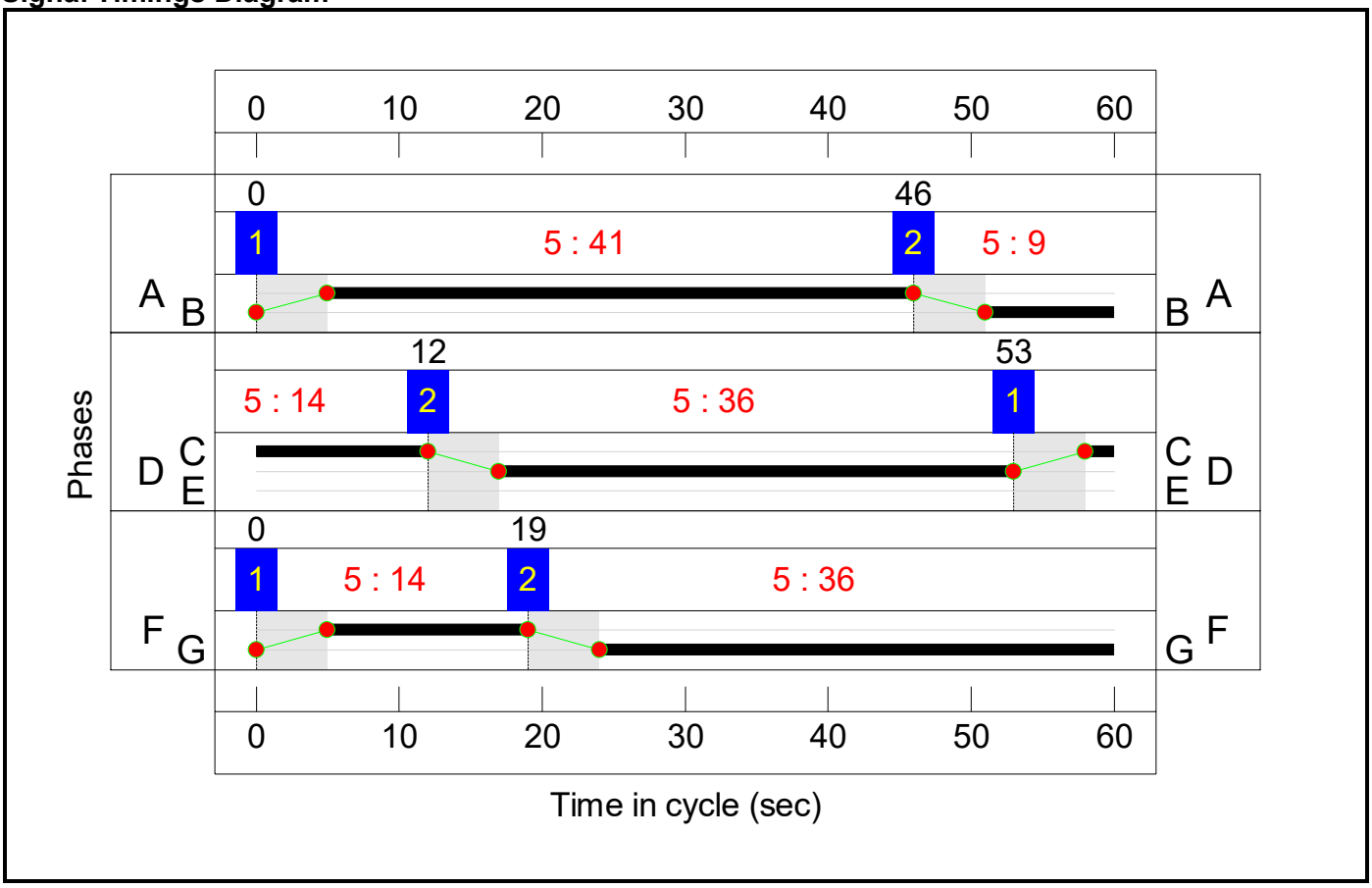
Stage	1	2
Duration	14	36
Change Point	53	12

Stage Stream: 3

Stage	1	2
Duration	14	36
Change Point	0	19

Full Input Data And Results

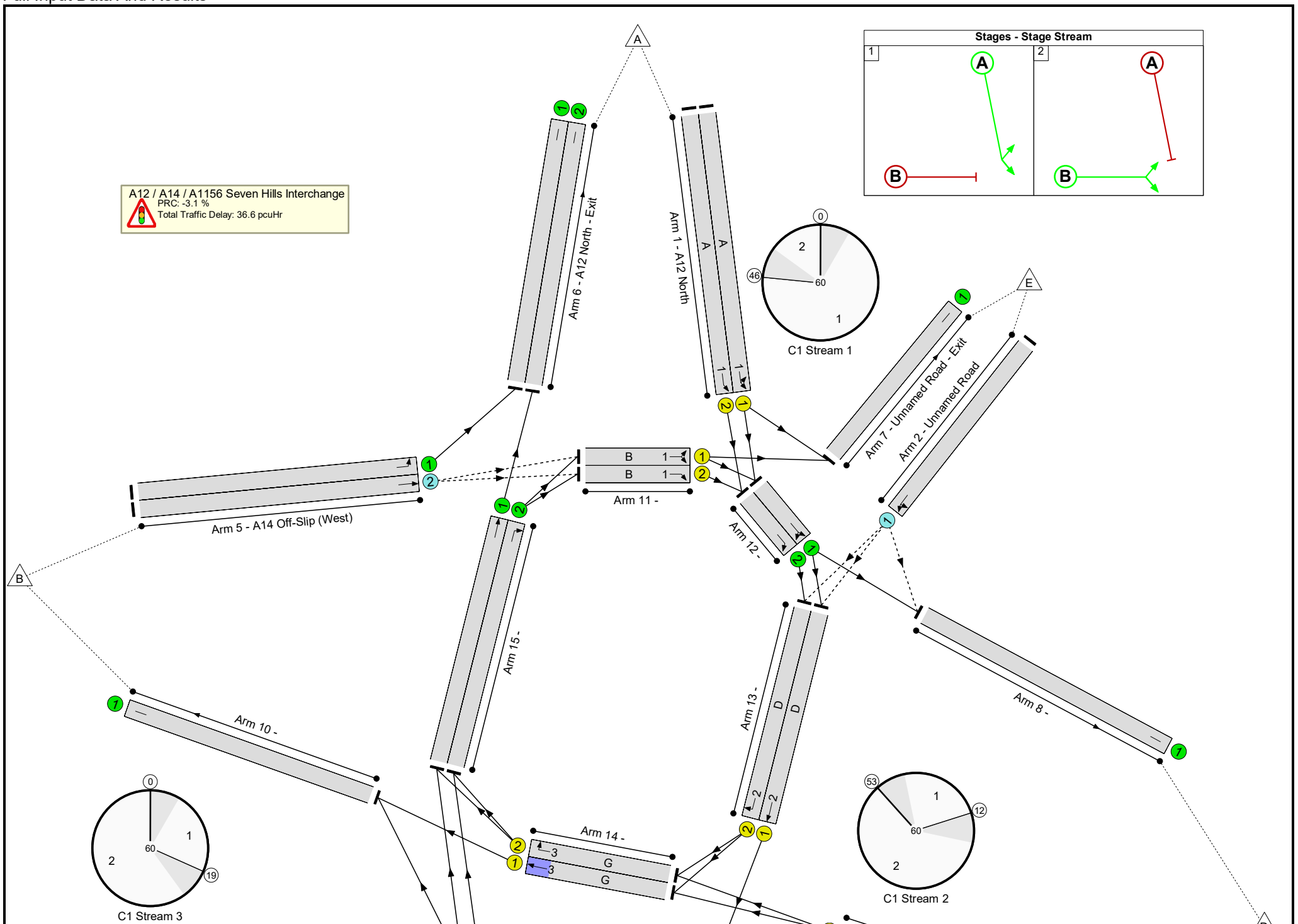
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.8%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.8%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	751	1866	1306	57.5%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	1034	1866	1306	79.2%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	42	1871	385	10.9%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	14	-	299	1877	469	63.7%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	14	-	421	1877	469	89.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	14	-	405	1878	470	86.3%
4/2	A1156 Ahead	U	3	N/A	F		1	14	-	131	1878	470	27.9%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1361	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	97	1871	709	13.7%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1361	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	749	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1150	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	225	1886	314	71.6%
11/2	Right	U	1	N/A	B		1	9	-	4	1886	314	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	916	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1038	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	36	-	467	1877	1157	40.3%
13/2	Right	U	2	N/A	D		1	36	-	1074	1877	1157	92.8%
14/1	Ahead	U	3	N/A	G		1	36	-	1067	2007	1238	86.2%
14/2	Right	U	3	N/A	G		1	36	-	428	1872	1154	37.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	749	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	132	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**139**	**0**	**0**	**15.6**	**21.0**	**0.0**	**36.6**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**139**	**0**	**0**	**15.6**	**21.0**	**0.0**	**36.6**	**-**	**-**	**-**	**-**
1/1	751	751	-	-	-	0.9	0.7	-	1.6	7.8	6.3	0.7	6.9
1/2	1034	1034	-	-	-	1.7	1.9	-	3.6	12.6	11.5	1.9	13.4
2/1	42	42	42	0	0	0.0	0.1	-	0.1	7.2	0.2	0.1	0.3
3/1	299	299	-	-	-	1.7	0.9	-	2.5	30.5	4.4	0.9	5.3
3/2	421	421	-	-	-	2.5	3.8	-	6.3	54.0	6.8	3.8	10.6
4/1	405	405	-	-	-	2.4	2.9	-	5.3	47.1	6.4	2.9	9.3
4/2	131	131	-	-	-	0.7	0.2	-	0.9	23.5	1.7	0.2	1.9
5/1	1361	1361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	97	97	97	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1361	1361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1150	1150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	225	225	-	-	-	1.3	1.2	-	2.5	40.2	3.6	1.2	4.9
11/2	4	4	-	-	-	0.0	0.0	-	0.0	27.0	0.1	0.0	0.1
12/1	916	916	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1038	1038	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	467	467	-	-	-	0.5	0.3	-	0.9	6.7	2.3	0.3	2.7
13/2	1074	1074	-	-	-	1.5	5.7	-	7.2	24.2	7.9	5.7	13.5
14/1	1067	1067	-	-	-	0.3	3.0	-	3.3	11.3	0.9	3.0	3.9

Full Input Data And Results

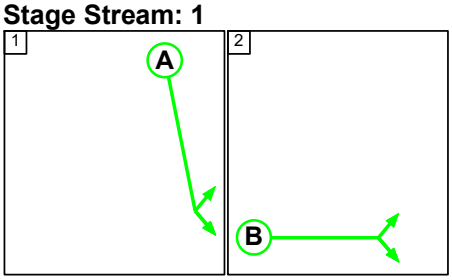
14/2	428	428	-	-	-	1.9	0.3	-	2.2	18.8	7.1	0.3	7.4
15/1	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	132	132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	13.7	Total Delay for Signalled Lanes (pcuHr):	7.77	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-3.1	Total Delay for Signalled Lanes (pcuHr):	16.93	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	4.3	Total Delay for Signalled Lanes (pcuHr):	11.73	Cycle Time (s): 60
	PRC Over All Lanes (%):	-3.1	Total Delay Over All Lanes(pcuHr):	36.60	

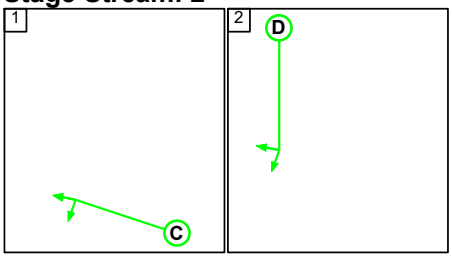
Full Input Data And Results
Scenario 30: '34RC 17:00-18:00' (FG30: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

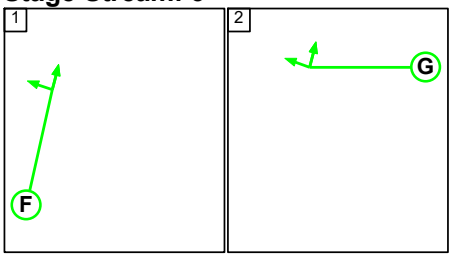
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

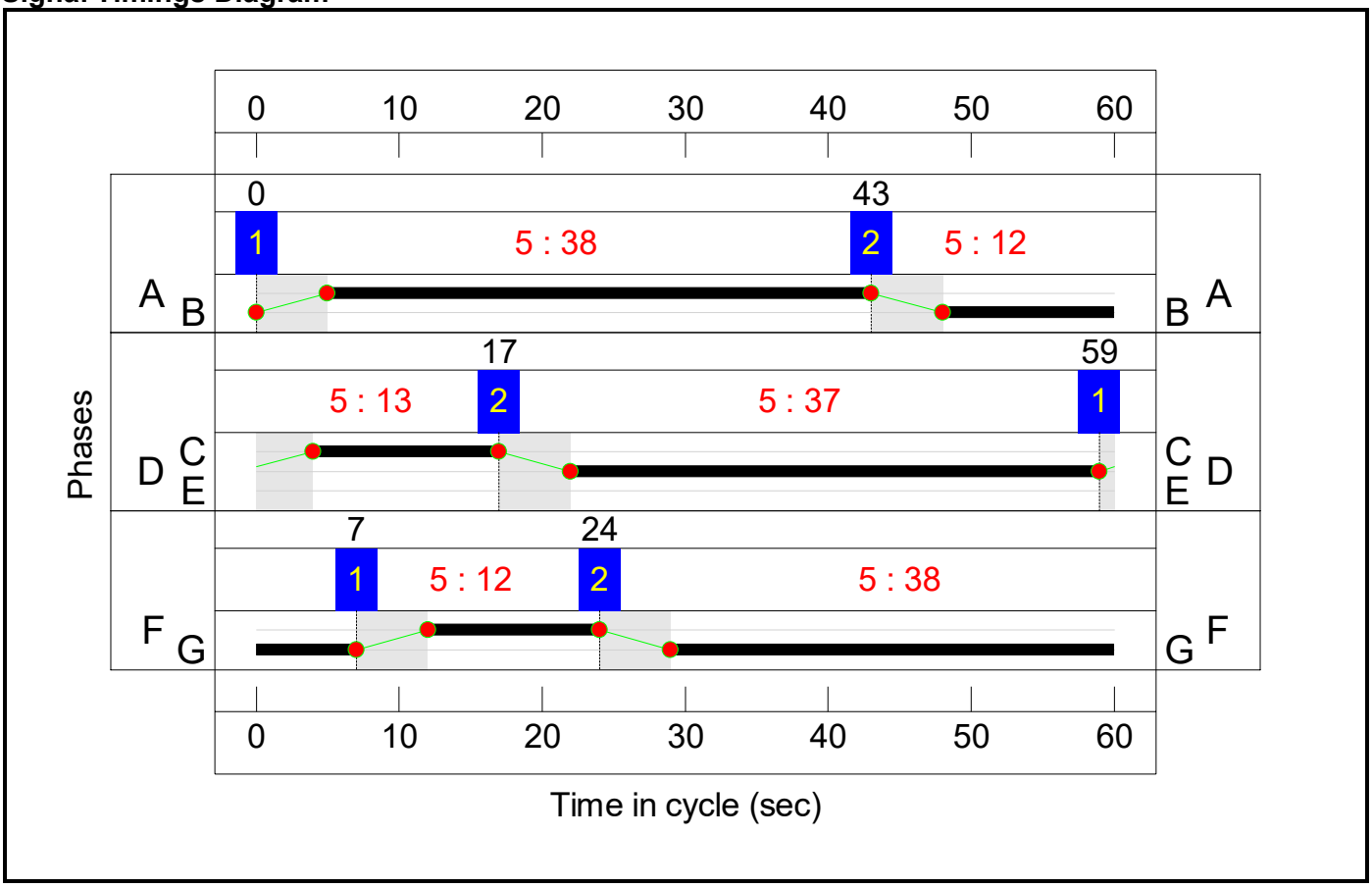
Stage	1	2
Duration	13	37
Change Point	59	17

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	7	24

Full Input Data And Results

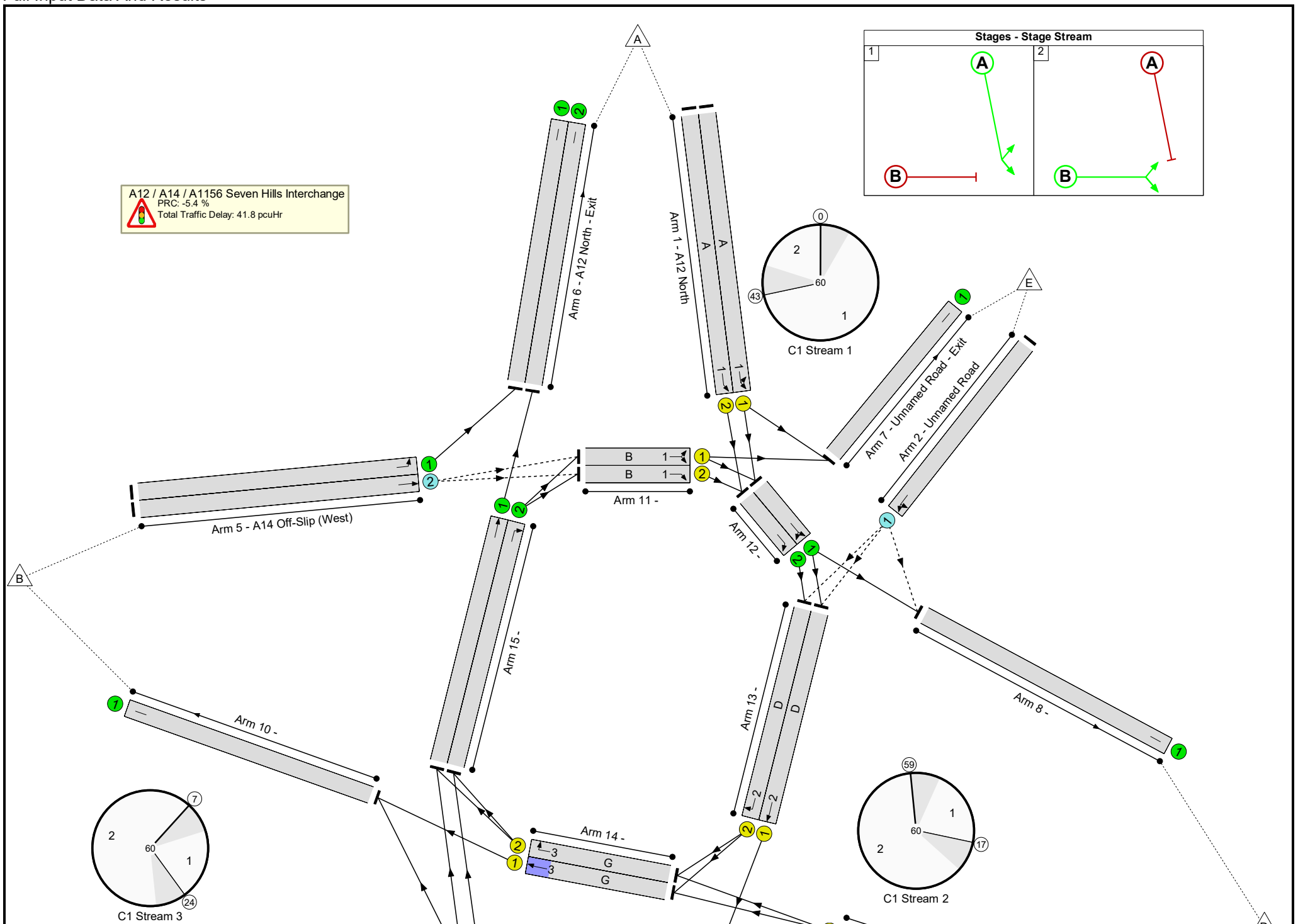
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	701	1866	1213	57.8%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1100	1866	1213	90.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	345	8.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	335	1877	438	76.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	394	1877	438	90.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	308	1878	407	75.7%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	219	1878	407	53.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1518	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	118	1871	721	16.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1518	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	566	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	755	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1204	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	332	1886	409	81.2%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	979	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1105	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	420	1877	1189	35.3%
13/2	Right	U	2	N/A	D		1	37	-	1128	1877	1189	94.9%
14/1	Ahead	U	3	N/A	G		1	38	-	1127	2007	1305	86.4%
14/2	Right	U	3	N/A	G		1	38	-	395	1872	1217	32.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**148**	**0**	**0**	**15.9**	**25.9**	**0.0**	**41.8**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**148**	**0**	**0**	**15.9**	**25.9**	**0.0**	**41.8**	**-**	**-**	**-**	**-**
1/1	701	701	-	-	-	1.1	0.7	-	1.8	9.4	6.4	0.7	7.1
1/2	1100	1100	-	-	-	2.7	4.5	-	7.2	23.7	15.6	4.5	20.1
2/1	30	30	30	0	0	0.0	0.0	-	0.1	7.5	0.1	0.0	0.2
3/1	335	335	-	-	-	2.0	1.6	-	3.6	38.4	5.1	1.6	6.7
3/2	394	394	-	-	-	2.4	3.8	-	6.3	57.2	6.3	3.8	10.2
4/1	308	308	-	-	-	1.9	1.5	-	3.4	39.7	4.8	1.5	6.3
4/2	219	219	-	-	-	1.3	0.6	-	1.8	30.4	3.2	0.6	3.8
5/1	1518	1518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	118	118	118	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1518	1518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	566	566	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	755	755	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1204	1204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	332	332	-	-	-	1.3	2.1	-	3.4	36.8	5.4	2.1	7.4
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	979	979	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1105	1105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	420	420	-	-	-	0.4	0.3	-	0.7	5.9	2.3	0.3	2.6
13/2	1128	1128	-	-	-	0.7	7.5	-	8.2	26.1	5.8	7.5	13.2
14/1	1127	1127	-	-	-	0.2	3.1	-	3.3	10.5	0.7	3.1	3.8

Full Input Data And Results

14/2	395	395	-	-	-	1.7	0.2	-	1.9	17.7	6.6	0.2	6.8
15/1	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

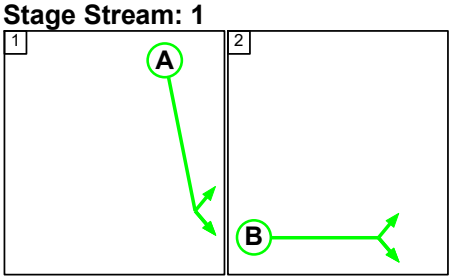
C1	Stream: 1 PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	12.51	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-5.4	Total Delay for Signalled Lanes (pcuHr):	18.69	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	10.47	Cycle Time (s):	60
	PRC Over All Lanes (%):	-5.4	Total Delay Over All Lanes(pcuHr):	41.83		

Full Input Data And Results

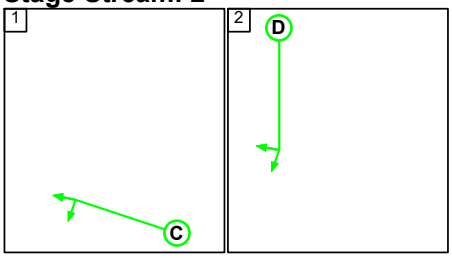
Scenario 31: '34OP 06:00-07:00' (FG31: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

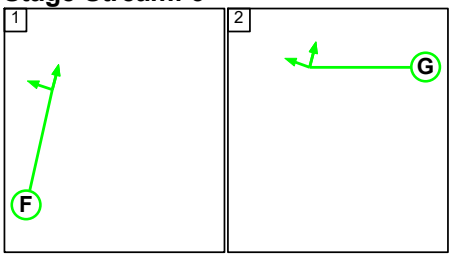
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

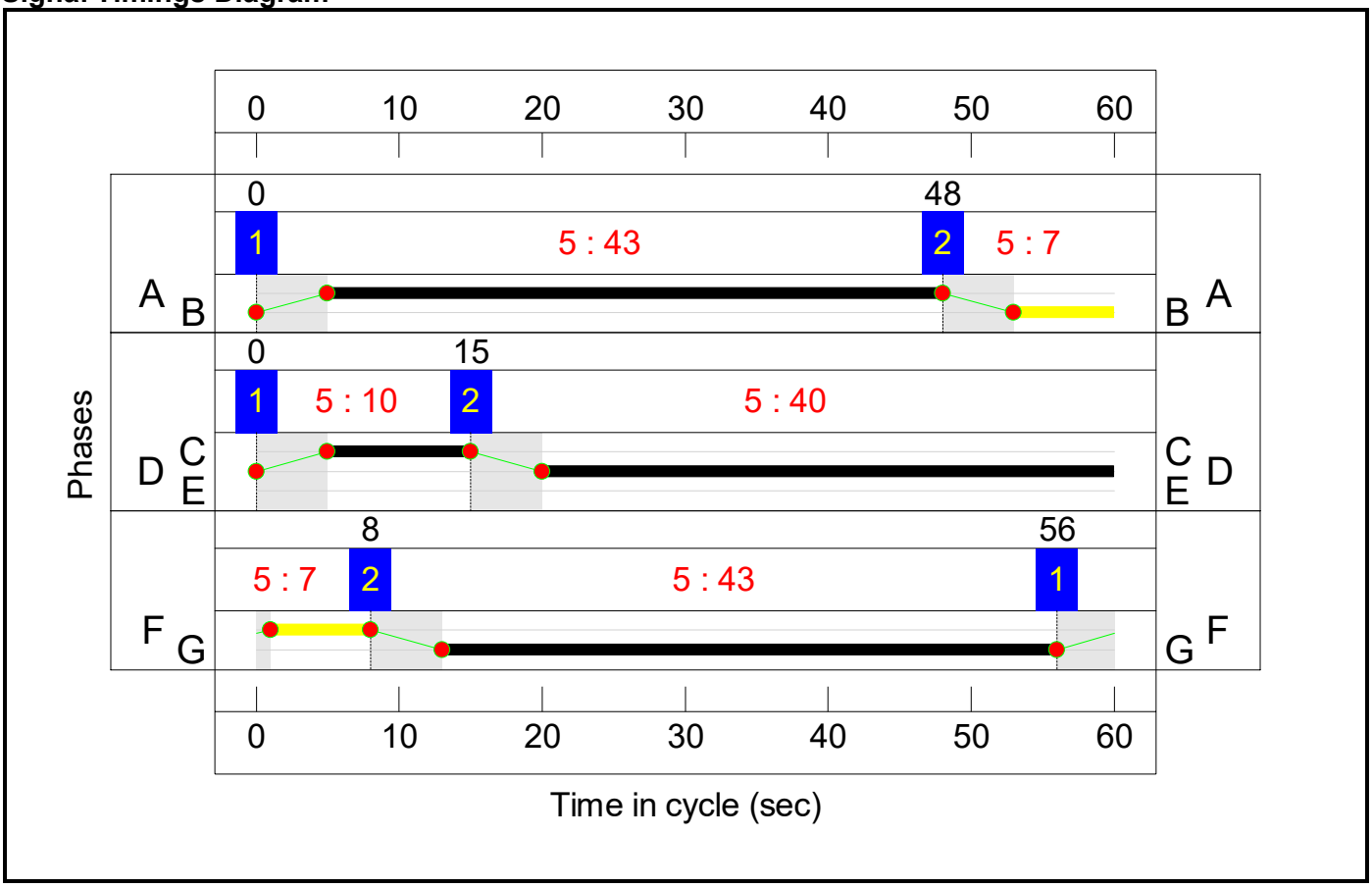
Stage	1	2
Duration	10	40
Change Point	0	15

Stage Stream: 3

Stage	1	2
Duration	7	43
Change Point	56	8

Full Input Data And Results

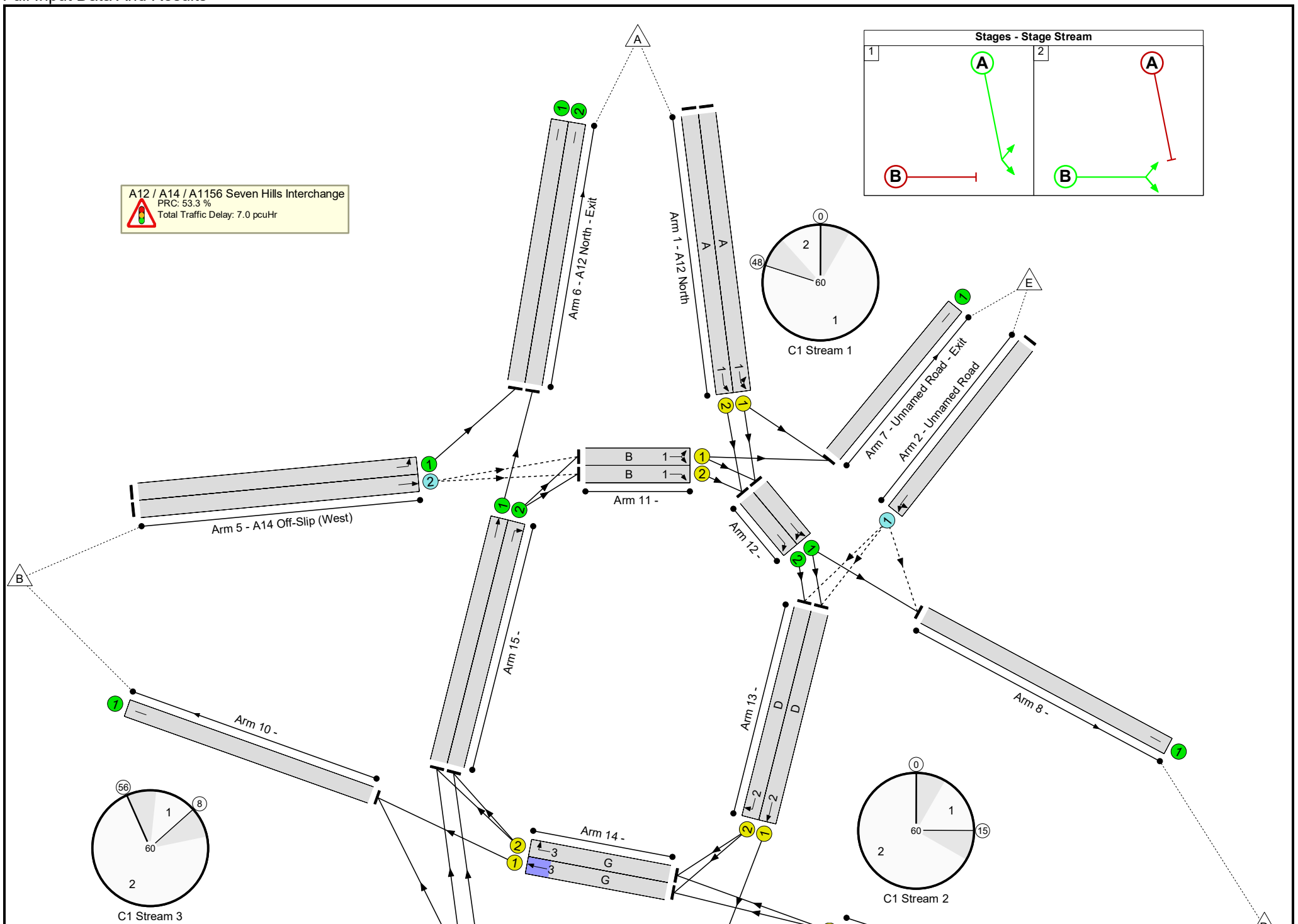
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	43	-	308	1866	1368	22.5%
1/2	A12 North Ahead	U	1	N/A	A		1	43	-	702	1866	1368	51.3%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	31	1871	659	4.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	71	1877	344	20.6%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	183	1877	344	53.2%
4/1	A1156 Left Ahead	U	3	N/A	F		1	7	-	36	1878	250	14.4%
4/2	A1156 Ahead	U	3	N/A	F		1	7	-	2	1878	250	0.8%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	36	1871	926	3.9%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	157	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	7	-	29	1886	251	11.5%
11/2	Right	U	1	N/A	B		1	7	-	21	1886	251	8.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	310	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	723	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	86	1877	1283	6.7%
13/2	Right	U	2	N/A	D		1	40	-	753	1877	1283	58.7%
14/1	Ahead	U	3	N/A	G		1	43	-	743	2007	1472	50.5%
14/2	Right	U	3	N/A	G		1	43	-	193	1872	1373	14.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**67**	**0**	**0**	**4.1**	**2.9**	**0.0**	**7.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**67**	**0**	**0**	**4.1**	**2.9**	**0.0**	**7.0**	**-**	**-**	**-**	**-**
1/1	308	308	-	-	-	0.2	0.1	-	0.4	4.3	1.6	0.1	1.8
1/2	702	702	-	-	-	0.7	0.5	-	1.2	6.1	4.9	0.5	5.4
2/1	31	31	31	0	0	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
3/1	71	71	-	-	-	0.4	0.1	-	0.5	27.4	1.0	0.1	1.1
3/2	183	183	-	-	-	1.1	0.6	-	1.7	33.3	2.7	0.6	3.3
4/1	36	36	-	-	-	0.2	0.1	-	0.3	31.4	0.5	0.1	0.6
4/2	2	2	-	-	-	0.0	0.0	-	0.0	30.2	0.0	0.0	0.0
5/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	36	36	36	0	0	0.0	0.0	-	0.0	2.0	0.0	0.0	0.0
6/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	157	157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	29	29	-	-	-	0.1	0.1	-	0.2	25.7	0.4	0.1	0.5
11/2	21	21	-	-	-	0.1	0.0	-	0.2	30.8	0.3	0.0	0.3
12/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	86	86	-	-	-	0.1	0.0	-	0.1	3.7	0.3	0.0	0.3
13/2	753	753	-	-	-	0.6	0.7	-	1.3	6.1	3.2	0.7	3.9
14/1	743	743	-	-	-	0.5	0.5	-	1.0	5.0	2.7	0.5	3.2

Full Input Data And Results

14/2	193	193	-	-	-	0.0	0.1	-	0.1	1.7	0.2	0.1	0.3
15/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

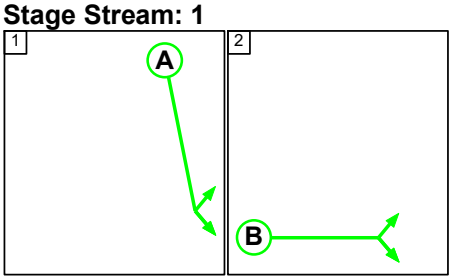
C1	Stream: 1 PRC for Signalled Lanes (%):	75.4	Total Delay for Signalled Lanes (pcuHr):	1.94	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	53.3	Total Delay for Signalled Lanes (pcuHr):	3.59	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	78.3	Total Delay for Signalled Lanes (pcuHr):	1.46	Cycle Time (s): 60
	PRC Over All Lanes (%):	53.3	Total Delay Over All Lanes(pcuHr):	7.04	

Full Input Data And Results

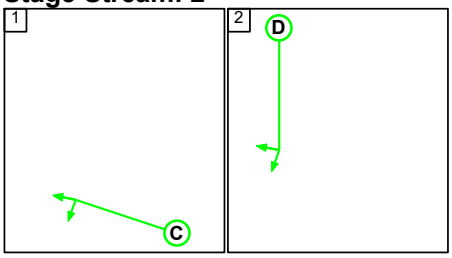
Scenario 32: '34OP 07:00-08:00' (FG32: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

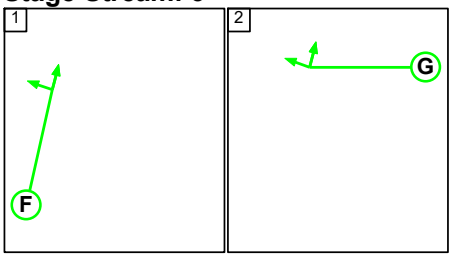
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	7	49

Stage Stream: 2

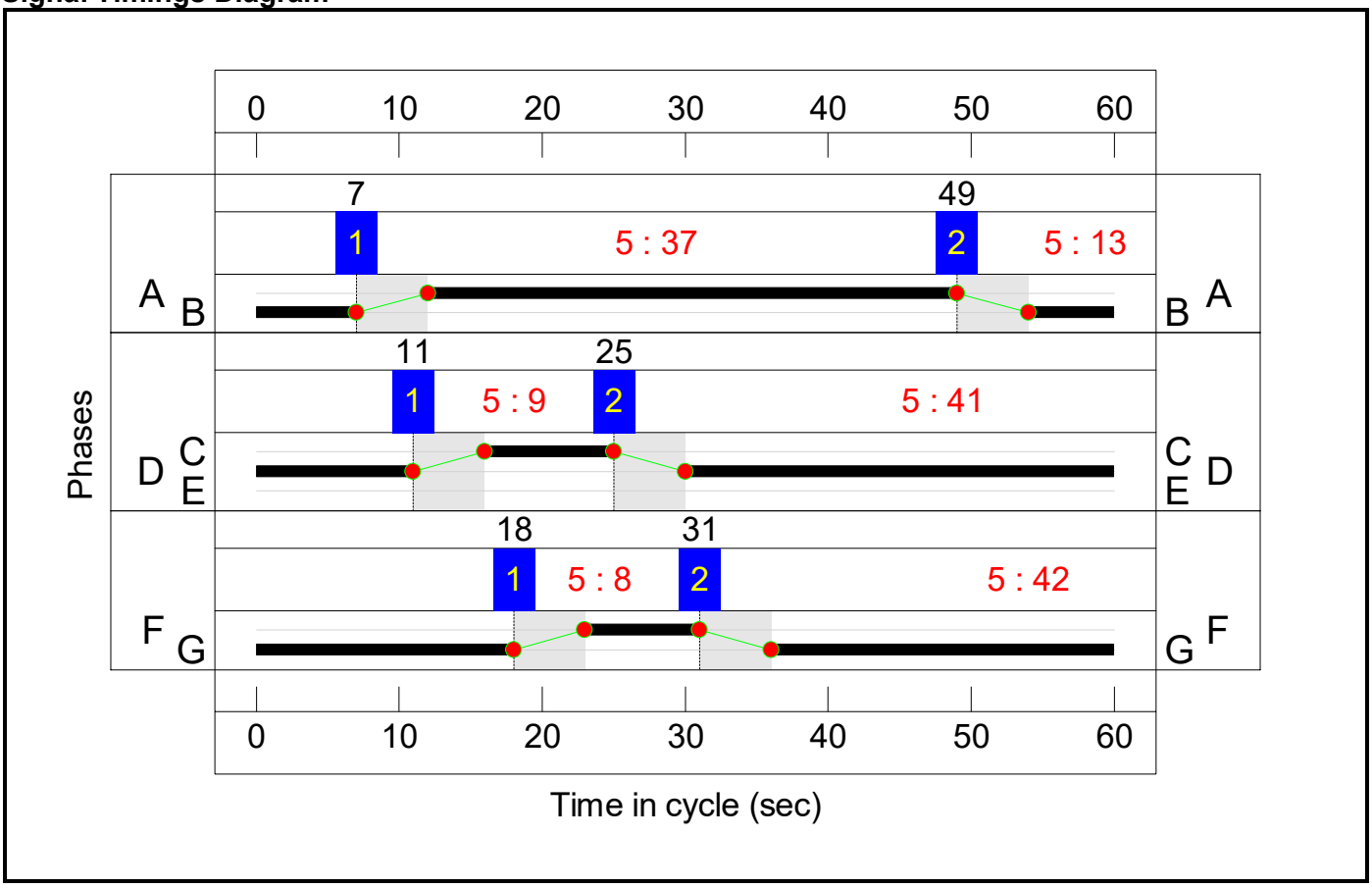
Stage	1	2
Duration	9	41
Change Point	11	25

Stage Stream: 3

Stage	1	2
Duration	8	42
Change Point	18	31

Full Input Data And Results

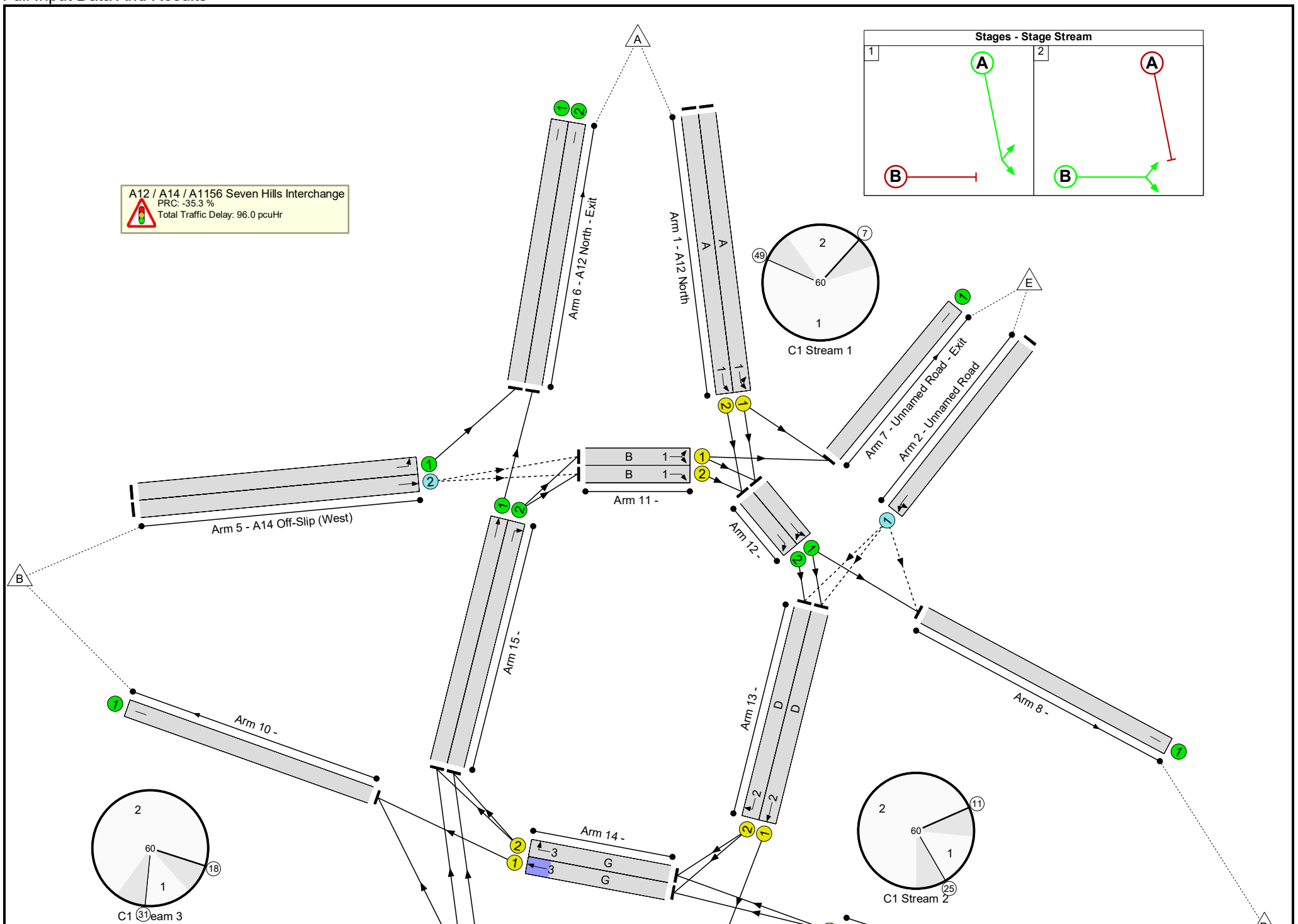
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**121.8%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**121.8%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	37	-	507	1866	1182	42.9%
1/2	A12 North Ahead	U	1	N/A	A		1	37	-	1218	1866	1182	103.1%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	60	1871	408	14.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	9	-	208	1877	313	66.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	9	-	381	1877	313	121.8%
4/1	A1156 Left Ahead	U	3	N/A	F		1	8	-	227	1878	282	80.6%
4/2	A1156 Ahead	U	3	N/A	F		1	8	-	94	1878	282	33.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1395	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	110	1871	810	13.6%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1395	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	71	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1338	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	13	-	214	1886	440	48.0%
11/2	Right	U	1	N/A	B		1	13	-	6	1886	440	1.4%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1224	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	41	-	269	1877	1314	20.5%
13/2	Right	U	2	N/A	D		1	41	-	1277	1877	1314	94.4%
14/1	Ahead	U	3	N/A	G		1	42	-	1279	2007	1438	86.4%
14/2	Right	U	3	N/A	G		1	42	-	379	1872	1342	23.2%
15/1	Ahead	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	110	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**170**	**0**	**0**	**15.9**	**80.0**	**0.0**	**96.0**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**170**	**0**	**0**	**15.9**	**80.0**	**0.0**	**96.0**	**-**	**-**	**-**	**-**
1/1	507	507	-	-	-	0.8	0.4	-	1.2	8.2	4.2	0.4	4.6
1/2	1218	1182	-	-	-	4.6	28.7	-	33.3	98.4	20.9	28.7	49.6
2/1	60	60	60	0	0	0.0	0.1	-	0.1	5.9	0.2	0.1	0.3
3/1	208	208	-	-	-	1.4	1.0	-	2.3	40.3	3.2	1.0	4.2
3/2	381	313	-	-	-	4.5	36.7	-	41.2	389.0	7.5	36.7	44.2
4/1	227	227	-	-	-	1.6	1.9	-	3.5	55.4	3.7	1.9	5.6
4/2	94	94	-	-	-	0.6	0.2	-	0.8	32.4	1.4	0.2	1.6
5/1	1395	1395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	110	110	110	0	0	0.0	0.1	-	0.1	2.6	0.0	0.1	0.1
6/1	1395	1395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	68	68	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1301	1301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	211	211	-	-	-	0.8	0.5	-	1.3	21.7	3.0	0.5	3.4
11/2	6	6	-	-	-	0.0	0.0	-	0.0	22.2	0.1	0.0	0.1
12/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1188	1188	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	269	269	-	-	-	0.2	0.1	-	0.4	4.9	1.4	0.1	1.5
13/2	1241	1241	-	-	-	0.4	7.1	-	7.5	21.6	12.6	7.1	19.7
14/1	1242	1242	-	-	-	0.2	3.1	-	3.3	9.5	0.9	3.1	4.0

Full Input Data And Results

14/2	312	312	-	-	-	0.9	0.2	-	1.1	12.2	5.2	0.2	5.3
15/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

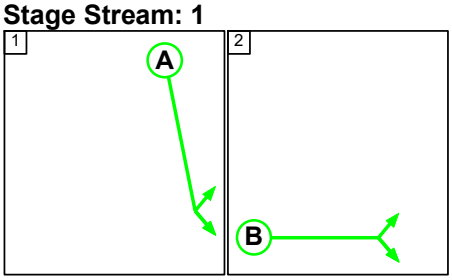
C1	Stream: 1 PRC for Signalled Lanes (%):	-14.5	Total Delay for Signalled Lanes (pcuHr):	35.78	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-35.3	Total Delay for Signalled Lanes (pcuHr):	51.32	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	8.68	Cycle Time (s):	60
	PRC Over All Lanes (%):	-35.3	Total Delay Over All Lanes(pcuHr):	95.96		

Full Input Data And Results

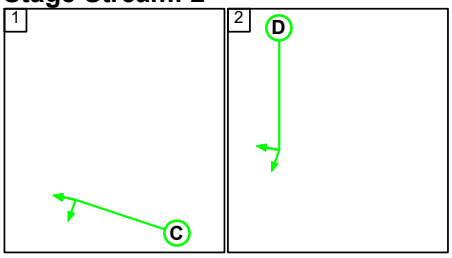
Scenario 33: '34OP 08:00-09:00' (FG33: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

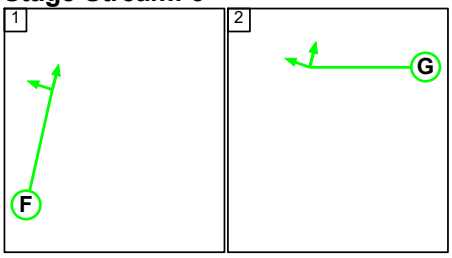
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	36	14
Change Point	5	46

Stage Stream: 2

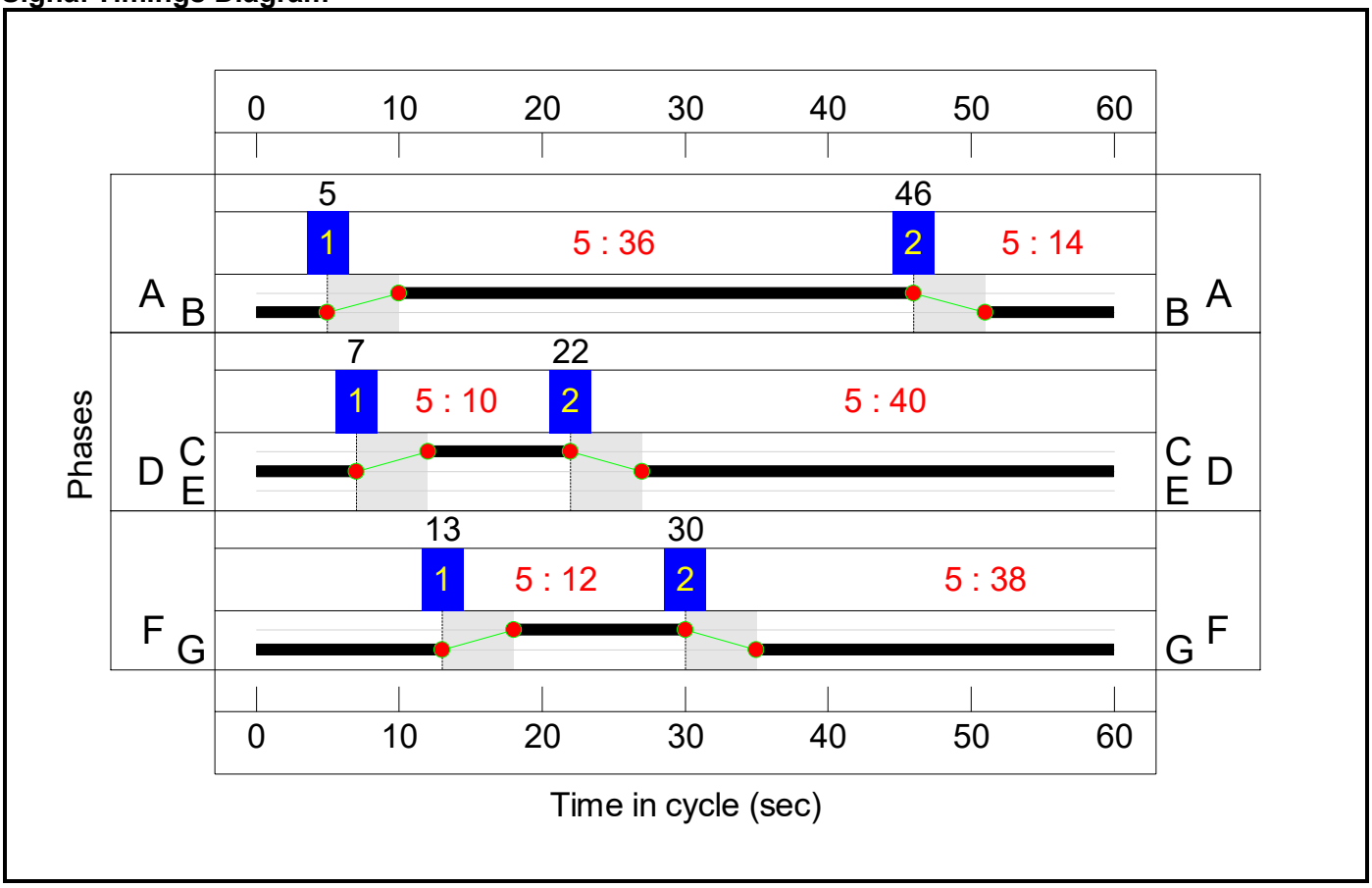
Stage	1	2
Duration	10	40
Change Point	7	22

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	13	30

Full Input Data And Results

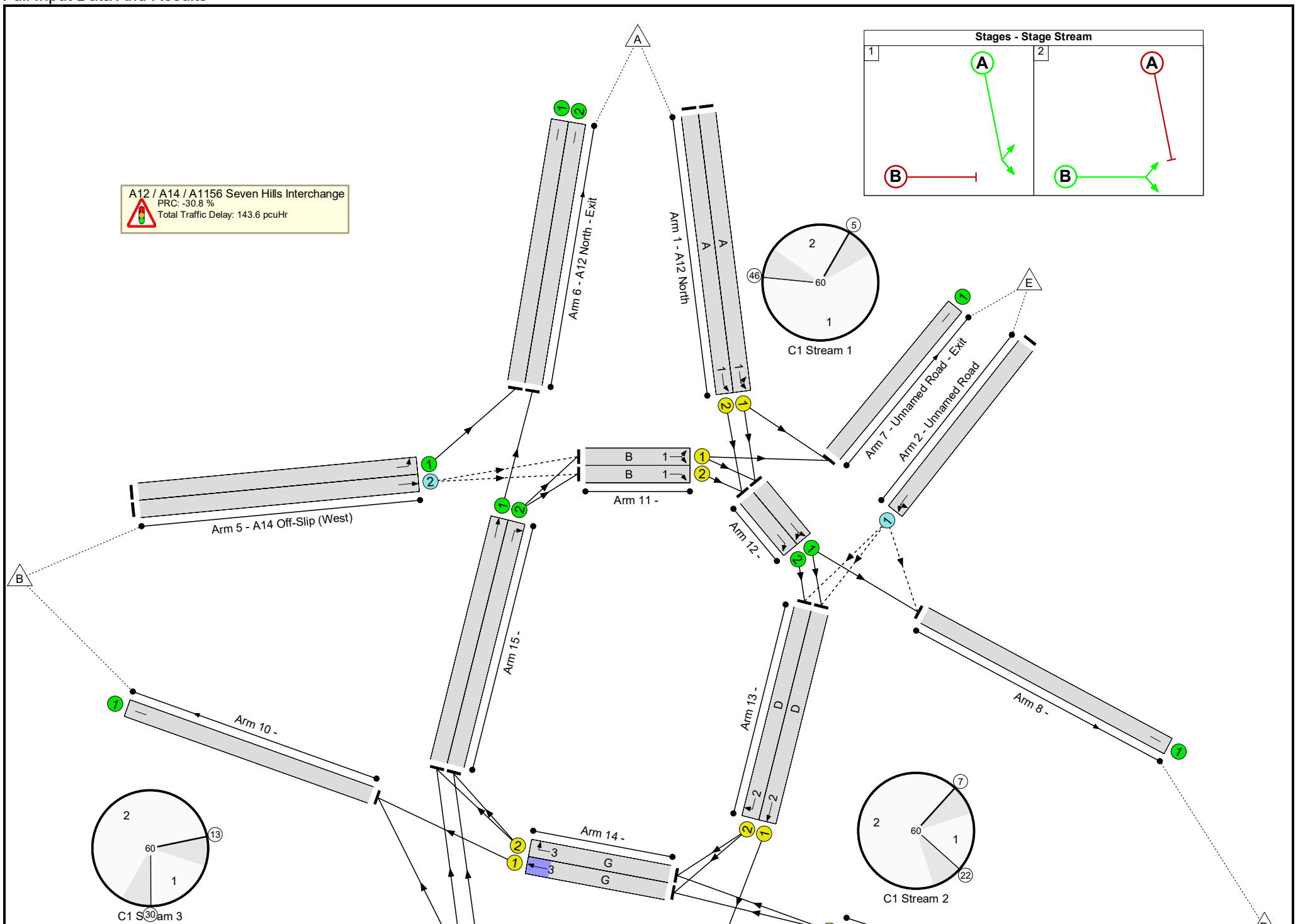
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.7%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.7%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	36	-	826	1866	1151	71.8%
1/2	A12 North Ahead	U	1	N/A	A		1	36	-	1262	1866	1151	109.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	110	1871	313	35.1%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	10	-	283	1877	344	82.2%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	10	-	405	1877	344	117.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	362	1878	407	89.0%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	148	1878	407	36.4%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1675	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	136	1871	741	18.3%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1675	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	679	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	34	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1427	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	14	-	289	1886	471	60.8%
11/2	Right	U	1	N/A	B		1	14	-	12	1886	471	2.5%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	1081	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1274	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	40	-	551	1877	1283	43.0%
13/2	Right	U	2	N/A	D		1	40	-	1356	1877	1283	97.0%
14/1	Ahead	U	3	N/A	G		1	38	-	1346	2007	1305	94.6%
14/2	Right	U	3	N/A	G		1	38	-	415	1872	1217	29.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	679	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**246**	**0**	**0**	**22.5**	**121.1**	**0.0**	**143.6**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**246**	**0**	**0**	**22.5**	**121.1**	**0.0**	**143.6**	**-**	**-**	**-**	**-**
1/1	826	826	-	-	-	1.8	1.3	-	3.1	13.4	9.4	1.3	10.7
1/2	1262	1151	-	-	-	6.8	60.8	-	67.6	193.0	22.9	60.8	83.7
2/1	110	110	110	0	0	0.3	0.3	-	0.5	17.6	1.2	0.3	1.4
3/1	283	283	-	-	-	1.9	2.2	-	4.0	51.1	4.5	2.2	6.6
3/2	405	344	-	-	-	4.5	33.5	-	37.9	337.2	7.8	33.5	41.2
4/1	362	362	-	-	-	2.3	3.5	-	5.8	57.5	5.8	3.5	9.3
4/2	148	148	-	-	-	0.8	0.3	-	1.1	26.9	2.1	0.3	2.4
5/1	1675	1675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	136	136	136	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1675	1675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	31	31	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1316	1316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	286	286	-	-	-	1.1	0.8	-	1.9	23.6	4.3	0.8	5.1
11/2	12	12	-	-	-	0.1	0.0	-	0.1	21.2	0.2	0.0	0.2
12/1	1081	1081	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	551	551	-	-	-	0.5	0.4	-	0.9	5.7	2.9	0.4	3.2
13/2	1245	1245	-	-	-	0.6	10.5	-	11.1	32.2	7.4	10.5	17.9
14/1	1235	1235	-	-	-	0.6	7.3	-	7.9	22.9	2.9	7.3	10.2

Full Input Data And Results

14/2	354	354	-	-	-	1.3	0.2	-	1.5	15.5	5.9	0.2	6.1
15/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	162	162	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

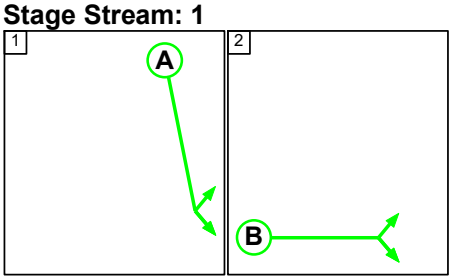
C1 Stream: 1 PRC for Signalled Lanes (%):	-21.9	Total Delay for Signalled Lanes (pcuHr):	72.68	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):	-30.8	Total Delay for Signalled Lanes (pcuHr):	53.97	Cycle Time (s):	60
C1 Stream: 3 PRC for Signalled Lanes (%):	-5.2	Total Delay for Signalled Lanes (pcuHr):	16.28	Cycle Time (s):	60
PRC Over All Lanes (%):	-30.8	Total Delay Over All Lanes(pcuHr):	143.57		

Full Input Data And Results

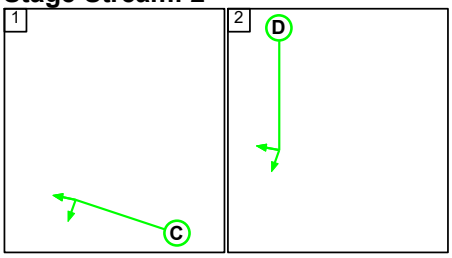
Scenario 34: '34OP 15:00-16:00' (FG34: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

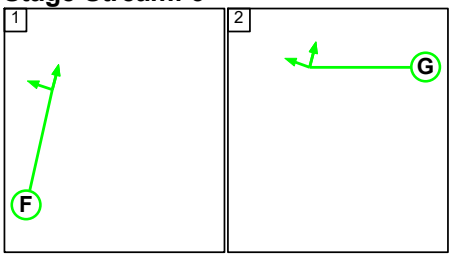
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	58	44

Stage Stream: 2

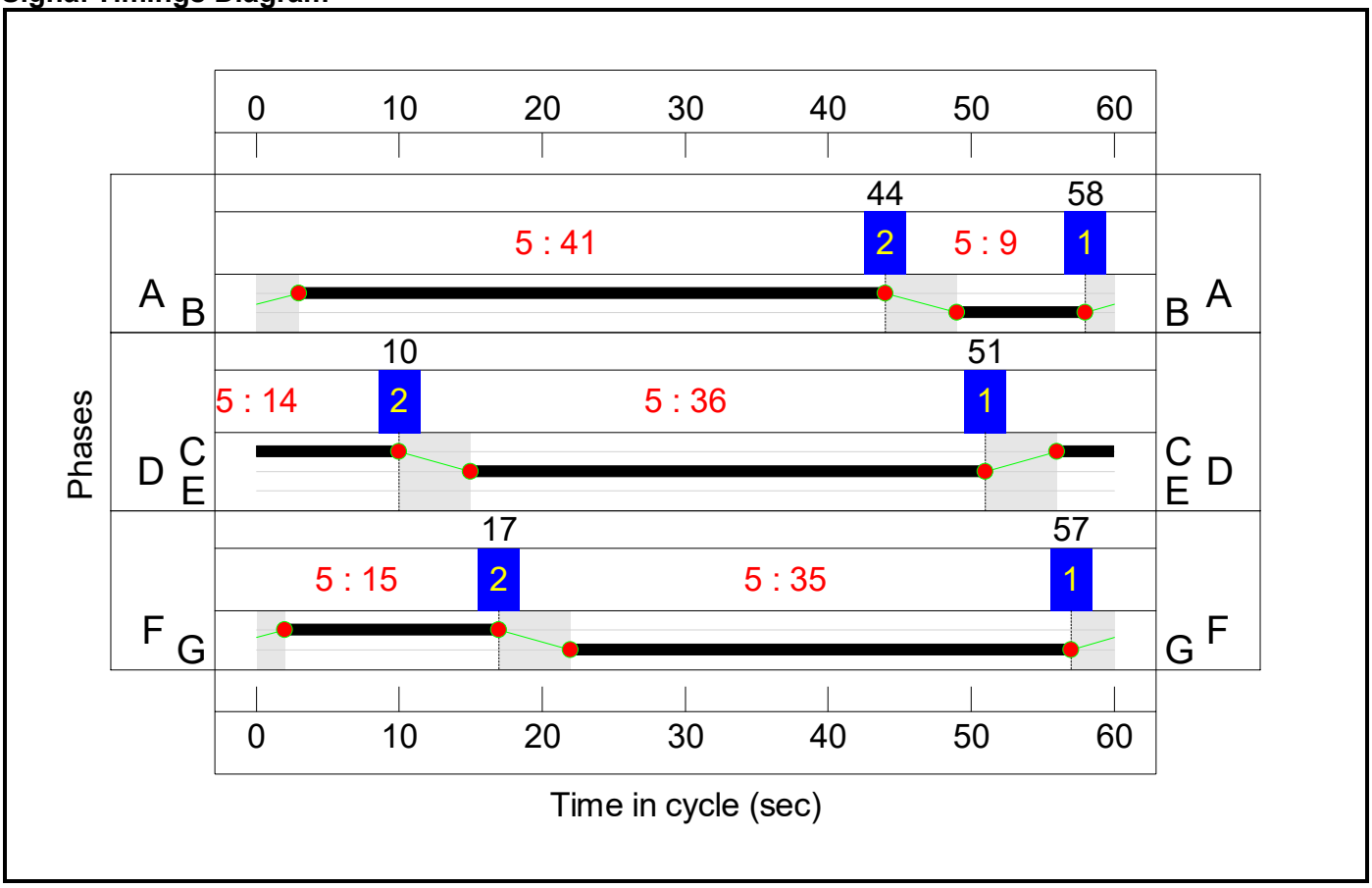
Stage	1	2
Duration	14	36
Change Point	51	10

Stage Stream: 3

Stage	1	2
Duration	15	35
Change Point	57	17

Full Input Data And Results

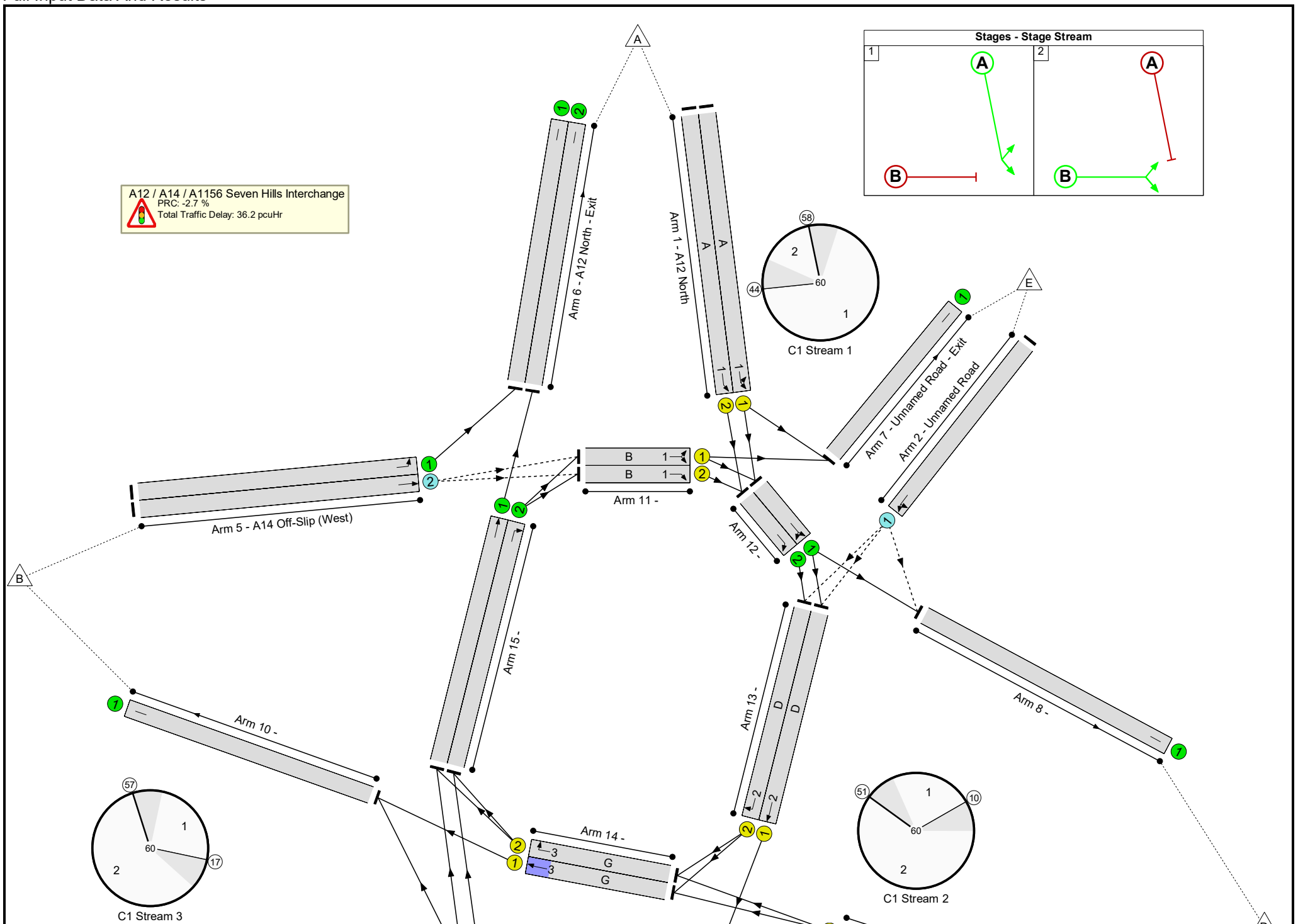
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	41	-	750	1866	1306	57.4%
1/2	A12 North Ahead	U	1	N/A	A		1	41	-	1030	1866	1306	78.9%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	42	1871	387	10.9%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	14	-	299	1877	469	63.7%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	14	-	421	1877	469	89.7%
4/1	A1156 Left Ahead	U	3	N/A	F		1	15	-	409	1878	501	81.7%
4/2	A1156 Ahead	U	3	N/A	F		1	15	-	130	1878	501	26.0%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1359	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	97	1871	708	13.7%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1359	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	764	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1146	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	9	-	224	1886	314	71.3%
11/2	Right	U	1	N/A	B		1	9	-	4	1886	314	1.3%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	914	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1034	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	36	-	465	1877	1157	40.2%
13/2	Right	U	2	N/A	D		1	36	-	1070	1877	1157	92.4%
14/1	Ahead	U	3	N/A	G		1	35	-	1063	2007	1204	88.3%
14/2	Right	U	3	N/A	G		1	35	-	428	1872	1123	38.1%
15/1	Ahead	U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**139**	**0**	**0**	**15.7**	**20.5**	**0.0**	**36.2**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**139**	**0**	**0**	**15.7**	**20.5**	**0.0**	**36.2**	**-**	**-**	**-**	**-**
1/1	750	750	-	-	-	0.9	0.7	-	1.6	7.7	6.2	0.7	6.9
1/2	1030	1030	-	-	-	1.7	1.8	-	3.6	12.5	11.4	1.8	13.3
2/1	42	42	42	0	0	0.0	0.1	-	0.1	7.2	0.2	0.1	0.3
3/1	299	299	-	-	-	1.7	0.9	-	2.5	30.5	4.4	0.9	5.3
3/2	421	421	-	-	-	2.5	3.8	-	6.3	54.0	6.8	3.8	10.6
4/1	409	409	-	-	-	2.3	2.1	-	4.5	39.4	6.4	2.1	8.5
4/2	130	130	-	-	-	0.6	0.2	-	0.8	22.2	1.7	0.2	1.9
5/1	1359	1359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	97	97	97	0	0	0.0	0.1	-	0.1	2.9	0.0	0.1	0.1
6/1	1359	1359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	764	764	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1146	1146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	224	224	-	-	-	1.3	1.2	-	2.5	40.5	3.6	1.2	4.8
11/2	4	4	-	-	-	0.0	0.0	-	0.0	27.0	0.1	0.0	0.1
12/1	914	914	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1034	1034	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	465	465	-	-	-	0.5	0.3	-	0.9	6.7	2.3	0.3	2.7
13/2	1070	1070	-	-	-	1.5	5.4	-	7.0	23.5	7.8	5.4	13.3
14/1	1063	1063	-	-	-	0.5	3.6	-	4.1	13.7	1.6	3.6	5.2

Full Input Data And Results

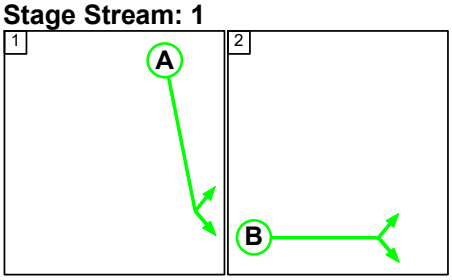
14/2	428	428	-	-	-	1.9	0.3	-	2.3	19.0	7.1	0.3	7.4
15/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	14.1	Total Delay for Signalled Lanes (pcuHr):	7.73	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-2.7	Total Delay for Signalled Lanes (pcuHr):	16.69	Cycle Time (s): 60
C1	Stream: 3 PRC for Signalled Lanes (%):	2.0	Total Delay for Signalled Lanes (pcuHr):	11.59	Cycle Time (s): 60
	PRC Over All Lanes (%):	-2.7	Total Delay Over All Lanes(pcuHr):	36.17	

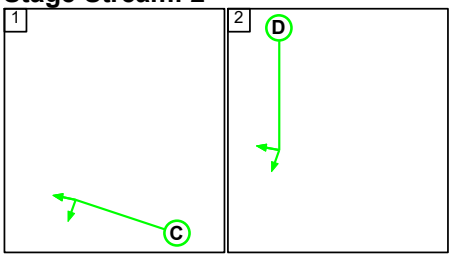
Full Input Data And Results
Scenario 35: '34OP 17:00-18:00' (FG35: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

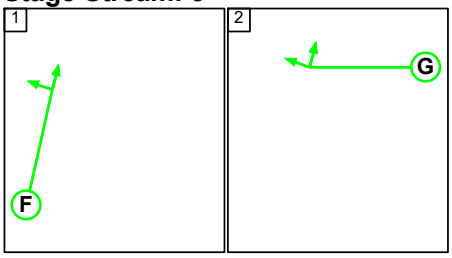
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	59	42

Stage Stream: 2

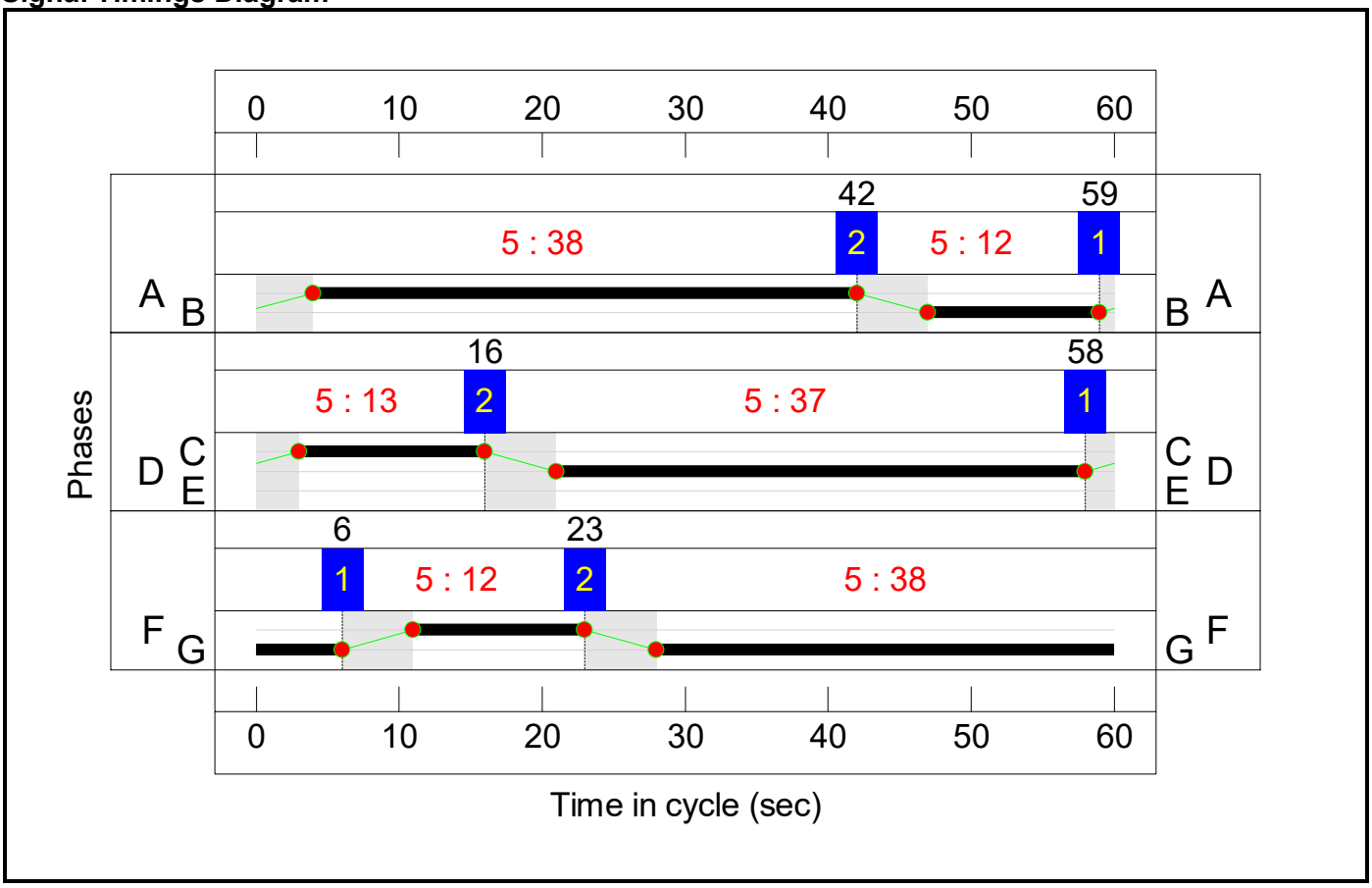
Stage	1	2
Duration	13	37
Change Point	58	16

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	6	23

Full Input Data And Results

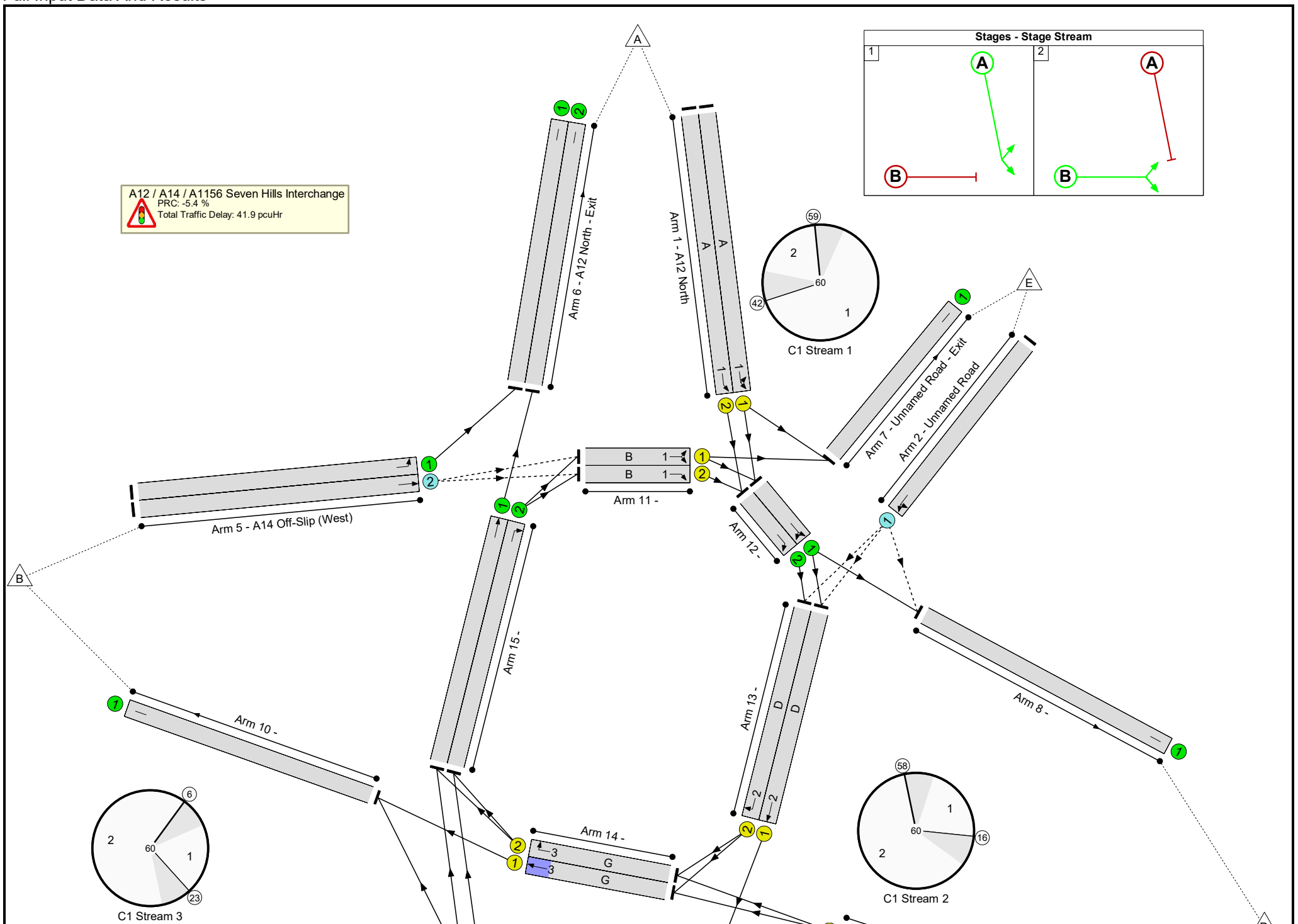
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.9%**
A12 / A14 / A1156 Seven Hills Interchange	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.9%**
1/1	A12 North Left Ahead	U	1	N/A	A		1	38	-	700	1866	1213	57.7%
1/2	A12 North Ahead	U	1	N/A	A		1	38	-	1100	1866	1213	90.7%
2/1	Unnamed Road Left Ahead	O	N/A	N/A	-		-	-	-	30	1871	345	8.7%
3/1	A14 Off-Slip (East) Left	U	2	N/A	C		1	13	-	335	1877	438	76.5%
3/2	A14 Off-Slip (East) Ahead	U	2	N/A	C		1	13	-	394	1877	438	90.0%
4/1	A1156 Left Ahead	U	3	N/A	F		1	12	-	308	1878	407	75.7%
4/2	A1156 Ahead	U	3	N/A	F		1	12	-	220	1878	407	54.1%
5/1	A14 Off-Slip (West) Left	U	N/A	N/A	-		-	-	-	1518	Inf	Inf	0.0%
5/2	A14 Off-Slip (West) Ahead	O	N/A	N/A	-		-	-	-	118	1871	721	16.4%
6/1	A12 North - Exit	U	N/A	N/A	-		-	-	-	1518	Inf	Inf	0.0%
6/2	A12 North - Exit	U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
7/1	Unnamed Road - Exit	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	567	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	754	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1204	Inf	Inf	0.0%

Full Input Data And Results

11/1	Left Right	U	1	N/A	B		1	12	-	333	1886	409	81.5%
11/2	Right	U	1	N/A	B		1	12	-	5	1886	409	1.2%
12/1	Ahead Right	U	N/A	N/A	-		-	-	-	979	Inf	Inf	0.0%
12/2	Right	U	N/A	N/A	-		-	-	-	1105	Inf	Inf	0.0%
13/1	Ahead	U	2	N/A	D		1	37	-	419	1877	1189	35.2%
13/2	Right	U	2	N/A	D		1	37	-	1128	1877	1189	94.9%
14/1	Ahead	U	3	N/A	G		1	38	-	1127	2007	1305	86.4%
14/2	Right	U	3	N/A	G		1	38	-	395	1872	1217	32.5%
15/1	Ahead	U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
15/2	Right	U	N/A	N/A	-		-	-	-	220	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21 mitigation measures	**-**	**-**	**148**	**0**	**0**	**15.9**	**26.0**	**0.0**	**41.9**	**-**	**-**	**-**	**-**
A12 / A14 / A1156 Seven Hills Interchange	**-**	**-**	**148**	**0**	**0**	**15.9**	**26.0**	**0.0**	**41.9**	**-**	**-**	**-**	**-**
1/1	700	700	-	-	-	1.1	0.7	-	1.8	9.4	6.4	0.7	7.1
1/2	1100	1100	-	-	-	2.7	4.5	-	7.2	23.7	15.6	4.5	20.1
2/1	30	30	30	0	0	0.0	0.0	-	0.1	7.5	0.1	0.0	0.2
3/1	335	335	-	-	-	2.0	1.6	-	3.6	38.4	5.1	1.6	6.7
3/2	394	394	-	-	-	2.4	3.8	-	6.3	57.2	6.3	3.8	10.2
4/1	308	308	-	-	-	1.9	1.5	-	3.4	39.7	4.8	1.5	6.3
4/2	220	220	-	-	-	1.3	0.6	-	1.9	30.4	3.2	0.6	3.8
5/1	1518	1518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	118	118	118	0	0	0.0	0.1	-	0.1	3.0	0.0	0.1	0.1
6/1	1518	1518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	567	567	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	754	754	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1204	1204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	333	333	-	-	-	1.3	2.1	-	3.4	37.1	5.4	2.1	7.5
11/2	5	5	-	-	-	0.0	0.0	-	0.0	23.3	0.1	0.0	0.1
12/1	979	979	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1105	1105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	419	419	-	-	-	0.4	0.3	-	0.7	5.9	2.3	0.3	2.6
13/2	1128	1128	-	-	-	0.7	7.5	-	8.2	26.1	5.8	7.5	13.2
14/1	1127	1127	-	-	-	0.2	3.1	-	3.3	10.5	0.7	3.1	3.8

Full Input Data And Results

14/2	395	395	-	-	-	1.7	0.2	-	1.9	17.7	6.6	0.2	6.8
15/1	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	220	220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	12.54	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-5.4	Total Delay for Signalled Lanes (pcuHr):	18.69	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	10.48	Cycle Time (s):	60
	PRC Over All Lanes (%):	-5.4	Total Delay Over All Lanes(pcuHr):	41.87		

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 2020.07.23_J21_Model_CV_Cap Adjusted_v16_SENS.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16a No FI Sensitivity\J21_sens\Model
Report generation date: 17/12/2020 17:42:28

»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Forecast, 6-7 AM
»2034 Operational Forecast, 7-8 AM
»2034 Operational Forecast, 8-9 AM
»2034 Operational Forecast, 3-4 PM
»2034 Operational Forecast, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	0.5	2.5	2.13	0.35	A	1.9	3.5	4.14	0.65	A	4.2	14.9	8.06	0.81	A	1.9	3.8	4.12	0.66	A	2.3	4.7	4.65	0.70	A
B - A14 North-West	0.0	0.5	3.82	0.02	A	0.1	0.5	4.29	0.10	A	0.2	0.5	5.10	0.17	A	0.1	0.5	4.62	0.10	A	0.2	0.5	4.51	0.13	A
C - A1156 South-West	0.1	0.5	2.85	0.13	A	0.9	4.0	8.32	0.48	A	3.5	16.8	22.18	0.79	C	1.5	4.3	9.82	0.60	A	1.3	4.0	8.93	0.57	A
D - A14 South-East	0.2	0.5	2.67	0.16	A	1.6	4.2	9.60	0.61	A	5.3	29.2	31.92	0.86	D	1.5	4.0	9.23	0.60	A	2.2	6.3	11.55	0.69	B
E - Unnamed Road North-East	0.0	0.5	4.02	0.03	A	0.1	0.5	10.22	0.12	B	0.6	2.1	26.36	0.38	D	0.1	0.5	9.71	0.09	A	0.1	0.5	11.08	0.07	B
2023 Reference Case																									
A - A12 North	0.6	2.7	2.14	0.36	A	2.0	3.8	4.35	0.67	A	4.2	15.0	8.14	0.81	A	2.0	4.1	4.31	0.67	A	2.4	5.1	4.87	0.71	A
B - A14 North-West	0.0	0.5	3.73	0.02	A	0.1	0.5	4.37	0.11	A	0.2	0.5	5.34	0.17	A	0.1	0.5	4.83	0.11	A	0.2	0.5	4.63	0.14	A
C - A1156 South-West	0.2	0.5	2.95	0.14	A	1.1	4.3	9.20	0.52	A	5.4	29.7	32.62	0.86	D	1.7	4.9	10.84	0.64	B	1.6	4.6	10.35	0.62	B
D - A14 South-East	0.2	0.5	2.76	0.17	A	1.5	4.2	9.65	0.60	A	5.1	27.4	28.88	0.85	D	1.8	4.5	10.51	0.65	B	2.7	11.3	13.71	0.74	B
E - Unnamed Road North-East	0.0	0.5	4.15	0.03	A	0.2	0.5	11.30	0.14	B	0.6	2.7	26.22	0.40	D	0.1	0.5	9.94	0.10	A	0.1	0.5	11.23	0.08	B
2023 Early Years																									
A - A12 North	0.6	2.7	2.16	0.37	A	2.1	4.4	4.63	0.68	A	4.6	18.4	8.88	0.83	A	2.1	4.4	4.54	0.68	A	2.6	5.4	5.19	0.72	A
B - A14 North-West	0.0	0.5	3.80	0.03	A	0.1	0.5	4.57	0.12	A	0.2	0.5	5.64	0.19	A	0.1	0.5	4.96	0.11	A	0.2	0.5	4.84	0.14	A
C - A1156 South-West	0.2	0.5	2.99	0.14	A	1.1	4.5	9.87	0.54	A	6.6	35.8	39.44	0.89	E	1.9	5.5	11.64	0.66	B	2.2	6.8	12.73	0.69	B
D - A14 South-East	0.2	0.5	2.86	0.17	A	2.1	6.5	12.68	0.68	B	6.9	37.6	39.07	0.89	E	2.0	5.3	11.42	0.67	B	3.0	13.2	14.86	0.75	B
E - Unnamed Road North-East	0.0	0.5	4.21	0.03	A	0.2	0.5	12.07	0.15	B	0.7	3.0	29.09	0.43	D	0.1	0.5	10.28	0.10	B	0.1	0.5	12.04	0.08	B
2028 Reference Case																									
A - A12 North	0.5	2.5	1.97	0.35	A	1.8	3.6	3.98	0.65	A	4.0	12.3	7.31	0.80	A	2.2	4.6	4.39	0.69	A	2.6	5.8	5.10	0.73	A
B - A14 North-West	0.0	0.5	3.43	0.02	A	0.1	0.5	4.09	0.10	A	0.2	0.5	4.83	0.16	A	0.1	0.5	4.79	0.11	A	0.2	0.5	4.54	0.14	A
C - A1156 South-West	0.0	0.5	2.67	0.03	A	0.7	3.2	7.77	0.40	A	2.2	8.9	16.17	0.70	C	1.5	4.6	10.32	0.61	B	1.4	4.4	9.67	0.59	A
D - A14 South-East	0.2	0.5	2.82	0.17	A	1.8	5.0	10.96	0.65	B	9.7	47.5	53.94	0.93	F	2.6	10.7	14.12	0.73	B	4.1	21.0	19.97	0.81	C
E - Unnamed Road North-East	0.0	0.5	3.78	0.03	A	0.2	0.5	10.02	0.13	B	0.6	2.6	23.89	0.39	C	0.1	0.5	10.06	0.10	B	0.1	0.5	11.69	0.08	B
2028 Peak Construction																									
A - A12 North	0.6	2.7	2.11	0.37	A	2.0	4.0	4.43	0.67	A	4.2	14.7	7.86	0.81	A	2.2	4.7	4.64	0.69	A	2.4	5.2	4.91	0.71	A
B - A14 North-West	0.1	0.5	5.03	0.10	A	0.3	1.2	6.35	0.21	A	0.3	1.4	6.75	0.25	A	0.2	0.5	6.13	0.16	A	0.2	0.5	4.77	0.14	A
C - A1156 South-West	0.1	0.5	3.73	0.06	A	1.2	4.7	11.41	0.54	B	4.1	21.8	28.81	0.82	D	2.2	8.3	14.34	0.70	B	1.5	4.5	10.11	0.60	B
D - A14 South-East	0.2	0.5	3.08	0.19	A	2.3	8.3	13.87	0.70	B	13.1	55.3	70.82	0.97	F	2.7	11.1	14.39	0.73	B	3.7	18.5	17.72	0.80	C
E - Unnamed Road North-East	0.0	0.5	4.10	0.04	A	0.2	0.5	11.22	0.15	B	0.7	2.8	25.24	0.40	D	0.1	0.5	10.18	0.10	B	0.1	0.5	10.93	0.08	B
2034 Reference Case																									
A - A12 North	0.6	2.6	2.00	0.36	A	2.0	4.0	4.18	0.67	A	4.8	18.9	8.45	0.83	A	2.4	5.1	4.66	0.70	A	3.1	6.7	5.84	0.76	A
B - A14 North-West	0.0	0.5	3.43	0.02	A	0.1	0.5	4.19	0.11	A	0.2	0.5	4.91	0.16	A	0.1	0.5	5.18	0.12	A	0.2	0.5	4.87	0.15	A
C - A1156 South-West	0.0	0.5	2.73	0.03	A	0.7	3.6	8.21	0.43	A	2.4	9.8	16.94	0.71	C	1.8	5.1	11.22	0.64	B	1.8	5.5	11.62	0.65	B
D - A14 South-East	0.2	0.5	2.88	0.17	A	2.0	5.9	11.96	0.67	B	15.7	59.9	80.55	0.99	F	4.3	21.8	20.99	0.82	C	5.0	25.6	24.18	0.84	C
E - Unnamed Road North-East	0.0	0.5	3.89	0.03	A	0.2	0.5	10.51	0.14	B	0.7	3.0	26.07	0.42	D	0.1	0.5	10.37	0.11	B	0.1	0.5	12.57	0.09	B
2034 Operational Forecast																									
A - A12 North	0.6	2.6	2.00	0.36	A	2.0	4.2	4.25	0.67	A	5.2	22.4	9.12	0.84	A	2.3	5.0	4.62	0.70	A	3.1	6.7	5.85	0.76	A
B - A14 North-West	0.0	0.5	3.43	0.02	A	0.1	0.5	4.19	0.11	A	0.2	0.5	4.93	0.16	A	0.1	0.5	5.20	0.12	A	0.2	0.5	4.88	0.15	A

C - A1156 South-West	0.0	0.5	2.73	0.03	A	0.8	3.7	8.36	0.43	A	2.5	10.4	17.52	0.72	C	1.8	5.1	11.20	0.65	B	1.9	5.5	11.66	0.65	B
D - A14 South-East	0.2	0.5	2.88	0.17	A	2.1	6.2	12.31	0.68	B	18.9	63.8	94.48	1.01	F	4.2	21.3	20.46	0.82	C	5.0	25.5	24.06	0.84	C
E - Unnamed Road North-East	0.0	0.5	3.89	0.03	A	0.2	0.5	10.71	0.15	B	0.8	3.5	29.30	0.45	D	0.1	0.5	10.29	0.11	B	0.1	0.5	12.56	0.09	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / A14 / A1156 Seven Hills Interchange
Location	52.026165, 1.254641
Site number	21
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	The entry to exit separation has been calculated for Arm C and Arm E, as it is the major arm with significant separation. Arm E (A14 North-West) has bypass for left turn movement. The circulating flow shall be added after receiving the flows.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Forecast	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Forecast	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Forecast	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Forecast	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Forecast	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A14 North-West	
C	A1156 South-West	
D	A14 South-East	
E	Unnamed Road North-East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.40	9.60	5.5	24.5	160.0	41.0	
B - A14 North-West	2.80	4.80	5.1	40.4	160.0	36.0	
C - A1156 South-West	3.50	8.90	21.4	45.4	163.3	34.0	
D - A14 South-East	5.70	7.20	41.1	44.6	163.3	35.0	
E - Unnamed Road North-East	2.50	4.50	10.2	29.9	160.0	16.0	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	179	75.10
B - A14 North-West	362	128.00
C - A1156 South-West	844	80.70
D - A14 South-East	745	131.50
E - Unnamed Road North-East	1073	37.20

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
A - A12 North		
B - A14 North-West	✓	100
C - A1156 South-West		
D - A14 South-East		
E - Unnamed Road North-East		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-100
B - A14 North-West	None		
C - A1156 South-West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-200
D - A14 South-East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-150
E - Unnamed Road North-East	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	1.129	3028
B - A14 North-West	0.733	1626
C - A1156 South-West	0.888	2291
D - A14 South-East	0.947	2417
E - Unnamed Road North-East	0.675	1739

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - A14 North-West		ONE HOUR	✓	533	100.000
C - A1156 South-West		ONE HOUR	✓	170	100.000
D - A14 South-East		ONE HOUR	✓	228	100.000
E - Unnamed Road North-East		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	577	65	190	1
	B - A14 North-West	513	8	3	0	9
	C - A1156 South-West	30	7	0	132	1
	D - A14 South-East	148	0	70	0	10
	E - Unnamed Road North-East	8	16	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	6	9	0
	B - A14 North-West	12	88	0	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	2.13	0.5	2.5	A	764	1147
B - A14 North-West	0.02	3.82	0.0	0.5	A	395	28
C - A1156 South-West	0.13	2.85	0.1	0.5	A	156	234
D - A14 South-East	0.16	2.67	0.2	0.5	A	209	314
E - Unnamed Road North-East	0.03	4.02	0.0	0.5	A	23	34

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	627	627	157	0	386	122	2674	0.235	626	140	0.0	0.3	1.757	A
B - A14 North-West	324	15	4	386	0	247	1028	0.015	15	457	0.0	0.0	3.554	A
C - A1156 South-West	128	128	32	0	0	576	1701	0.075	128	104	0.0	0.1	2.288	A
D - A14 South-East	172	172	43	0	0	509	1833	0.094	171	243	0.0	0.1	2.166	A
E - Unnamed Road North-East	19	19	5	0	0	733	1161	0.016	19	16	0.0	0.0	3.151	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	749	749	187	0	461	146	2647	0.283	748	167	0.3	0.4	1.895	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	546	0.0	0.0	3.659	A
C - A1156 South-West	153	153	38	0	0	689	1595	0.096	153	124	0.1	0.1	2.495	A
D - A14 South-East	205	205	51	0	0	608	1734	0.118	205	290	0.1	0.1	2.353	A
E - Unnamed Road North-East	22	22	6	0	0	876	1061	0.021	22	19	0.0	0.0	3.466	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	917	917	229	0	565	179	2610	0.351	917	205	0.4	0.5	2.126	A
B - A14 North-West	473	22	6	565	0	362	965	0.023	22	669	0.0	0.0	3.815	A
C - A1156 South-West	187	187	47	0	0	844	1451	0.129	187	152	0.1	0.1	2.848	A
D - A14 South-East	251	251	63	0	0	745	1600	0.157	251	355	0.1	0.2	2.669	A
E - Unnamed Road North-East	28	28	7	0	0	1073	924	0.030	27	23	0.0	0.0	4.017	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	917	917	229	0	565	179	2610	0.351	917	205	0.5	0.5	2.126	A
B - A14 North-West	473	22	6	565	0	362	965	0.023	22	669	0.0	0.0	3.815	A
C - A1156 South-West	187	187	47	0	0	844	1450	0.129	187	152	0.1	0.1	2.849	A
D - A14 South-East	251	251	63	0	0	745	1599	0.157	251	356	0.2	0.2	2.670	A
E - Unnamed Road North-East	28	28	7	0	0	1073	923	0.030	28	23	0.0	0.0	4.019	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	749	749	187	0	461	147	2647	0.283	749	167	0.5	0.4	1.897	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	547	0.0	0.0	3.663	A
C - A1156 South-West	153	153	38	0	0	690	1594	0.096	153	124	0.1	0.1	2.499	A
D - A14 South-East	205	205	51	0	0	609	1734	0.118	205	291	0.2	0.1	2.357	A
E - Unnamed Road North-East	22	22	6	0	0	877	1060	0.021	23	19	0.0	0.0	3.471	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	627	627	157	0	386	123	2673	0.235	627	140	0.4	0.3	1.761	A
B - A14 North-West	324	15	4	386	0	248	1027	0.015	15	458	0.0	0.0	3.558	A
C - A1156 South-West	128	128	32	0	0	578	1699	0.075	128	104	0.1	0.1	2.293	A
D - A14 South-East	172	172	43	0	0	510	1832	0.094	172	243	0.1	0.1	2.170	A
E - Unnamed Road North-East	19	19	5	0	0	734	1160	0.016	19	16	0.0	0.0	3.154	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D - A14 South-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D - A14 South-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A
E - Unnamed Road North-East	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.03	0.25	0.54	0.54			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.15	0.03	0.26	0.46	0.49			N/A	N/A
D - A14 South-East	0.19	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.03	0.30	1.43	2.50			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
D - A14 South-East	0.19	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D - A14 South-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D - A14 South-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	5.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	282	75.10
B - A14 North-West	705	128.00
C - A1156 South-West	1553	80.70
D - A14 South-East	1450	131.50
E - Unnamed Road North-East	1850	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1474	100.000
B - A14 North-West		ONE HOUR	✓	1201	100.000
C - A1156 South-West		ONE HOUR	✓	358	100.000
D - A14 South-East		ONE HOUR	✓	540	100.000
E - Unnamed Road North-East		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1035	179	257	3
	B - A14 North-West	1112	2	60	0	27
	C - A1156 South-West	152	52	0	149	5
	D - A14 South-East	320	3	204	0	13
	E - Unnamed Road North-East	2	37	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	3	12	0	3	100
	D - A14 South-East	4	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	4.14	1.9	3.5	A	1353	2029

B - A14 North-West	0.10	4.29	0.1	0.5	A	1090	123
C - A1156 South-West	0.48	8.32	0.9	4.0	A	329	493
D - A14 South-East	0.61	9.60	1.6	4.2	A	496	743
E - Unnamed Road North-East	0.12	10.22	0.1	0.5	B	39	59

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1110	1110	277	0	837	192	2592	0.428	1107	355	0.0	0.7	2.419	A
B - A14 North-West	894	67	17	837	0	481	1082	0.062	67	848	0.0	0.1	3.546	A
C - A1156 South-West	270	270	67	0	0	1060	1204	0.224	268	335	0.0	0.3	3.841	A
D - A14 South-East	407	407	102	0	0	989	1356	0.300	405	305	0.0	0.4	3.778	A
E - Unnamed Road North-East	32	32	8	0	0	1263	708	0.046	32	36	0.0	0.0	5.328	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1325	1325	331	0	1000	230	2550	0.520	1324	425	0.7	1.1	2.934	A
B - A14 North-West	1068	80	20	1000	0	575	1021	0.078	80	1014	0.1	0.1	3.824	A
C - A1156 South-West	322	322	80	0	0	1268	1046	0.308	321	400	0.3	0.4	4.966	A
D - A14 South-East	485	485	121	0	0	1184	1193	0.407	484	365	0.4	0.7	5.071	A
E - Unnamed Road North-East	39	39	10	0	0	1510	578	0.067	39	43	0.0	0.1	6.672	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1623	1623	406	0	1224	281	2493	0.651	1620	519	1.1	1.8	4.110	A
B - A14 North-West	1308	98	24	1224	0	702	940	0.104	98	1240	0.1	0.1	4.277	A
C - A1156 South-West	394	394	99	0	0	1550	830	0.475	392	489	0.4	0.9	8.198	A
D - A14 South-East	595	595	149	0	0	1448	972	0.612	591	447	0.7	1.5	9.381	A
E - Unnamed Road North-East	47	47	12	0	0	1848	402	0.118	47	53	0.1	0.1	10.149	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1623	1623	406	0	1224	282	2492	0.651	1623	522	1.8	1.9	4.144	A
B - A14 North-West	1308	98	24	1224	0	706	937	0.105	98	1243	0.1	0.1	4.289	A
C - A1156 South-West	394	394	99	0	0	1555	826	0.477	394	491	0.9	0.9	8.324	A
D - A14 South-East	595	595	149	0	0	1451	969	0.613	594	448	1.5	1.6	9.600	A
E - Unnamed Road North-East	47	47	12	0	0	1852	400	0.119	47	53	0.1	0.1	10.221	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1325	1325	331	0	1000	231	2548	0.520	1328	429	1.9	1.1	2.959	A
B - A14 North-West	1068	80	20	1000	0	580	1018	0.079	80	1018	0.1	0.1	3.837	A
C - A1156 South-West	322	322	80	0	0	1274	1041	0.309	324	403	0.9	0.5	5.031	A
D - A14 South-East	485	485	121	0	0	1188	1190	0.408	489	367	1.6	0.7	5.162	A
E - Unnamed Road North-East	39	39	10	0	0	1516	575	0.067	39	43	0.1	0.1	6.714	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1110	1110	277	0	837	193	2590	0.428	1111	358	1.1	0.8	2.435	A
B - A14 North-West	894	67	17	837	0	484	1080	0.062	67	851	0.1	0.1	3.554	A
C - A1156 South-West	270	270	67	0	0	1065	1201	0.224	270	336	0.5	0.3	3.871	A
D - A14 South-East	407	407	102	0	0	994	1353	0.301	408	307	0.7	0.4	3.815	A
E - Unnamed Road North-East	32	32	8	0	0	1268	705	0.046	32	36	0.1	0.0	5.355	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - A14 South-East	0.43	0.00	0.00	0.43	0.43			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.05	0.55	2.41	3.54			N/A	N/A
B - A14 North-West	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C - A1156 South-West	0.44	0.00	0.00	0.44	0.44			N/A	N/A
D - A14 South-East	0.68	0.06	0.70	1.40	1.49			N/A	N/A
E - Unnamed Road North-East	0.07	0.03	0.26	0.46	0.49			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.03	0.26	1.84	1.84			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.89	0.03	0.26	0.89	0.89			N/A	N/A
D - A14 South-East	1.54	0.03	0.27	1.54	1.54			N/A	N/A
E - Unnamed Road North-East	0.13	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.03	0.26	1.86	1.86			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.90	0.03	0.29	1.33	3.95			N/A	N/A

D - A14 South-East	1.56	0.03	0.28	1.56	4.20			N/A	N/A
E - Unnamed Road North-East	0.13	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.33	1.07	1.47	1.77			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.45	0.00	0.00	0.45	0.45			N/A	N/A
D - A14 South-East	0.70	0.08	0.76	1.39	1.47			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.08	0.79	1.25	1.25			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.29	0.03	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.43	0.04	0.37	1.22	1.38			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	12.10	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	394	75.10
B - A14 North-West	910	128.00
C - A1156 South-West	1661	80.70
D - A14 South-East	1726	131.50
E - Unnamed Road North-East	2284	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1745	100.000
B - A14 North-West		ONE HOUR	✓	1507	100.000
C - A1156 South-West		ONE HOUR	✓	534	100.000
D - A14 South-East		ONE HOUR	✓	583	100.000
E - Unnamed Road North-East		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1091	288	363	3
	B - A14 North-West	1379	6	113	0	9
	C - A1156 South-West	243	74	0	215	2
	D - A14 South-East	346	0	224	0	13
	E - Unnamed Road North-East	8	46	17	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	6	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	3	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.06	4.2	14.9	A	1601	2402

B - A14 North-West	0.17	5.10	0.2	0.5	A	1456	176
C - A1156 South-West	0.79	22.18	3.5	16.8	C	490	735
D - A14 South-East	0.86	31.92	5.3	29.2	D	535	802
E - Unnamed Road North-East	0.38	26.36	0.6	2.1	D	69	103

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1314	1314	328	0	1038	268	2495	0.527	1309	447	0.0	1.1	3.025	A
B - A14 North-West	1194	96	24	1038	0	619	1039	0.093	96	913	0.0	0.1	3.813	A
C - A1156 South-West	402	402	101	0	0	1132	1150	0.350	400	481	0.0	0.5	4.784	A
D - A14 South-East	439	439	110	0	0	1177	1173	0.374	437	436	0.0	0.6	4.873	A
E - Unnamed Road North-East	56	56	14	0	0	1557	545	0.104	56	20	0.0	0.1	7.358	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1569	1569	392	0	1240	321	2441	0.643	1566	535	1.1	1.8	4.103	A
B - A14 North-West	1426	115	29	1240	0	741	958	0.120	115	1092	0.1	0.1	4.269	A
C - A1156 South-West	480	480	120	0	0	1354	981	0.490	478	576	0.5	0.9	7.144	A
D - A14 South-East	524	524	131	0	0	1408	994	0.527	522	522	0.6	1.1	7.592	A
E - Unnamed Road North-East	67	67	17	0	0	1863	408	0.165	67	24	0.1	0.2	10.552	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1921	1921	480	0	1518	390	2370	0.811	1912	644	1.8	4.1	7.706	A
B - A14 North-West	1747	141	35	1518	0	894	856	0.165	141	1332	0.1	0.2	5.033	A
C - A1156 South-West	588	588	147	0	0	1647	757	0.776	579	699	0.9	3.2	19.309	C
D - A14 South-East	642	642	160	0	0	1719	754	0.851	627	635	1.1	4.8	25.890	D
E - Unnamed Road North-East	83	83	21	0	0	2273	224	0.368	81	29	0.2	0.6	24.913	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1921	1921	480	0	1518	394	2366	0.812	1921	655	4.1	4.2	8.059	A
B - A14 North-West	1747	141	35	1518	0	908	846	0.167	141	1339	0.2	0.2	5.103	A
C - A1156 South-West	588	588	147	0	0	1661	747	0.787	587	706	3.2	3.5	22.182	C
D - A14 South-East	642	642	160	0	0	1727	748	0.859	640	640	4.8	5.3	31.916	D
E - Unnamed Road North-East	83	83	21	0	0	2285	219	0.377	82	30	0.6	0.6	26.358	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1569	1569	392	0	1240	326	2435	0.644	1578	551	4.2	1.8	4.245	A
B - A14 North-West	1426	115	29	1240	0	762	944	0.122	115	1102	0.2	0.1	4.348	A
C - A1156 South-West	480	480	120	0	0	1375	965	0.497	490	586	3.5	1.0	7.727	A
D - A14 South-East	524	524	131	0	0	1420	985	0.532	541	529	5.3	1.2	8.398	A
E - Unnamed Road North-East	67	67	17	0	0	1880	400	0.168	69	25	0.6	0.2	10.911	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1314	1314	328	0	1038	270	2493	0.527	1317	452	1.8	1.1	3.070	A
B - A14 North-West	1194	96	24	1038	0	626	1035	0.093	97	918	0.1	0.1	3.834	A
C - A1156 South-West	402	402	101	0	0	1140	1144	0.351	404	485	1.0	0.5	4.876	A
D - A14 South-East	439	439	110	0	0	1184	1167	0.376	441	440	1.2	0.6	4.972	A
E - Unnamed Road North-East	56	56	14	0	0	1567	541	0.104	57	20	0.2	0.1	7.443	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.53	0.53	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.59	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.04	0.41	4.75	8.37			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.94	0.05	0.53	1.95	2.87			N/A	N/A
D - A14 South-East	1.10	0.05	0.45	2.66	4.09			N/A	N/A
E - Unnamed Road North-East	0.20	0.00	0.00	0.20	0.20			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.10	0.03	0.29	4.10	14.89			N/A	N/A
B - A14 North-West	0.20	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	3.16	0.03	0.33	6.06	16.82			N/A	N/A
D - A14 South-East	4.75	0.04	0.42	13.04	24.97			N/A	N/A
E - Unnamed Road North-East	0.56	0.03	0.26	0.56	0.89			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.21	0.03	0.27	4.21	4.21			N/A	N/A
B - A14 North-West	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	3.46	0.03	0.31	4.36	16.65			N/A	N/A

D - A14 South-East	5.35	0.04	0.36	11.99	29.23			N/A	N/A
E - Unnamed Road North-East	0.59	0.04	0.36	1.27	2.14			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.06	0.95	4.46	6.48			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	1.01	0.05	0.46	2.32	3.53			N/A	N/A
D - A14 South-East	1.16	0.04	0.39	2.93	5.04			N/A	N/A
E - Unnamed Road North-East	0.21	0.00	0.00	0.21	0.21			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.04	0.39	2.84	4.87			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.55	0.03	0.32	1.09	2.39			N/A	N/A
D - A14 South-East	0.61	0.03	0.30	1.39	2.86			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.25	0.45	0.48			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	5.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	250	75.10
B - A14 North-West	845	128.00
C - A1156 South-West	1464	80.70
D - A14 South-East	1448	131.50
E - Unnamed Road North-East	1893	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1536	100.000
B - A14 North-West		ONE HOUR	✓	1167	100.000
C - A1156 South-West		ONE HOUR	✓	504	100.000
D - A14 South-East		ONE HOUR	✓	522	100.000
E - Unnamed Road North-East		ONE HOUR	✓	32	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	962	274	296	3
	B - A14 North-West	1087	4	42	0	34
	C - A1156 South-West	279	79	4	138	4
	D - A14 South-East	336	0	185	0	1
	E - Unnamed Road North-East	5	22	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	4	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	3	3	0	1	0
	D - A14 South-East	6	0	2	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.66	4.12	1.9	3.8	A	1409	2114

B - A14 North-West	0.10	4.62	0.1	0.5	A	1060	110
C - A1156 South-West	0.60	9.82	1.5	4.3	A	462	694
D - A14 South-East	0.60	9.23	1.5	4.0	A	479	718
E - Unnamed Road North-East	0.09	9.71	0.1	0.5	A	29	44

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1156	1156	289	0	818	170	2652	0.436	1153	466	0.0	0.8	2.397	A
B - A14 North-West	870	60	15	818	0	576	1040	0.058	60	801	0.0	0.1	3.673	A
C - A1156 South-West	379	379	95	0	0	999	1298	0.292	378	380	0.0	0.4	3.904	A
D - A14 South-East	393	393	98	0	0	988	1346	0.292	391	328	0.0	0.4	3.766	A
E - Unnamed Road North-East	24	24	6	0	0	1292	727	0.033	24	31	0.0	0.0	5.118	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1381	1381	345	0	977	204	2616	0.528	1379	557	0.8	1.1	2.910	A
B - A14 North-West	1039	72	18	977	0	689	967	0.074	72	958	0.1	0.1	4.019	A
C - A1156 South-West	453	453	113	0	0	1195	1140	0.398	452	455	0.4	0.7	5.228	A
D - A14 South-East	469	469	117	0	0	1182	1185	0.396	468	392	0.4	0.6	5.016	A
E - Unnamed Road North-East	29	29	7	0	0	1545	592	0.049	29	38	0.0	0.1	6.388	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1691	1691	423	0	1197	249	2567	0.659	1688	680	1.1	1.9	4.082	A
B - A14 North-West	1272	88	22	1197	0	841	870	0.101	88	1172	0.1	0.1	4.602	A
C - A1156 South-West	555	555	139	0	0	1461	924	0.600	552	556	0.7	1.5	9.575	A
D - A14 South-East	575	575	144	0	0	1446	967	0.595	572	480	0.6	1.4	9.044	A
E - Unnamed Road North-East	35	35	9	0	0	1891	408	0.086	35	46	0.1	0.1	9.645	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1691	1691	423	0	1197	250	2566	0.659	1691	684	1.9	1.9	4.116	A
B - A14 North-West	1272	88	22	1197	0	845	867	0.102	88	1175	0.1	0.1	4.619	A
C - A1156 South-West	555	555	139	0	0	1465	921	0.602	555	558	1.5	1.5	9.818	A
D - A14 South-East	575	575	144	0	0	1449	964	0.596	575	481	1.4	1.5	9.234	A
E - Unnamed Road North-East	35	35	9	0	0	1895	406	0.087	35	46	0.1	0.1	9.709	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1381	1381	345	0	977	205	2614	0.528	1384	562	1.9	1.1	2.933	A
B - A14 North-West	1039	72	18	977	0	695	963	0.075	72	962	0.1	0.1	4.040	A
C - A1156 South-West	453	453	113	0	0	1201	1135	0.399	456	458	1.5	0.7	5.331	A
D - A14 South-East	469	469	117	0	0	1186	1182	0.397	472	394	1.5	0.7	5.098	A
E - Unnamed Road North-East	29	29	7	0	0	1551	589	0.049	29	38	0.1	0.1	6.430	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1156	1156	289	0	818	171	2651	0.436	1158	469	1.1	0.8	2.415	A
B - A14 North-West	870	60	15	818	0	580	1037	0.058	60	804	0.1	0.1	3.686	A
C - A1156 South-West	379	379	95	0	0	1004	1294	0.293	380	382	0.7	0.4	3.943	A
D - A14 South-East	393	393	98	0	0	992	1342	0.293	394	330	0.7	0.4	3.802	A
E - Unnamed Road North-East	24	24	6	0	0	1297	725	0.033	24	32	0.1	0.0	5.142	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A1156 South-West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
D - A14 South-East	0.41	0.00	0.00	0.41	0.41			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.05	0.50	2.57	3.80			N/A	N/A
B - A14 North-West	0.08	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.65	0.07	0.70	1.37	1.46			N/A	N/A
D - A14 South-East	0.65	0.07	0.70	1.37	1.45			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.03	0.26	1.91	1.91			N/A	N/A
B - A14 North-West	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C - A1156 South-West	1.46	0.03	0.27	1.46	1.46			N/A	N/A
D - A14 South-East	1.43	0.03	0.27	1.43	1.43			N/A	N/A
E - Unnamed Road North-East	0.09	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.92	0.03	0.26	1.92	1.92			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	1.49	0.03	0.28	1.49	4.35			N/A	N/A

D - A14 South-East	1.46	0.03	0.28	1.46	4.02			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.31	1.09	1.57	1.83			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.67	0.07	0.75	1.37	1.45			N/A	N/A
D - A14 South-East	0.66	0.08	0.76	1.37	1.44			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.08	0.80	1.42	1.42			N/A	N/A
B - A14 North-West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A1156 South-West	0.42	0.04	0.36	1.19	1.36			N/A	N/A
D - A14 South-East	0.42	0.04	0.36	1.19	1.35			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	348	75.10
B - A14 North-West	843	128.00
C - A1156 South-West	1518	80.70
D - A14 South-East	1476	131.50
E - Unnamed Road North-East	2068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1607	100.000
B - A14 North-West		ONE HOUR	✓	1382	100.000
C - A1156 South-West		ONE HOUR	✓	484	100.000
D - A14 South-East		ONE HOUR	✓	625	100.000
E - Unnamed Road North-East		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1002	226	377	1
	B - A14 North-West	1272	3	89	0	18
	C - A1156 South-West	201	77	0	182	24
	D - A14 South-East	358	0	267	0	0
	E - Unnamed Road North-East	0	16	5	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	3	1	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	1	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.65	2.3	4.7	A	1475	2212

B - A14 North-West	0.13	4.51	0.2	0.5	A	1270	151
C - A1156 South-West	0.57	8.93	1.3	4.0	A	444	666
D - A14 South-East	0.69	11.55	2.2	6.3	B	574	860
E - Unnamed Road North-East	0.07	11.08	0.1	0.5	B	20	30

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1210	1210	302	0	958	237	2663	0.454	1207	420	0.0	0.8	2.466	A
B - A14 North-West	1042	83	21	958	0	574	1096	0.076	82	824	0.0	0.1	3.552	A
C - A1156 South-West	364	364	91	0	0	1036	1316	0.277	363	440	0.0	0.4	3.769	A
D - A14 South-East	471	471	118	0	0	1007	1378	0.341	468	420	0.0	0.5	3.947	A
E - Unnamed Road North-East	17	17	4	0	0	1411	660	0.025	16	32	0.0	0.0	5.590	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1445	1445	361	0	1143	284	2613	0.553	1443	502	0.8	1.2	3.074	A
B - A14 North-West	1244	99	25	1143	0	687	1021	0.097	99	986	0.1	0.1	3.901	A
C - A1156 South-West	435	435	109	0	0	1239	1156	0.376	434	527	0.4	0.6	4.979	A
D - A14 South-East	562	562	140	0	0	1205	1219	0.461	561	503	0.5	0.8	5.457	A
E - Unnamed Road North-East	20	20	5	0	0	1688	530	0.037	20	39	0.0	0.0	7.060	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1769	1769	442	0	1400	347	2545	0.695	1765	613	1.2	2.2	4.596	A
B - A14 North-West	1524	121	30	1400	0	838	922	0.131	121	1206	0.1	0.2	4.493	A
C - A1156 South-West	533	533	133	0	0	1514	940	0.567	530	643	0.6	1.3	8.724	A
D - A14 South-East	688	688	172	0	0	1474	1002	0.687	683	615	0.8	2.1	11.127	B
E - Unnamed Road North-East	24	24	6	0	0	2065	352	0.069	24	47	0.0	0.1	10.987	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1769	1769	442	0	1400	348	2543	0.696	1769	616	2.2	2.3	4.650	A
B - A14 North-West	1524	121	30	1400	0	843	919	0.132	121	1209	0.2	0.2	4.514	A
C - A1156 South-West	533	533	133	0	0	1519	936	0.569	533	646	1.3	1.3	8.926	A
D - A14 South-East	688	688	172	0	0	1477	999	0.689	688	617	2.1	2.2	11.553	B
E - Unnamed Road North-East	24	24	6	0	0	2070	349	0.069	24	47	0.1	0.1	11.077	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1445	1445	361	0	1143	285	2611	0.553	1449	508	2.3	1.2	3.110	A
B - A14 North-West	1244	99	25	1143	0	694	1017	0.097	99	990	0.2	0.1	3.924	A
C - A1156 South-West	435	435	109	0	0	1246	1151	0.378	438	531	1.3	0.6	5.072	A
D - A14 South-East	562	562	140	0	0	1210	1215	0.462	567	505	2.2	0.9	5.598	A
E - Unnamed Road North-East	20	20	5	0	0	1695	526	0.038	20	39	0.1	0.0	7.112	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1210	1210	302	0	958	238	2662	0.455	1211	423	1.2	0.8	2.484	A
B - A14 North-West	1042	83	21	958	0	578	1093	0.076	83	828	0.1	0.1	3.562	A
C - A1156 South-West	364	364	91	0	0	1041	1312	0.278	365	443	0.6	0.4	3.808	A
D - A14 South-East	471	471	118	0	0	1012	1375	0.342	472	422	0.9	0.5	3.992	A
E - Unnamed Road North-East	17	17	4	0	0	1417	658	0.025	17	32	0.0	0.0	5.617	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - A14 South-East	0.51	0.51	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.05	0.46	2.99	4.74			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.60	0.06	0.68	1.34	1.42			N/A	N/A
D - A14 South-East	0.85	0.06	0.66	1.57	1.99			N/A	N/A
E - Unnamed Road North-East	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.25	0.03	0.26	2.25	2.25			N/A	N/A
B - A14 North-West	0.15	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.28	0.03	0.26	1.28	1.28			N/A	N/A
D - A14 South-East	2.11	0.03	0.28	2.11	6.28			N/A	N/A
E - Unnamed Road North-East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.27	0.03	0.26	2.27	2.27			N/A	N/A
B - A14 North-West	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.30	0.03	0.28	1.30	4.03			N/A	N/A

D - A14 South-East	2.17	0.03	0.28	2.17	5.74			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.17	1.15	1.88	2.38			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.61	0.07	0.75	1.35	1.43			N/A	N/A
D - A14 South-East	0.87	0.06	0.75	1.53	1.93			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.06	0.73	1.44	1.87			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.39	0.03	0.33	1.10	1.30			N/A	N/A
D - A14 South-East	0.52	0.04	0.38	1.44	1.57			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	37	75.10
B - A14 North-West	222	128.00
C - A1156 South-West	857	80.70
D - A14 South-East	778	131.50
E - Unnamed Road North-East	968	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	875	100.000
B - A14 North-West		ONE HOUR	✓	559	100.000
C - A1156 South-West		ONE HOUR	✓	174	100.000
D - A14 South-East		ONE HOUR	✓	234	100.000
E - Unnamed Road North-East		ONE HOUR	✓	28	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	615	65	194	1
	B - A14 North-West	538	8	3	0	10
	C - A1156 South-West	30	7	0	136	1
	D - A14 South-East	151	0	73	0	11
	E - Unnamed Road North-East	9	18	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	6	9	0
	B - A14 North-West	11	88	0	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.14	0.6	2.7	A	803	1205

B - A14 North-West	0.02	3.73	0.0	0.5	A	413	29
C - A1156 South-West	0.14	2.95	0.2	0.5	A	159	239
D - A14 South-East	0.17	2.76	0.2	0.5	A	215	322
E - Unnamed Road North-East	0.03	4.15	0.0	0.5	A	25	38

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	659	659	165	0	405	127	2713	0.243	658	142	0.0	0.3	1.751	A
B - A14 North-West	339	16	4	405	0	253	1054	0.015	16	487	0.0	0.0	3.465	A
C - A1156 South-West	131	131	33	0	0	610	1672	0.078	130	106	0.0	0.1	2.335	A
D - A14 South-East	176	176	44	0	0	540	1804	0.098	176	248	0.0	0.1	2.211	A
E - Unnamed Road North-East	21	21	5	0	0	767	1151	0.018	21	18	0.0	0.0	3.184	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	787	787	197	0	483	152	2684	0.293	786	170	0.3	0.4	1.896	A
B - A14 North-West	405	19	5	483	0	303	1026	0.018	19	582	0.0	0.0	3.572	A
C - A1156 South-West	156	156	39	0	0	729	1561	0.100	156	126	0.1	0.1	2.561	A
D - A14 South-East	211	211	53	0	0	645	1701	0.124	210	297	0.1	0.1	2.414	A
E - Unnamed Road North-East	25	25	6	0	0	917	1044	0.024	25	21	0.0	0.0	3.530	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	964	964	241	0	592	186	2645	0.364	963	208	0.4	0.6	2.141	A
B - A14 North-West	496	23	6	592	0	371	988	0.023	23	713	0.0	0.0	3.729	A
C - A1156 South-West	191	191	48	0	0	893	1410	0.136	191	155	0.1	0.2	2.953	A
D - A14 South-East	258	258	64	0	0	790	1560	0.165	258	363	0.1	0.2	2.764	A
E - Unnamed Road North-East	31	31	8	0	0	1123	898	0.034	31	26	0.0	0.0	4.149	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	964	964	241	0	592	186	2644	0.364	964	209	0.6	0.6	2.141	A
B - A14 North-West	496	23	6	592	0	371	988	0.023	23	714	0.0	0.0	3.730	A
C - A1156 South-West	191	191	48	0	0	894	1409	0.136	191	155	0.2	0.2	2.955	A
D - A14 South-East	258	258	64	0	0	791	1559	0.165	258	364	0.2	0.2	2.765	A
E - Unnamed Road North-East	31	31	8	0	0	1124	898	0.034	31	26	0.0	0.0	4.151	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	787	787	197	0	483	152	2684	0.293	787	170	0.6	0.4	1.898	A
B - A14 North-West	405	19	5	483	0	304	1026	0.018	19	583	0.0	0.0	3.576	A
C - A1156 South-West	156	156	39	0	0	730	1560	0.100	156	126	0.2	0.1	2.566	A
D - A14 South-East	211	211	53	0	0	646	1700	0.124	211	297	0.2	0.1	2.416	A
E - Unnamed Road North-East	25	25	6	0	0	918	1044	0.024	25	21	0.0	0.0	3.536	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	659	659	165	0	405	127	2712	0.243	659	143	0.4	0.3	1.755	A
B - A14 North-West	339	16	4	405	0	254	1054	0.015	16	488	0.0	0.0	3.467	A
C - A1156 South-West	131	131	33	0	0	612	1670	0.078	131	106	0.1	0.1	2.340	A
D - A14 South-East	176	176	44	0	0	541	1803	0.098	176	249	0.1	0.1	2.215	A
E - Unnamed Road North-East	21	21	5	0	0	769	1150	0.018	21	18	0.0	0.0	3.188	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D - A14 South-East	0.14	0.00	0.00	0.14	0.14			N/A	N/A
E - Unnamed Road North-East	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.25	0.57	0.57			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.16	0.03	0.26	0.46	0.49			N/A	N/A
D - A14 South-East	0.20	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.38	2.69			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A

D - A14 South-East	0.20	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D - A14 South-East	0.14	0.00	0.00	0.14	0.14			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	5.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	123	75.10
B - A14 North-West	572	128.00
C - A1156 South-West	1637	80.70
D - A14 South-East	1563	131.50
E - Unnamed Road North-East	1813	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1494	100.000
B - A14 North-West		ONE HOUR	✓	1246	100.000
C - A1156 South-West		ONE HOUR	✓	385	100.000
D - A14 South-East		ONE HOUR	✓	518	100.000
E - Unnamed Road North-East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1037	192	261	3
	B - A14 North-West	1154	2	60	0	30
	C - A1156 South-West	162	52	0	165	6
	D - A14 South-East	325	3	176	0	14
	E - Unnamed Road North-East	2	41	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.35	2.0	3.8	A	1371	2056

B - A14 North-West	0.11	4.37	0.1	0.5	A	1132	127
C - A1156 South-West	0.52	9.20	1.1	4.3	A	353	530
D - A14 South-East	0.60	9.65	1.5	4.2	A	476	713
E - Unnamed Road North-East	0.14	11.30	0.2	0.5	B	44	66

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1125	1125	281	0	869	208	2583	0.435	1122	367	0.0	0.8	2.457	A
B - A14 North-West	929	69	17	869	0	506	1082	0.064	69	852	0.0	0.1	3.553	A
C - A1156 South-West	290	290	72	0	0	1069	1192	0.243	288	324	0.0	0.3	3.976	A
D - A14 South-East	390	390	98	0	0	1004	1326	0.294	389	321	0.0	0.4	3.836	A
E - Unnamed Road North-East	36	36	9	0	0	1290	691	0.052	36	40	0.0	0.1	5.495	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1343	1343	336	0	1037	249	2537	0.529	1342	439	0.8	1.1	3.007	A
B - A14 North-West	1109	83	21	1037	0	605	1016	0.081	83	1019	0.1	0.1	3.855	A
C - A1156 South-West	346	346	86	0	0	1279	1034	0.335	345	387	0.3	0.5	5.224	A
D - A14 South-East	466	466	116	0	0	1202	1165	0.400	465	384	0.4	0.7	5.135	A
E - Unnamed Road North-East	43	43	11	0	0	1543	556	0.077	43	48	0.1	0.1	7.009	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1645	1645	411	0	1271	304	2474	0.665	1641	536	1.1	2.0	4.307	A
B - A14 North-West	1358	101	25	1271	0	739	928	0.109	101	1247	0.1	0.1	4.352	A
C - A1156 South-West	424	424	106	0	0	1564	818	0.518	421	473	0.5	1.1	9.026	A
D - A14 South-East	571	571	143	0	0	1470	946	0.603	567	469	0.7	1.5	9.426	A
E - Unnamed Road North-East	53	53	13	0	0	1887	373	0.141	52	59	0.1	0.2	11.200	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1645	1645	411	0	1271	305	2473	0.665	1645	538	2.0	2.0	4.348	A
B - A14 North-West	1358	101	25	1271	0	743	926	0.109	101	1250	0.1	0.1	4.366	A
C - A1156 South-West	424	424	106	0	0	1569	814	0.520	424	475	1.1	1.1	9.203	A
D - A14 South-East	571	571	143	0	0	1473	944	0.605	571	471	1.5	1.5	9.645	A
E - Unnamed Road North-East	53	53	13	0	0	1891	371	0.142	53	59	0.2	0.2	11.303	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1343	1343	336	0	1037	251	2535	0.530	1346	443	2.0	1.1	3.036	A
B - A14 North-West	1109	83	21	1037	0	610	1013	0.082	83	1023	0.1	0.1	3.872	A
C - A1156 South-West	346	346	86	0	0	1286	1029	0.336	348	390	1.1	0.5	5.306	A
D - A14 South-East	466	466	116	0	0	1206	1161	0.401	469	386	1.5	0.7	5.228	A
E - Unnamed Road North-East	43	43	11	0	0	1549	553	0.078	43	48	0.2	0.1	7.065	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1125	1125	281	0	869	209	2582	0.436	1126	369	1.1	0.8	2.476	A
B - A14 North-West	929	69	17	869	0	509	1080	0.064	69	856	0.1	0.1	3.565	A
C - A1156 South-West	290	290	72	0	0	1075	1188	0.244	290	325	0.5	0.3	4.013	A
D - A14 South-East	390	390	98	0	0	1009	1322	0.295	391	323	0.7	0.4	3.872	A
E - Unnamed Road North-East	36	36	9	0	0	1295	688	0.052	36	40	0.1	0.1	5.524	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - A14 South-East	0.41	0.00	0.00	0.41	0.41			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.05	0.50	2.60	3.84			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.46	0.48			N/A	N/A
C - A1156 South-West	0.50	0.05	0.47	1.28	1.39			N/A	N/A
D - A14 South-East	0.66	0.06	0.70	1.38	1.47			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.03	0.26	1.96	1.96			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.05	0.03	0.26	1.05	1.05			N/A	N/A
D - A14 South-East	1.48	0.03	0.27	1.48	1.48			N/A	N/A
E - Unnamed Road North-East	0.16	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.97	0.03	0.26	1.97	1.97			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	1.07	0.03	0.29	1.17	4.29			N/A	N/A

D - A14 South-East	1.51	0.03	0.28	1.51	4.25			N/A	N/A
E - Unnamed Road North-East	0.16	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.25	1.09	1.62	1.87			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.51	0.05	0.50	1.30	1.40			N/A	N/A
D - A14 South-East	0.68	0.07	0.75	1.38	1.46			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.07	0.77	1.49	1.51			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.32	0.03	0.27	0.49	0.95			N/A	N/A
D - A14 South-East	0.42	0.04	0.36	1.20	1.36			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	13.26	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	161	75.10
B - A14 North-West	797	128.00
C - A1156 South-West	1897	80.70
D - A14 South-East	2135	131.50
E - Unnamed Road North-East	2473	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1736	100.000
B - A14 North-West		ONE HOUR	✓	1550	100.000
C - A1156 South-West		ONE HOUR	✓	580	100.000
D - A14 South-East		ONE HOUR	✓	610	100.000
E - Unnamed Road North-East		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1107	263	361	3
	B - A14 North-West	1421	6	113	0	10
	C - A1156 South-West	263	74	0	241	2
	D - A14 South-East	354	0	241	0	14
	E - Unnamed Road North-East	9	51	19	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	6	9	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.14	4.2	15.0	A	1593	2389

B - A14 North-West	0.17	5.34	0.2	0.5	A	1501	178
C - A1156 South-West	0.86	32.62	5.4	29.7	D	532	798
D - A14 South-East	0.85	28.88	5.1	27.4	D	560	840
E - Unnamed Road North-East	0.40	26.22	0.6	2.7	D	76	115

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1307	1307	327	0	1069	289	2494	0.524	1302	469	0.0	1.1	3.009	A
B - A14 North-West	1231	97	24	1069	0	661	1027	0.095	97	929	0.0	0.1	3.868	A
C - A1156 South-West	437	437	109	0	0	1156	1133	0.385	434	477	0.0	0.6	5.136	A
D - A14 South-East	459	459	115	0	0	1177	1172	0.392	457	455	0.0	0.6	5.015	A
E - Unnamed Road North-East	63	63	16	0	0	1569	539	0.116	62	22	0.0	0.1	7.534	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1560	1560	390	0	1277	346	2434	0.641	1558	561	1.1	1.8	4.096	A
B - A14 North-West	1470	116	29	1277	0	791	938	0.124	116	1111	0.1	0.1	4.379	A
C - A1156 South-West	521	521	130	0	0	1383	968	0.538	519	571	0.6	1.1	7.980	A
D - A14 South-East	548	548	137	0	0	1408	1012	0.542	546	544	0.6	1.2	7.700	A
E - Unnamed Road North-East	75	75	19	0	0	1877	409	0.183	75	27	0.1	0.2	10.754	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1911	1911	478	0	1564	419	2357	0.811	1902	675	1.8	4.1	7.752	A
B - A14 North-West	1800	142	36	1564	0	952	828	0.172	142	1355	0.1	0.2	5.246	A
C - A1156 South-West	638	638	160	0	0	1682	751	0.850	624	694	1.1	4.7	25.963	D
D - A14 South-East	672	672	168	0	0	1718	796	0.843	658	660	1.2	4.6	24.023	C
E - Unnamed Road North-East	92	92	23	0	0	2288	234	0.391	90	33	0.2	0.6	24.693	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1911	1911	478	0	1564	424	2351	0.813	1910	687	4.1	4.2	8.143	A
B - A14 North-West	1800	142	36	1564	0	969	816	0.174	142	1363	0.2	0.2	5.340	A
C - A1156 South-West	638	638	160	0	0	1696	741	0.862	636	700	4.7	5.4	32.616	D
D - A14 South-East	672	672	168	0	0	1727	790	0.850	670	667	4.6	5.1	28.876	D
E - Unnamed Road North-East	92	92	23	0	0	2302	229	0.401	92	33	0.6	0.6	26.218	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1560	1560	390	0	1277	355	2425	0.644	1570	580	4.2	1.8	4.257	A
B - A14 North-West	1470	116	29	1277	0	818	919	0.126	116	1123	0.2	0.1	4.485	A
C - A1156 South-West	521	521	130	0	0	1403	954	0.547	538	581	5.4	1.2	8.997	A
D - A14 South-East	548	548	137	0	0	1420	1003	0.547	564	554	5.1	1.2	8.470	A
E - Unnamed Road North-East	75	75	19	0	0	1897	400	0.187	77	27	0.6	0.2	11.172	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1307	1307	327	0	1069	292	2491	0.524	1310	474	1.8	1.1	3.053	A
B - A14 North-West	1231	97	24	1069	0	669	1022	0.095	97	935	0.1	0.1	3.895	A
C - A1156 South-West	437	437	109	0	0	1164	1127	0.387	439	481	1.2	0.6	5.250	A
D - A14 South-East	459	459	115	0	0	1184	1167	0.394	462	458	1.2	0.7	5.119	A
E - Unnamed Road North-East	63	63	16	0	0	1579	535	0.117	63	23	0.2	0.1	7.627	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.62	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.64	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.76	0.04	0.41	4.72	8.30			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	1.14	0.05	0.46	2.76	4.26			N/A	N/A
D - A14 South-East	1.16	0.05	0.46	2.81	4.35			N/A	N/A
E - Unnamed Road North-East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.10	0.03	0.29	4.10	15.00			N/A	N/A
B - A14 North-West	0.21	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	4.73	0.04	0.42	12.97	24.86			N/A	N/A
D - A14 South-East	4.58	0.04	0.40	12.22	24.52			N/A	N/A
E - Unnamed Road North-East	0.62	0.03	0.27	0.62	0.96			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.23	0.03	0.27	4.23	4.23			N/A	N/A
B - A14 North-West	0.21	0.03	0.25	0.46	0.48			N/A	N/A
C - A1156 South-West	5.43	0.04	0.36	12.34	29.69			N/A	N/A

D - A14 South-East	5.08	0.03	0.34	10.15	27.42			N/A	N/A
E - Unnamed Road North-East	0.65	0.04	0.35	1.50	2.65			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.06	0.96	4.44	6.44			N/A	N/A
B - A14 North-West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A1156 South-West	1.23	0.04	0.40	3.14	5.39			N/A	N/A
D - A14 South-East	1.23	0.04	0.41	3.13	5.31			N/A	N/A
E - Unnamed Road North-East	0.23	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.04	0.39	2.81	4.83			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.64	0.03	0.30	1.44	3.00			N/A	N/A
D - A14 South-East	0.65	0.03	0.30	1.03	3.12			N/A	N/A
E - Unnamed Road North-East	0.13	0.03	0.25	0.45	0.48			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	103	75.10
B - A14 North-West	800	128.00
C - A1156 South-West	1613	80.70
D - A14 South-East	1887	131.50
E - Unnamed Road North-East	2213	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1554	100.000
B - A14 North-West		ONE HOUR	✓	1240	100.000
C - A1156 South-West		ONE HOUR	✓	535	100.000
D - A14 South-East		ONE HOUR	✓	576	100.000
E - Unnamed Road North-East		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	945	303	302	3
	B - A14 North-West	1156	4	42	0	38
	C - A1156 South-West	291	79	4	156	4
	D - A14 South-East	351	0	224	0	1
	E - Unnamed Road North-East	6	24	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	4	5	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	6	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.31	2.0	4.1	A	1426	2139

B - A14 North-West	0.11	4.83	0.1	0.5	A	1123	115
C - A1156 South-West	0.64	10.84	1.7	4.9	B	491	737
D - A14 South-East	0.65	10.51	1.8	4.5	B	529	793
E - Unnamed Road North-East	0.10	9.94	0.1	0.5	A	33	49

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	1170	293	0	870	187	2642	0.443	1167	487	0.0	0.8	2.435	A
B - A14 North-West	921	63	16	870	0	611	1022	0.062	63	790	0.0	0.1	3.754	A
C - A1156 South-West	403	403	101	0	0	1000	1289	0.313	401	432	0.0	0.5	4.047	A
D - A14 South-East	434	434	109	0	0	999	1325	0.327	432	347	0.0	0.5	4.022	A
E - Unnamed Road North-East	27	27	7	0	0	1319	703	0.038	27	35	0.0	0.0	5.324	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1397	1397	349	0	1039	224	2601	0.537	1396	582	0.8	1.2	2.981	A
B - A14 North-West	1100	75	19	1039	0	731	944	0.080	75	945	0.1	0.1	4.142	A
C - A1156 South-West	481	481	120	0	0	1196	1134	0.424	480	517	0.5	0.7	5.494	A
D - A14 South-East	518	518	130	0	0	1195	1179	0.440	517	415	0.5	0.8	5.430	A
E - Unnamed Road North-East	32	32	8	0	0	1578	576	0.056	32	42	0.0	0.1	6.618	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1711	1711	428	0	1273	274	2547	0.672	1708	710	1.2	2.0	4.272	A
B - A14 North-West	1348	92	23	1273	0	892	841	0.110	92	1156	0.1	0.1	4.807	A
C - A1156 South-West	589	589	147	0	0	1462	925	0.637	585	631	0.7	1.7	10.494	B
D - A14 South-East	635	635	159	0	0	1462	979	0.648	631	507	0.8	1.8	10.215	B
E - Unnamed Road North-East	39	39	10	0	0	1930	403	0.097	39	51	0.1	0.1	9.874	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1711	1711	428	0	1273	275	2546	0.672	1711	715	2.0	2.0	4.315	A
B - A14 North-West	1348	92	23	1273	0	897	837	0.110	92	1158	0.1	0.1	4.833	A
C - A1156 South-West	589	589	147	0	0	1467	921	0.640	589	634	1.7	1.7	10.836	B
D - A14 South-East	635	635	159	0	0	1465	977	0.650	635	509	1.8	1.8	10.506	B
E - Unnamed Road North-East	39	39	10	0	0	1935	401	0.098	39	51	0.1	0.1	9.944	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1397	1397	349	0	1039	226	2599	0.538	1401	588	2.0	1.2	3.013	A
B - A14 North-West	1100	75	19	1039	0	739	939	0.080	76	949	0.1	0.1	4.167	A
C - A1156 South-West	481	481	120	0	0	1202	1129	0.426	485	520	1.7	0.8	5.622	A
D - A14 South-East	518	518	130	0	0	1200	1176	0.441	522	417	1.8	0.8	5.544	A
E - Unnamed Road North-East	32	32	8	0	0	1585	573	0.056	32	42	0.1	0.1	6.662	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	1170	293	0	870	189	2641	0.443	1172	490	1.2	0.8	2.452	A
B - A14 North-West	921	63	16	870	0	616	1019	0.062	63	793	0.1	0.1	3.766	A
C - A1156 South-West	403	403	101	0	0	1005	1285	0.314	404	434	0.8	0.5	4.092	A
D - A14 South-East	434	434	109	0	0	1003	1322	0.328	435	348	0.8	0.5	4.064	A
E - Unnamed Road North-East	27	27	7	0	0	1325	700	0.038	27	35	0.1	0.0	5.350	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.45	0.00	0.00	0.45	0.45			N/A	N/A
D - A14 South-East	0.48	0.00	0.00	0.48	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.05	0.49	2.73	4.09			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.46	0.48			N/A	N/A
C - A1156 South-West	0.73	0.06	0.70	1.43	1.43			N/A	N/A
D - A14 South-East	0.78	0.06	0.71	1.15	1.67			N/A	N/A
E - Unnamed Road North-East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.02	0.03	0.26	2.02	2.02			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.47	0.49			N/A	N/A
C - A1156 South-West	1.70	0.03	0.27	1.70	3.07			N/A	N/A
D - A14 South-East	1.79	0.03	0.27	1.79	3.46			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.03	0.26	2.04	2.04			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	1.74	0.03	0.28	1.74	4.86			N/A	N/A

D - A14 South-East	1.82	0.03	0.28	1.82	4.52			N/A	N/A
E - Unnamed Road North-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.24	1.11	1.69	1.92			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.75	0.07	0.75	1.39	1.39			N/A	N/A
D - A14 South-East	0.80	0.07	0.78	1.07	1.60			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.07	0.78	1.10	1.62			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.46	0.04	0.38	1.29	1.45			N/A	N/A
D - A14 South-East	0.49	0.04	0.39	1.01	1.01			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	153	75.10
B - A14 North-West	695	128.00
C - A1156 South-West	1621	80.70
D - A14 South-East	1944	131.50
E - Unnamed Road North-East	2358	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1638	100.000
B - A14 North-West		ONE HOUR	✓	1365	100.000
C - A1156 South-West		ONE HOUR	✓	523	100.000
D - A14 South-East		ONE HOUR	✓	671	100.000
E - Unnamed Road North-East		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1007	243	386	1
	B - A14 North-West	1253	3	89	0	20
	C - A1156 South-West	232	77	0	187	27
	D - A14 South-East	362	0	310	0	0
	E - Unnamed Road North-East	0	18	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	4	2	1	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.87	2.4	5.1	A	1503	2255

B - A14 North-West	0.14	4.63	0.2	0.5	A	1265	154
C - A1156 South-West	0.62	10.35	1.6	4.6	B	480	720
D - A14 South-East	0.74	13.71	2.7	11.3	B	616	924
E - Unnamed Road North-East	0.08	11.23	0.1	0.5	B	22	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1233	1233	308	0	943	244	2669	0.462	1230	446	0.0	0.9	2.495	A
B - A14 North-West	1037	84	21	943	0	606	1094	0.077	84	829	0.0	0.1	3.565	A
C - A1156 South-West	394	394	98	0	0	1043	1300	0.303	392	486	0.0	0.4	3.956	A
D - A14 South-East	505	505	126	0	0	1026	1345	0.376	503	431	0.0	0.6	4.261	A
E - Unnamed Road North-East	18	18	5	0	0	1438	640	0.029	18	36	0.0	0.0	5.786	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1473	1473	368	0	1126	292	2616	0.563	1471	533	0.9	1.3	3.141	A
B - A14 North-West	1239	101	25	1126	0	725	1013	0.099	101	992	0.1	0.1	3.947	A
C - A1156 South-West	470	470	118	0	0	1248	1142	0.412	469	581	0.4	0.7	5.351	A
D - A14 South-East	603	603	151	0	0	1227	1200	0.503	602	516	0.6	1.0	5.999	A
E - Unnamed Road North-East	22	22	6	0	0	1721	517	0.043	22	43	0.0	0.0	7.266	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1804	1804	451	0	1380	357	2544	0.709	1799	650	1.3	2.4	4.808	A
B - A14 North-West	1517	123	31	1380	0	884	905	0.136	123	1213	0.1	0.2	4.603	A
C - A1156 South-West	576	576	144	0	0	1524	928	0.621	572	709	0.7	1.6	10.024	B
D - A14 South-East	739	739	185	0	0	1501	1003	0.737	732	630	1.0	2.7	12.974	B
E - Unnamed Road North-East	27	27	7	0	0	2104	350	0.077	27	52	0.0	0.1	11.134	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1804	1804	451	0	1380	359	2542	0.710	1804	655	2.4	2.4	4.875	A
B - A14 North-West	1517	123	31	1380	0	890	901	0.137	123	1216	0.2	0.2	4.630	A
C - A1156 South-West	576	576	144	0	0	1530	923	0.624	576	713	1.6	1.6	10.352	B
D - A14 South-East	739	739	185	0	0	1504	1000	0.739	739	632	2.7	2.7	13.706	B
E - Unnamed Road North-East	27	27	7	0	0	2110	348	0.078	27	53	0.1	0.1	11.229	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1473	1473	368	0	1126	295	2613	0.564	1477	540	2.4	1.3	3.180	A
B - A14 North-West	1239	101	25	1126	0	734	1007	0.100	101	996	0.2	0.1	3.975	A
C - A1156 South-West	470	470	118	0	0	1256	1135	0.414	474	586	1.6	0.7	5.473	A
D - A14 South-East	603	603	151	0	0	1232	1197	0.504	610	519	2.7	1.0	6.210	A
E - Unnamed Road North-East	22	22	6	0	0	1729	514	0.043	22	43	0.1	0.0	7.326	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1233	1233	308	0	943	246	2668	0.462	1235	449	1.3	0.9	2.517	A
B - A14 North-West	1037	84	21	943	0	611	1091	0.077	84	833	0.1	0.1	3.580	A
C - A1156 South-West	394	394	98	0	0	1049	1296	0.304	395	489	0.7	0.4	4.000	A
D - A14 South-East	505	505	126	0	0	1030	1342	0.376	507	433	1.0	0.6	4.318	A
E - Unnamed Road North-East	18	18	5	0	0	1445	638	0.029	18	36	0.0	0.0	5.816	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - A14 South-East	0.60	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.04	0.45	3.22	5.11			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.69	0.06	0.70	1.06	1.06			N/A	N/A
D - A14 South-East	1.00	0.05	0.60	2.04	2.96			N/A	N/A
E - Unnamed Road North-East	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.39	0.03	0.27	2.39	2.39			N/A	N/A
B - A14 North-West	0.16	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.59	0.03	0.27	1.59	2.08			N/A	N/A
D - A14 South-East	2.65	0.03	0.30	2.65	11.35			N/A	N/A
E - Unnamed Road North-East	0.08	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.42	0.03	0.26	2.42	2.42			N/A	N/A
B - A14 North-West	0.16	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.63	0.03	0.28	1.63	4.64			N/A	N/A

D - A14 South-East	2.74	0.03	0.28	2.74	8.44			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.15	1.16	2.00	2.69			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.71	0.07	0.76	1.41	1.50			N/A	N/A
D - A14 South-East	1.03	0.06	0.66	2.10	2.99			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.06	0.69	1.60	2.03			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.44	0.04	0.37	1.24	1.40			N/A	N/A
D - A14 South-East	0.61	0.04	0.36	1.35	2.28			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	231	128.00
C - A1156 South-West	870	80.70
D - A14 South-East	793	131.50
E - Unnamed Road North-East	982	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	887	100.000
B - A14 North-West		ONE HOUR	✓	626	100.000
C - A1156 South-West		ONE HOUR	✓	174	100.000
D - A14 South-East		ONE HOUR	✓	242	100.000
E - Unnamed Road North-East		ONE HOUR	✓	28	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	619	73	194	1
	B - A14 North-West	603	8	5	0	10
	C - A1156 South-West	30	7	0	136	1
	D - A14 South-East	159	0	73	0	11
	E - Unnamed Road North-East	9	18	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	13	88	20	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	7	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.16	0.6	2.7	A	814	1221

B - A14 North-West	0.03	3.80	0.0	0.5	A	468	32
C - A1156 South-West	0.14	2.99	0.2	0.5	A	159	239
D - A14 South-East	0.17	2.86	0.2	0.5	A	222	333
E - Unnamed Road North-East	0.03	4.21	0.0	0.5	A	25	38

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	668	668	167	0	454	128	2713	0.246	667	148	0.0	0.3	1.759	A
B - A14 North-West	384	17	4	454	0	259	1041	0.017	17	490	0.0	0.0	3.515	A
C - A1156 South-West	131	131	33	0	0	619	1661	0.079	130	113	0.0	0.1	2.352	A
D - A14 South-East	182	182	46	0	0	550	1773	0.103	182	248	0.0	0.1	2.262	A
E - Unnamed Road North-East	21	21	5	0	0	777	1142	0.018	21	18	0.0	0.0	3.209	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	798	798	199	0	542	153	2683	0.297	797	177	0.3	0.4	1.908	A
B - A14 North-West	458	21	5	542	0	310	1012	0.020	21	586	0.0	0.0	3.628	A
C - A1156 South-West	156	156	39	0	0	740	1548	0.101	156	135	0.1	0.1	2.585	A
D - A14 South-East	218	218	54	0	0	658	1669	0.130	218	297	0.1	0.1	2.479	A
E - Unnamed Road North-East	25	25	6	0	0	930	1034	0.024	25	21	0.0	0.0	3.565	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	977	977	244	0	664	188	2643	0.370	976	217	0.4	0.6	2.158	A
B - A14 North-West	561	25	6	664	0	380	973	0.026	25	718	0.0	0.0	3.796	A
C - A1156 South-West	191	191	48	0	0	906	1395	0.137	191	166	0.1	0.2	2.990	A
D - A14 South-East	267	267	67	0	0	806	1527	0.175	266	363	0.1	0.2	2.854	A
E - Unnamed Road North-East	31	31	8	0	0	1138	887	0.034	31	26	0.0	0.0	4.205	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	977	977	244	0	664	188	2643	0.370	977	217	0.6	0.6	2.160	A
B - A14 North-West	561	25	6	664	0	380	973	0.026	25	718	0.0	0.0	3.796	A
C - A1156 South-West	191	191	48	0	0	907	1394	0.137	191	166	0.2	0.2	2.991	A
D - A14 South-East	267	267	67	0	0	806	1527	0.175	267	364	0.2	0.2	2.855	A
E - Unnamed Road North-East	31	31	8	0	0	1139	886	0.035	31	26	0.0	0.0	4.208	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	798	798	199	0	542	154	2683	0.297	798	178	0.6	0.4	1.909	A
B - A14 North-West	458	21	5	542	0	311	1012	0.020	21	587	0.0	0.0	3.630	A
C - A1156 South-West	156	156	39	0	0	741	1547	0.101	156	135	0.2	0.1	2.587	A
D - A14 South-East	218	218	54	0	0	659	1669	0.131	218	297	0.2	0.2	2.483	A
E - Unnamed Road North-East	25	25	6	0	0	931	1033	0.024	25	21	0.0	0.0	3.569	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	668	668	167	0	454	129	2712	0.246	668	149	0.4	0.3	1.760	A
B - A14 North-West	384	17	4	454	0	260	1041	0.017	17	491	0.0	0.0	3.517	A
C - A1156 South-West	131	131	33	0	0	621	1659	0.079	131	113	0.1	0.1	2.355	A
D - A14 South-East	182	182	46	0	0	552	1772	0.103	183	249	0.2	0.1	2.265	A
E - Unnamed Road North-East	21	21	5	0	0	779	1141	0.018	21	18	0.0	0.0	3.216	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - A14 North-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C - A1156 South-West	0.16	0.03	0.26	0.46	0.49			N/A	N/A
D - A14 South-East	0.21	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.03	0.30	1.34	2.74			N/A	N/A
B - A14 North-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C - A1156 South-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A

D - A14 South-East	0.21	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	144	75.10
B - A14 North-West	610	128.00
C - A1156 South-West	1662	80.70
D - A14 South-East	1609	131.50
E - Unnamed Road North-East	1877	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1532	100.000
B - A14 North-West		ONE HOUR	✓	1325	100.000
C - A1156 South-West		ONE HOUR	✓	384	100.000
D - A14 South-East		ONE HOUR	✓	552	100.000
E - Unnamed Road North-East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1039	229	260	3
	B - A14 North-West	1228	2	65	0	30
	C - A1156 South-West	162	52	0	164	6
	D - A14 South-East	348	3	187	0	14
	E - Unnamed Road North-East	2	41	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	13	100	6	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	8	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.63	2.1	4.4	A	1406	2108

B - A14 North-West	0.12	4.57	0.1	0.5	A	1232	133
C - A1156 South-West	0.54	9.87	1.1	4.5	A	352	528
D - A14 South-East	0.68	12.68	2.1	6.5	B	507	760
E - Unnamed Road North-East	0.15	12.07	0.2	0.5	B	44	66

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1153	1153	288	0	925	211	2577	0.448	1150	384	0.0	0.8	2.518	A
B - A14 North-West	1011	73	18	925	0	522	1057	0.069	73	854	0.0	0.1	3.659	A
C - A1156 South-West	289	289	72	0	0	1088	1172	0.247	288	363	0.0	0.3	4.065	A
D - A14 South-East	416	416	104	0	0	1037	1274	0.326	414	319	0.0	0.5	4.174	A
E - Unnamed Road North-East	36	36	9	0	0	1321	673	0.053	36	40	0.0	0.1	5.650	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1377	1377	344	0	1104	253	2530	0.544	1376	459	0.8	1.2	3.115	A
B - A14 North-West	1207	87	22	1104	0	625	989	0.088	87	1021	0.1	0.1	3.993	A
C - A1156 South-West	345	345	86	0	0	1301	1010	0.341	344	435	0.3	0.5	5.400	A
D - A14 South-East	497	497	124	0	0	1241	1113	0.446	495	382	0.5	0.8	5.813	A
E - Unnamed Road North-East	43	43	11	0	0	1580	537	0.080	43	48	0.1	0.1	7.276	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1687	1687	422	0	1352	308	2466	0.684	1683	560	1.2	2.1	4.574	A
B - A14 North-West	1478	107	27	1352	0	761	898	0.119	107	1249	0.1	0.1	4.549	A
C - A1156 South-West	422	422	106	0	0	1590	792	0.534	420	531	0.5	1.1	9.628	A
D - A14 South-East	608	608	152	0	0	1518	894	0.680	603	467	0.8	2.0	12.172	B
E - Unnamed Road North-East	53	53	13	0	0	1933	353	0.149	52	58	0.1	0.2	11.945	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1687	1687	422	0	1352	310	2465	0.684	1686	564	2.1	2.1	4.626	A
B - A14 North-West	1478	107	27	1352	0	767	895	0.119	107	1252	0.1	0.1	4.568	A
C - A1156 South-West	422	422	106	0	0	1596	787	0.537	422	533	1.1	1.1	9.867	A
D - A14 South-East	608	608	152	0	0	1522	891	0.682	608	469	2.0	2.1	12.676	B
E - Unnamed Road North-East	53	53	13	0	0	1938	351	0.150	53	59	0.2	0.2	12.070	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1377	1377	344	0	1104	254	2528	0.545	1381	465	2.1	1.2	3.151	A
B - A14 North-West	1207	87	22	1104	0	632	984	0.089	87	1025	0.1	0.1	4.015	A
C - A1156 South-West	345	345	86	0	0	1310	1004	0.344	347	438	1.1	0.5	5.502	A
D - A14 South-East	497	497	124	0	0	1246	1109	0.448	502	384	2.1	0.8	5.971	A
E - Unnamed Road North-East	43	43	11	0	0	1587	534	0.080	43	48	0.2	0.1	7.345	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1153	1153	288	0	925	212	2575	0.448	1155	387	1.2	0.8	2.538	A
B - A14 North-West	1011	73	18	925	0	526	1054	0.069	73	857	0.1	0.1	3.672	A
C - A1156 South-West	289	289	72	0	0	1094	1168	0.247	290	365	0.5	0.3	4.105	A
D - A14 South-East	416	416	104	0	0	1042	1271	0.327	417	321	0.8	0.5	4.224	A
E - Unnamed Road North-East	36	36	9	0	0	1327	670	0.054	36	40	0.1	0.1	5.682	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - A14 South-East	0.48	0.00	0.00	0.48	0.48			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.19	0.05	0.48	2.84	4.37			N/A	N/A
B - A14 North-West	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.51	0.05	0.51	1.30	1.40			N/A	N/A
D - A14 South-East	0.80	0.06	0.67	1.36	1.82			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.03	0.26	2.13	2.13			N/A	N/A
B - A14 North-West	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.12	0.03	0.26	1.12	1.12			N/A	N/A
D - A14 South-East	2.04	0.03	0.28	2.04	6.50			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.03	0.26	2.15	2.15			N/A	N/A
B - A14 North-West	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.14	0.03	0.29	1.19	4.55			N/A	N/A

D - A14 South-East	2.10	0.03	0.28	2.10	6.51			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.19	1.13	1.80	2.08			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.53	0.05	0.56	1.31	1.41			N/A	N/A
D - A14 South-East	0.82	0.06	0.70	1.41	1.85			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.07	0.74	1.31	1.77			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.33	0.03	0.29	0.74	1.12			N/A	N/A
D - A14 South-East	0.49	0.04	0.37	1.40	1.44			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	15.80	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	165	75.10
B - A14 North-West	818	128.00
C - A1156 South-West	1919	80.70
D - A14 South-East	2135	131.50
E - Unnamed Road North-East	2475	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1744	100.000
B - A14 North-West		ONE HOUR	✓	1569	100.000
C - A1156 South-West		ONE HOUR	✓	585	100.000
D - A14 South-East		ONE HOUR	✓	620	100.000
E - Unnamed Road North-East		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1105	272	362	3
	B - A14 North-West	1436	6	117	0	10
	C - A1156 South-West	263	75	0	245	2
	D - A14 South-East	363	0	242	0	14
	E - Unnamed Road North-East	9	51	19	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	10	6	9	0
	B - A14 North-West	13	67	3	0	0
	C - A1156 South-West	7	7	0	0	0
	D - A14 South-East	9	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	8.88	4.6	18.4	A	1600	2400

B - A14 North-West	0.19	5.64	0.2	0.5	A	1536	183
C - A1156 South-West	0.89	39.44	6.6	35.8	E	537	805
D - A14 South-East	0.89	39.07	6.9	37.6	E	569	853
E - Unnamed Road North-East	0.43	29.09	0.7	3.0	D	76	115

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1313	1313	328	0	1081	295	2468	0.532	1308	475	0.0	1.1	3.092	A
B - A14 North-West	1260	100	25	1081	0	671	993	0.101	100	928	0.0	0.1	4.028	A
C - A1156 South-West	440	440	110	0	0	1161	1118	0.394	438	488	0.0	0.6	5.274	A
D - A14 South-East	467	467	117	0	0	1185	1147	0.407	464	458	0.0	0.7	5.251	A
E - Unnamed Road North-East	63	63	16	0	0	1581	530	0.118	62	22	0.0	0.1	7.688	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1567	1567	392	0	1291	353	2407	0.651	1565	568	1.1	1.8	4.260	A
B - A14 North-West	1505	120	30	1291	0	802	904	0.132	119	1110	0.1	0.2	4.584	A
C - A1156 South-West	526	526	131	0	0	1389	952	0.552	524	583	0.6	1.2	8.358	A
D - A14 South-East	557	557	139	0	0	1417	986	0.565	555	548	0.7	1.3	8.305	A
E - Unnamed Road North-East	75	75	19	0	0	1891	397	0.188	74	27	0.1	0.2	11.131	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1920	1920	480	0	1581	426	2329	0.824	1909	680	1.8	4.5	8.370	A
B - A14 North-West	1843	146	37	1581	0	960	798	0.184	146	1353	0.2	0.2	5.520	A
C - A1156 South-West	644	644	161	0	0	1686	736	0.875	627	707	1.2	5.5	29.463	D
D - A14 South-East	683	683	171	0	0	1729	771	0.886	664	664	1.3	5.9	29.810	D
E - Unnamed Road North-East	92	92	23	0	0	2303	221	0.414	90	32	0.2	0.7	27.033	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1920	1920	480	0	1581	432	2323	0.826	1919	695	4.5	4.6	8.880	A
B - A14 North-West	1843	146	37	1581	0	981	784	0.187	146	1361	0.2	0.2	5.643	A
C - A1156 South-West	644	644	161	0	0	1703	724	0.890	640	715	5.5	6.6	39.443	E
D - A14 South-East	683	683	171	0	0	1739	764	0.894	679	671	5.9	6.9	39.071	E
E - Unnamed Road North-East	92	92	23	0	0	2318	215	0.427	92	33	0.7	0.7	29.086	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1567	1567	392	0	1291	364	2395	0.654	1578	594	4.6	1.9	4.462	A
B - A14 North-West	1505	120	30	1291	0	838	880	0.136	120	1123	0.2	0.2	4.734	A
C - A1156 South-West	526	526	131	0	0	1414	934	0.563	547	596	6.6	1.3	9.800	A
D - A14 South-East	557	557	139	0	0	1431	977	0.571	580	561	6.9	1.4	9.557	A
E - Unnamed Road North-East	75	75	19	0	0	1915	388	0.193	77	28	0.7	0.2	11.650	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1313	1313	328	0	1081	298	2465	0.532	1316	481	1.9	1.1	3.139	A
B - A14 North-West	1260	100	25	1081	0	679	988	0.101	100	934	0.2	0.1	4.057	A
C - A1156 South-West	440	440	110	0	0	1170	1111	0.396	443	492	1.3	0.7	5.408	A
D - A14 South-East	467	467	117	0	0	1192	1142	0.409	469	462	1.4	0.7	5.377	A
E - Unnamed Road North-East	63	63	16	0	0	1591	526	0.119	63	23	0.2	0.1	7.793	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.55	1.03	1.13	1.13			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.64	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.68	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.04	0.41	4.93	8.79			N/A	N/A
B - A14 North-West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A1156 South-West	1.21	0.05	0.45	2.96	4.71			N/A	N/A
D - A14 South-East	1.27	0.04	0.45	3.21	5.11			N/A	N/A
E - Unnamed Road North-East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.45	0.03	0.30	4.45	18.44			N/A	N/A
B - A14 North-West	0.22	0.03	0.26	0.46	0.48			N/A	N/A
C - A1156 South-West	5.50	0.05	0.49	15.75	27.58			N/A	N/A
D - A14 South-East	5.93	0.05	0.66	17.05	29.16			N/A	N/A
E - Unnamed Road North-East	0.67	0.03	0.27	0.67	1.26			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.62	0.03	0.27	4.62	6.56			N/A	N/A
B - A14 North-West	0.23	0.03	0.26	0.47	0.50			N/A	N/A
C - A1156 South-West	6.59	0.04	0.41	17.43	35.77			N/A	N/A

D - A14 South-East	6.92	0.04	0.41	18.34	37.59			N/A	N/A
E - Unnamed Road North-East	0.72	0.04	0.35	1.69	2.97			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.92	0.06	0.88	4.80	7.09			N/A	N/A
B - A14 North-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A1156 South-West	1.32	0.04	0.39	3.42	6.02			N/A	N/A
D - A14 South-East	1.36	0.04	0.38	3.53	6.43			N/A	N/A
E - Unnamed Road North-East	0.24	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.04	0.38	2.89	5.22			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.66	0.03	0.29	1.30	3.01			N/A	N/A
D - A14 South-East	0.70	0.03	0.29	1.29	3.16			N/A	N/A
E - Unnamed Road North-East	0.14	0.03	0.25	0.45	0.48			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	104	75.10
B - A14 North-West	811	128.00
C - A1156 South-West	1620	80.70
D - A14 South-East	1891	131.50
E - Unnamed Road North-East	2225	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1546	100.000
B - A14 North-West		ONE HOUR	✓	1244	100.000
C - A1156 South-West		ONE HOUR	✓	536	100.000
D - A14 South-East		ONE HOUR	✓	582	100.000
E - Unnamed Road North-East		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	935	303	304	3
	B - A14 North-West	1159	4	43	0	38
	C - A1156 South-West	291	80	4	156	4
	D - A14 South-East	358	0	223	0	1
	E - Unnamed Road North-East	6	24	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	11	5	7	33
	B - A14 North-West	9	0	7	0	12
	C - A1156 South-West	2	4	0	0	0
	D - A14 South-East	7	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.54	2.1	4.4	A	1419	2128

B - A14 North-West	0.11	4.96	0.1	0.5	A	1140	117
C - A1156 South-West	0.66	11.64	1.9	5.5	B	492	738
D - A14 South-East	0.67	11.42	2.0	5.3	B	535	802
E - Unnamed Road North-East	0.10	10.28	0.1	0.5	B	33	49

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1164	1164	291	0	873	188	2591	0.449	1161	492	0.0	0.8	2.512	A
B - A14 North-West	935	64	16	873	0	616	1004	0.064	64	783	0.0	0.1	3.827	A
C - A1156 South-West	404	404	101	0	0	997	1272	0.317	402	432	0.0	0.5	4.128	A
D - A14 South-East	439	439	110	0	0	992	1305	0.336	437	348	0.0	0.5	4.138	A
E - Unnamed Road North-East	27	27	7	0	0	1314	694	0.039	27	35	0.0	0.0	5.394	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1390	1390	348	0	1042	225	2551	0.545	1389	589	0.8	1.2	3.093	A
B - A14 North-West	1117	76	19	1042	0	737	926	0.082	76	937	0.1	0.1	4.234	A
C - A1156 South-West	482	482	121	0	0	1193	1115	0.432	481	516	0.5	0.8	5.664	A
D - A14 South-East	524	524	131	0	0	1187	1158	0.452	522	416	0.5	0.8	5.653	A
E - Unnamed Road North-East	32	32	8	0	0	1572	566	0.057	32	42	0.0	0.1	6.742	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1703	1703	426	0	1276	275	2497	0.682	1699	717	1.2	2.1	4.489	A
B - A14 North-West	1368	93	23	1276	0	899	823	0.114	93	1145	0.1	0.1	4.932	A
C - A1156 South-West	590	590	148	0	0	1458	903	0.654	586	631	0.8	1.8	11.215	B
D - A14 South-East	641	641	160	0	0	1452	958	0.669	637	509	0.8	2.0	11.048	B
E - Unnamed Road North-East	39	39	10	0	0	1922	392	0.100	39	51	0.1	0.1	10.197	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1703	1703	426	0	1276	276	2496	0.682	1702	722	2.1	2.1	4.538	A
B - A14 North-West	1368	93	23	1276	0	905	819	0.114	93	1148	0.1	0.1	4.961	A
C - A1156 South-West	590	590	148	0	0	1463	899	0.657	590	633	1.8	1.9	11.644	B
D - A14 South-East	641	641	160	0	0	1456	956	0.671	641	511	2.0	2.0	11.425	B
E - Unnamed Road North-East	39	39	10	0	0	1927	389	0.101	39	51	0.1	0.1	10.277	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1390	1390	348	0	1042	227	2549	0.545	1394	595	2.1	1.2	3.125	A
B - A14 North-West	1117	76	19	1042	0	746	921	0.083	76	941	0.1	0.1	4.264	A
C - A1156 South-West	482	482	121	0	0	1200	1110	0.434	486	520	1.9	0.8	5.815	A
D - A14 South-East	524	524	131	0	0	1192	1154	0.454	528	419	2.0	0.8	5.790	A
E - Unnamed Road North-East	32	32	8	0	0	1579	562	0.057	32	42	0.1	0.1	6.791	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1164	1164	291	0	873	189	2590	0.450	1166	496	1.2	0.8	2.530	A
B - A14 North-West	935	64	16	873	0	621	1001	0.064	64	786	0.1	0.1	3.842	A
C - A1156 South-West	404	404	101	0	0	1002	1268	0.318	405	434	0.8	0.5	4.176	A
D - A14 South-East	439	439	110	0	0	997	1301	0.337	440	350	0.8	0.5	4.185	A
E - Unnamed Road North-East	27	27	7	0	0	1320	691	0.039	27	35	0.1	0.0	5.423	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D - A14 South-East	0.50	0.50	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.19	0.05	0.48	2.85	4.37			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.75	0.06	0.70	1.03	1.59			N/A	N/A
D - A14 South-East	0.82	0.06	0.70	1.39	1.84			N/A	N/A
E - Unnamed Road North-East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.11	0.03	0.26	2.11	2.11			N/A	N/A
B - A14 North-West	0.13	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.82	0.03	0.28	1.82	4.35			N/A	N/A
D - A14 South-East	1.95	0.03	0.28	1.95	5.14			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.03	0.26	2.13	2.13			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.87	0.03	0.28	1.87	5.51			N/A	N/A

D - A14 South-East	2.00	0.03	0.28	2.00	5.27			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.20	1.13	1.79	2.04			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.78	0.07	0.74	1.07	1.61			N/A	N/A
D - A14 South-East	0.84	0.07	0.76	1.39	1.82			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.07	0.76	1.30	1.76			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.47	0.04	0.38	1.04	1.04			N/A	N/A
D - A14 South-East	0.51	0.04	0.38	1.40	1.41			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	7.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	153	75.10
B - A14 North-West	730	128.00
C - A1156 South-West	1609	80.70
D - A14 South-East	1820	131.50
E - Unnamed Road North-East	2261	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1628	100.000
B - A14 North-West		ONE HOUR	✓	1350	100.000
C - A1156 South-West		ONE HOUR	✓	568	100.000
D - A14 South-East		ONE HOUR	✓	673	100.000
E - Unnamed Road North-East		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	988	242	396	1
	B - A14 North-West	1238	3	89	0	20
	C - A1156 South-West	263	87	0	191	27
	D - A14 South-East	365	0	309	0	0
	E - Unnamed Road North-East	0	18	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	2	2	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	1	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	5.19	2.6	5.4	A	1494	2241

B - A14 North-West	0.14	4.84	0.2	0.5	A	1256	154
C - A1156 South-West	0.69	12.73	2.2	6.8	B	521	782
D - A14 South-East	0.75	14.86	3.0	13.2	B	618	927
E - Unnamed Road North-East	0.08	12.04	0.1	0.5	B	22	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1226	1226	306	0	932	247	2612	0.469	1222	471	0.0	0.9	2.584	A
B - A14 North-West	1031	84	21	932	0	634	1069	0.079	84	822	0.0	0.1	3.656	A
C - A1156 South-West	428	428	107	0	0	1031	1288	0.332	426	484	0.0	0.5	4.165	A
D - A14 South-East	507	507	127	0	0	1011	1340	0.378	504	442	0.0	0.6	4.297	A
E - Unnamed Road North-East	18	18	5	0	0	1434	632	0.029	18	36	0.0	0.0	5.865	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1464	1464	366	0	1113	296	2559	0.572	1462	564	0.9	1.3	3.276	A
B - A14 North-West	1231	101	25	1113	0	759	984	0.102	101	983	0.1	0.1	4.074	A
C - A1156 South-West	511	511	128	0	0	1233	1128	0.453	509	579	0.5	0.8	5.806	A
D - A14 South-East	605	605	151	0	0	1209	1189	0.509	603	528	0.6	1.0	6.127	A
E - Unnamed Road North-East	22	22	6	0	0	1715	503	0.044	22	43	0.0	0.0	7.477	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1793	1793	448	0	1363	361	2488	0.721	1788	686	1.3	2.5	5.109	A
B - A14 North-West	1507	123	31	1363	0	924	873	0.141	123	1202	0.1	0.2	4.802	A
C - A1156 South-West	626	626	156	0	0	1506	913	0.685	620	707	0.8	2.1	12.119	B
D - A14 South-East	741	741	185	0	0	1478	985	0.753	734	645	1.0	2.9	13.953	B
E - Unnamed Road North-East	27	27	7	0	0	2097	329	0.082	27	52	0.0	0.1	11.913	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1793	1793	448	0	1363	363	2486	0.721	1793	692	2.5	2.6	5.194	A
B - A14 North-West	1507	123	31	1363	0	932	867	0.142	123	1206	0.2	0.2	4.838	A
C - A1156 South-West	626	626	156	0	0	1513	907	0.689	625	711	2.1	2.2	12.733	B
D - A14 South-East	741	741	185	0	0	1482	982	0.755	741	648	2.9	3.0	14.862	B
E - Unnamed Road North-East	27	27	7	0	0	2103	326	0.083	27	53	0.1	0.1	12.041	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1464	1464	366	0	1113	299	2556	0.573	1469	572	2.6	1.4	3.328	A
B - A14 North-West	1231	101	25	1113	0	770	977	0.103	101	989	0.2	0.1	4.110	A
C - A1156 South-West	511	511	128	0	0	1242	1121	0.456	516	585	2.2	0.8	6.003	A
D - A14 South-East	605	605	151	0	0	1214	1185	0.511	613	532	3.0	1.1	6.373	A
E - Unnamed Road North-East	22	22	6	0	0	1724	499	0.044	22	43	0.1	0.0	7.547	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1226	1226	306	0	932	249	2610	0.470	1228	475	1.4	0.9	2.609	A
B - A14 North-West	1031	84	21	932	0	640	1065	0.079	84	826	0.1	0.1	3.670	A
C - A1156 South-West	428	428	107	0	0	1037	1284	0.333	429	487	0.8	0.5	4.220	A
D - A14 South-East	507	507	127	0	0	1015	1336	0.379	509	444	1.1	0.6	4.359	A
E - Unnamed Road North-East	18	18	5	0	0	1441	629	0.029	18	36	0.0	0.0	5.897	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.49	0.00	0.00	0.49	0.49			N/A	N/A
D - A14 South-East	0.60	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.33	0.04	0.44	3.38	5.43			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.82	0.06	0.67	1.45	1.89			N/A	N/A
D - A14 South-East	1.02	0.05	0.56	2.20	3.22			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.03	0.27	2.53	2.53			N/A	N/A
B - A14 North-West	0.16	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.09	0.03	0.28	2.09	6.82			N/A	N/A
D - A14 South-East	2.86	0.03	0.30	3.06	13.24			N/A	N/A
E - Unnamed Road North-East	0.09	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.56	0.03	0.26	2.56	2.56			N/A	N/A
B - A14 North-West	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.16	0.03	0.28	2.16	6.67			N/A	N/A

D - A14 South-East	2.97	0.03	0.29	2.97	10.20			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.13	1.16	2.33	2.92			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.85	0.06	0.72	1.49	1.91			N/A	N/A
D - A14 South-East	1.06	0.05	0.59	2.31	3.35			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.06	0.63	1.73	2.41			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.50	0.04	0.37	1.42	1.53			N/A	N/A
D - A14 South-East	0.62	0.03	0.35	1.39	2.48			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	38	75.10
B - A14 North-West	229	128.00
C - A1156 South-West	893	80.70
D - A14 South-East	811	131.50
E - Unnamed Road North-East	1003	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	892	100.000
B - A14 North-West		ONE HOUR	✓	576	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	241	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	616	77	198	1
	B - A14 North-West	555	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	154	0	76	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	1.97	0.5	2.5	A	819	1228

B - A14 North-West	0.02	3.43	0.0	0.5	A	427	30
C - A1156 South-West	0.03	2.67	0.0	0.5	A	35	53
D - A14 South-East	0.17	2.82	0.2	0.5	A	221	331
E - Unnamed Road North-East	0.03	3.78	0.0	0.5	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	672	672	168	0	418	26	2825	0.238	670	145	0.0	0.3	1.671	A
B - A14 North-West	351	16	4	418	0	154	1113	0.015	16	489	0.0	0.0	3.280	A
C - A1156 South-West	29	29	7	0	0	614	1652	0.017	29	117	0.0	0.0	2.217	A
D - A14 South-East	181	181	45	0	0	550	1791	0.101	181	149	0.0	0.1	2.236	A
E - Unnamed Road North-East	22	22	5	0	0	678	1207	0.018	22	18	0.0	0.0	3.037	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	802	802	201	0	499	31	2818	0.285	802	173	0.3	0.4	1.784	A
B - A14 North-West	419	19	5	499	0	185	1096	0.018	19	584	0.0	0.0	3.342	A
C - A1156 South-West	34	34	9	0	0	735	1542	0.022	34	140	0.0	0.0	2.387	A
D - A14 South-East	216	216	54	0	0	658	1686	0.128	216	179	0.1	0.1	2.448	A
E - Unnamed Road North-East	26	26	7	0	0	811	1113	0.024	26	22	0.0	0.0	3.312	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	982	982	246	0	611	38	2808	0.350	982	212	0.4	0.5	1.971	A
B - A14 North-West	513	24	6	611	0	226	1072	0.022	24	715	0.0	0.0	3.431	A
C - A1156 South-West	42	42	11	0	0	900	1392	0.030	42	171	0.0	0.0	2.666	A
D - A14 South-East	265	265	66	0	0	806	1543	0.172	265	219	0.1	0.2	2.816	A
E - Unnamed Road North-East	32	32	8	0	0	993	984	0.033	32	27	0.0	0.0	3.782	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	982	982	246	0	611	38	2808	0.350	982	212	0.5	0.5	1.971	A
B - A14 North-West	513	24	6	611	0	227	1072	0.022	24	716	0.0	0.0	3.432	A
C - A1156 South-West	42	42	11	0	0	900	1391	0.030	42	171	0.0	0.0	2.667	A
D - A14 South-East	265	265	66	0	0	806	1543	0.172	265	219	0.2	0.2	2.817	A
E - Unnamed Road North-East	32	32	8	0	0	993	983	0.033	32	27	0.0	0.0	3.783	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	802	802	201	0	499	31	2818	0.285	803	174	0.5	0.4	1.788	A
B - A14 North-West	419	19	5	499	0	185	1096	0.018	19	585	0.0	0.0	3.346	A
C - A1156 South-West	34	34	9	0	0	736	1541	0.022	34	140	0.0	0.0	2.388	A
D - A14 South-East	216	216	54	0	0	659	1686	0.128	217	179	0.2	0.1	2.452	A
E - Unnamed Road North-East	26	26	7	0	0	811	1112	0.024	26	22	0.0	0.0	3.314	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	672	672	168	0	418	26	2825	0.238	672	145	0.4	0.3	1.671	A
B - A14 North-West	351	16	4	418	0	155	1113	0.015	16	490	0.0	0.0	3.281	A
C - A1156 South-West	29	29	7	0	0	616	1650	0.017	29	117	0.0	0.0	2.221	A
D - A14 South-East	181	181	45	0	0	552	1789	0.101	181	150	0.1	0.1	2.240	A
E - Unnamed Road North-East	22	22	5	0	0	679	1206	0.018	22	18	0.0	0.0	3.042	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.02	0.02	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.03	0.25	0.54	0.54			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D - A14 South-East	0.21	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.03	0.30	1.43	2.48			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A

D - A14 South-East	0.21	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.31	0.00	0.00	0.31	0.31			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	5.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	628	128.00
C - A1156 South-West	1721	80.70
D - A14 South-East	1656	131.50
E - Unnamed Road North-East	1931	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1525	100.000
B - A14 North-West		ONE HOUR	✓	1292	100.000
C - A1156 South-West		ONE HOUR	✓	284	100.000
D - A14 South-East		ONE HOUR	✓	542	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1066	192	263	4
	B - A14 North-West	1198	2	60	0	32
	C - A1156 South-West	162	52	0	64	6
	D - A14 South-East	331	3	193	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	2	12	0	8	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	3.98	1.8	3.6	A	1399	2099

B - A14 North-West	0.10	4.09	0.1	0.5	A	1170	129
C - A1156 South-West	0.40	7.77	0.7	3.2	A	261	391
D - A14 South-East	0.65	10.96	1.8	5.0	B	497	746
E - Unnamed Road North-East	0.13	10.02	0.2	0.5	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1148	1148	287	0	902	134	2657	0.432	1145	371	0.0	0.8	2.376	A
B - A14 North-West	960	70	18	902	0	435	1117	0.063	70	876	0.0	0.1	3.440	A
C - A1156 South-West	214	214	53	0	0	1098	1148	0.186	213	337	0.0	0.2	3.847	A
D - A14 South-East	408	408	102	0	0	1028	1307	0.312	406	247	0.0	0.5	3.988	A
E - Unnamed Road North-East	38	38	9	0	0	1237	713	0.053	38	42	0.0	0.1	5.331	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1371	1371	343	0	1077	161	2625	0.522	1370	444	0.8	1.1	2.864	A
B - A14 North-West	1146	84	21	1077	0	521	1060	0.079	84	1047	0.1	0.1	3.686	A
C - A1156 South-West	255	255	64	0	0	1313	992	0.257	255	403	0.2	0.3	4.882	A
D - A14 South-East	487	487	122	0	0	1230	1146	0.425	486	295	0.5	0.7	5.445	A
E - Unnamed Road North-East	45	45	11	0	0	1480	587	0.077	45	50	0.1	0.1	6.636	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1679	1679	420	0	1319	196	2583	0.650	1676	542	1.1	1.8	3.956	A
B - A14 North-West	1404	103	26	1319	0	636	985	0.105	103	1281	0.1	0.1	4.081	A
C - A1156 South-West	313	313	78	0	0	1606	780	0.401	311	492	0.3	0.7	7.669	A
D - A14 South-East	597	597	149	0	0	1505	927	0.644	593	361	0.7	1.7	10.639	B
E - Unnamed Road North-East	55	55	14	0	0	1811	416	0.133	55	61	0.1	0.2	9.957	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1679	1679	420	0	1319	197	2583	0.650	1679	545	1.8	1.8	3.984	A
B - A14 North-West	1404	103	26	1319	0	639	983	0.105	103	1284	0.1	0.1	4.092	A
C - A1156 South-West	313	313	78	0	0	1611	776	0.403	313	494	0.7	0.7	7.766	A
D - A14 South-East	597	597	149	0	0	1508	925	0.645	597	362	1.7	1.8	10.955	B
E - Unnamed Road North-East	55	55	14	0	0	1814	415	0.133	55	62	0.2	0.2	10.018	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1371	1371	343	0	1077	161	2625	0.522	1374	448	1.8	1.1	2.887	A
B - A14 North-West	1146	84	21	1077	0	526	1057	0.080	84	1051	0.1	0.1	3.699	A
C - A1156 South-West	255	255	64	0	0	1320	987	0.259	257	405	0.7	0.4	4.939	A
D - A14 South-East	487	487	122	0	0	1234	1143	0.426	491	296	1.8	0.8	5.560	A
E - Unnamed Road North-East	45	45	11	0	0	1485	585	0.077	45	51	0.2	0.1	6.676	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1148	1148	287	0	902	135	2656	0.432	1149	374	1.1	0.8	2.391	A
B - A14 North-West	960	70	18	902	0	438	1115	0.063	70	879	0.1	0.1	3.447	A
C - A1156 South-West	214	214	53	0	0	1103	1144	0.187	214	338	0.4	0.2	3.873	A
D - A14 South-East	408	408	102	0	0	1032	1304	0.313	409	248	0.8	0.5	4.029	A
E - Unnamed Road North-East	38	38	9	0	0	1242	710	0.053	38	42	0.1	0.1	5.355	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - A14 South-East	0.45	0.00	0.00	0.45	0.45			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.05	0.54	2.46	3.62			N/A	N/A
B - A14 North-West	0.09	0.03	0.26	0.47	0.50			N/A	N/A
C - A1156 South-West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - A14 South-East	0.73	0.06	0.69	1.48	1.48			N/A	N/A
E - Unnamed Road North-East	0.08	0.03	0.25	0.45	0.48			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.03	0.26	1.83	1.83			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.66	0.03	0.26	0.66	0.66			N/A	N/A
D - A14 South-East	1.75	0.03	0.27	1.75	3.47			N/A	N/A
E - Unnamed Road North-East	0.15	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.85	0.03	0.26	1.85	1.85			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.67	0.03	0.31	1.17	3.20			N/A	N/A

D - A14 South-East	1.79	0.03	0.28	1.79	5.02			N/A	N/A
E - Unnamed Road North-East	0.15	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.37	1.08	1.47	1.76			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - A14 South-East	0.75	0.07	0.74	1.44	1.44			N/A	N/A
E - Unnamed Road North-East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.08	0.81	1.23	1.23			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - A14 South-East	0.46	0.04	0.38	1.30	1.46			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	13.86	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms
[same as above]

Roundabout Geometry
[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	168	75.10
B - A14 North-West	888	128.00
C - A1156 South-West	1941	80.70
D - A14 South-East	2164	131.50
E - Unnamed Road North-East	2497	37.20

Bypass
[same as above]

Slope / Intercept / Capacity
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1817	100.000
B - A14 North-West		ONE HOUR	✓	1599	100.000
C - A1156 South-West		ONE HOUR	✓	462	100.000
D - A14 South-East		ONE HOUR	✓	625	100.000
E - Unnamed Road North-East		ONE HOUR	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1112	336	364	4
	B - A14 North-West	1470	6	113	0	11
	C - A1156 South-West	263	74	0	123	2
	D - A14 South-East	359	0	250	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	5	9	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	1	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	7.31	4.0	12.3	A	1667	2501

B - A14 North-West	0.16	4.83	0.2	0.5	A	1546	178
C - A1156 South-West	0.70	16.17	2.2	8.9	C	424	636
D - A14 South-East	0.93	53.94	9.7	47.5	F	573	860
E - Unnamed Road North-East	0.39	23.89	0.6	2.6	C	80	120

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1368	1368	342	0	1106	202	2593	0.528	1363	473	0.0	1.1	2.917	A
B - A14 North-West	1268	97	24	1106	0	578	1068	0.091	97	935	0.0	0.1	3.705	A
C - A1156 South-West	348	348	87	0	0	1166	1114	0.312	346	539	0.0	0.5	4.678	A
D - A14 South-East	470	470	118	0	0	1238	1134	0.415	468	369	0.0	0.7	5.382	A
E - Unnamed Road North-East	66	66	16	0	0	1542	550	0.120	65	24	0.0	0.1	7.413	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1633	1633	408	0	1321	242	2550	0.640	1631	565	1.1	1.8	3.905	A
B - A14 North-West	1514	116	29	1321	0	691	991	0.117	116	1118	0.1	0.1	4.114	A
C - A1156 South-West	415	415	104	0	0	1395	952	0.436	414	645	0.5	0.8	6.685	A
D - A14 South-East	562	562	140	0	0	1481	967	0.581	559	441	0.7	1.4	8.772	A
E - Unnamed Road North-East	79	79	20	0	0	1844	423	0.186	78	28	0.1	0.2	10.437	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2000	2000	500	0	1618	295	2493	0.802	1992	677	1.8	3.9	7.056	A
B - A14 North-West	1855	143	36	1618	0	830	898	0.159	142	1365	0.1	0.2	4.766	A
C - A1156 South-West	509	509	127	0	0	1691	742	0.686	503	780	0.8	2.1	14.798	B
D - A14 South-East	688	688	172	0	0	1809	742	0.927	662	538	1.4	7.8	37.213	E
E - Unnamed Road North-East	96	96	24	0	0	2252	251	0.384	95	34	0.2	0.6	22.877	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2000	2000	500	0	1618	297	2491	0.803	2000	691	3.9	4.0	7.312	A
B - A14 North-West	1855	143	36	1618	0	845	887	0.161	143	1372	0.2	0.2	4.833	A
C - A1156 South-West	509	509	127	0	0	1708	730	0.697	508	789	2.1	2.2	16.166	C
D - A14 South-East	688	688	172	0	0	1817	737	0.934	680	541	7.8	9.7	53.939	F
E - Unnamed Road North-East	96	96	24	0	0	2262	247	0.391	96	35	0.6	0.6	23.894	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1633	1633	408	0	1321	245	2547	0.641	1642	590	4.0	1.8	4.016	A
B - A14 North-West	1514	116	29	1321	0	718	973	0.120	117	1127	0.2	0.1	4.205	A
C - A1156 South-West	415	415	104	0	0	1425	931	0.446	421	662	2.2	0.8	7.135	A
D - A14 South-East	562	562	140	0	0	1493	959	0.586	595	445	9.7	1.4	10.744	B
E - Unnamed Road North-East	79	79	20	0	0	1858	417	0.189	80	29	0.6	0.2	10.730	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1368	1368	342	0	1106	204	2591	0.528	1370	478	1.8	1.1	2.957	A
B - A14 North-West	1268	97	24	1106	0	584	1064	0.092	98	940	0.1	0.1	3.725	A
C - A1156 South-West	348	348	87	0	0	1175	1108	0.314	349	544	0.8	0.5	4.753	A
D - A14 South-East	470	470	118	0	0	1245	1129	0.417	473	371	1.4	0.7	5.518	A
E - Unnamed Road North-East	66	66	16	0	0	1550	547	0.120	66	24	0.2	0.1	7.495	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.45	0.00	0.00	0.45	0.45			N/A	N/A
D - A14 South-East	0.70	0.30	0.96	1.39	1.45			N/A	N/A
E - Unnamed Road North-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.76	0.04	0.41	4.71	8.30			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	0.76	0.06	0.68	1.17	1.69			N/A	N/A
D - A14 South-East	1.36	0.04	0.43	3.52	5.78			N/A	N/A
E - Unnamed Road North-East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.90	0.03	0.29	3.90	12.27			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.08	0.03	0.29	2.08	8.15			N/A	N/A
D - A14 South-East	7.77	0.08	1.73	21.97	33.60			N/A	N/A
E - Unnamed Road North-East	0.60	0.03	0.26	0.60	0.74			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.99	0.03	0.27	3.99	3.99			N/A	N/A
B - A14 North-West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.22	0.03	0.29	2.22	8.91			N/A	N/A

D - A14 South-East	9.65	0.06	1.19	28.20	47.54			N/A	N/A
E - Unnamed Road North-East	0.62	0.03	0.34	1.42	2.57			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.07	1.02	4.27	6.09			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.82	0.06	0.66	1.47	1.91			N/A	N/A
D - A14 South-East	1.45	0.04	0.36	3.63	7.25			N/A	N/A
E - Unnamed Road North-East	0.24	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.04	0.41	2.83	4.70			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.46	0.03	0.35	1.38	1.48			N/A	N/A
D - A14 South-East	0.72	0.03	0.28	0.89	2.83			N/A	N/A
E - Unnamed Road North-East	0.14	0.03	0.25	0.45	0.48			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	6.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms
[same as above]

Roundabout Geometry
[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	118	75.10
B - A14 North-West	915	128.00
C - A1156 South-West	1719	80.70
D - A14 South-East	1958	131.50
E - Unnamed Road North-East	2309	37.20

Bypass
[same as above]

Slope / Intercept / Capacity
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1620	100.000
B - A14 North-West		ONE HOUR	✓	1288	100.000
C - A1156 South-West		ONE HOUR	✓	488	100.000
D - A14 South-East		ONE HOUR	✓	620	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	978	333	305	4
	B - A14 North-West	1202	4	42	0	40
	C - A1156 South-West	291	79	4	109	5
	D - A14 South-East	368	0	250	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	4	5	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	2	3	0	1	0
	D - A14 South-East	6	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	4.39	2.2	4.6	A	1487	2230

B - A14 North-West	0.11	4.79	0.1	0.5	A	1164	118
C - A1156 South-West	0.61	10.32	1.5	4.6	B	448	672
D - A14 South-East	0.73	14.12	2.6	10.7	B	569	853
E - Unnamed Road North-East	0.10	10.06	0.1	0.5	B	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1220	1220	305	0	905	154	2684	0.455	1217	499	0.0	0.8	2.448	A
B - A14 North-West	955	65	16	905	0	589	1019	0.063	64	815	0.0	0.1	3.770	A
C - A1156 South-West	368	368	92	0	0	1038	1256	0.293	366	474	0.0	0.4	4.038	A
D - A14 South-East	466	466	117	0	0	1048	1294	0.361	464	314	0.0	0.6	4.330	A
E - Unnamed Road North-East	28	28	7	0	0	1334	695	0.041	28	37	0.0	0.0	5.399	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1457	1457	364	0	1081	184	2650	0.550	1455	598	0.8	1.2	3.008	A
B - A14 North-West	1140	77	19	1081	0	705	946	0.082	77	975	0.1	0.1	4.142	A
C - A1156 South-West	439	439	110	0	0	1242	1101	0.399	438	567	0.4	0.7	5.426	A
D - A14 South-East	557	557	139	0	0	1253	1143	0.487	555	375	0.6	0.9	6.109	A
E - Unnamed Road North-East	34	34	8	0	0	1595	570	0.059	34	44	0.0	0.1	6.708	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1784	1784	446	0	1324	225	2605	0.685	1780	728	1.2	2.1	4.345	A
B - A14 North-West	1397	94	24	1324	0	859	849	0.111	94	1193	0.1	0.1	4.769	A
C - A1156 South-West	538	538	134	0	0	1517	891	0.604	535	692	0.7	1.5	10.012	B
D - A14 South-East	682	682	171	0	0	1533	938	0.727	676	459	0.9	2.5	13.402	B
E - Unnamed Road North-East	41	41	10	0	0	1951	401	0.103	41	54	0.1	0.1	9.993	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1784	1784	446	0	1324	226	2604	0.685	1784	734	2.1	2.2	4.390	A
B - A14 North-West	1397	94	24	1324	0	865	845	0.112	94	1196	0.1	0.1	4.795	A
C - A1156 South-West	538	538	134	0	0	1523	886	0.607	538	695	1.5	1.5	10.317	B
D - A14 South-East	682	682	171	0	0	1537	936	0.729	682	460	2.5	2.6	14.120	B
E - Unnamed Road North-East	41	41	10	0	0	1956	399	0.103	41	54	0.1	0.1	10.062	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1457	1457	364	0	1081	185	2649	0.550	1460	605	2.2	1.2	3.037	A
B - A14 North-West	1140	77	19	1081	0	713	941	0.082	77	980	0.1	0.1	4.171	A
C - A1156 South-West	439	439	110	0	0	1250	1094	0.401	442	571	1.5	0.7	5.549	A
D - A14 South-East	557	557	139	0	0	1258	1140	0.489	564	377	2.6	1.0	6.316	A
E - Unnamed Road North-East	34	34	8	0	0	1602	567	0.059	34	44	0.1	0.1	6.750	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1220	1220	305	0	905	155	2683	0.455	1222	503	1.2	0.8	2.467	A
B - A14 North-West	955	65	16	905	0	593	1016	0.064	65	819	0.1	0.1	3.783	A
C - A1156 South-West	368	368	92	0	0	1044	1252	0.294	369	477	0.7	0.4	4.082	A
D - A14 South-East	466	466	117	0	0	1052	1290	0.361	468	315	1.0	0.6	4.387	A
E - Unnamed Road North-East	28	28	7	0	0	1339	692	0.041	28	37	0.1	0.0	5.425	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
D - A14 South-East	0.56	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.05	0.47	2.93	4.58			N/A	N/A
B - A14 North-West	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.66	0.07	0.70	1.38	1.46			N/A	N/A
D - A14 South-East	0.94	0.05	0.63	1.86	2.68			N/A	N/A
E - Unnamed Road North-East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.14	0.03	0.26	2.14	2.14			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.48	0.03	0.27	1.48	1.53			N/A	N/A
D - A14 South-East	2.53	0.03	0.29	2.53	10.69			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.16	0.03	0.26	2.16	2.16			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	1.52	0.03	0.28	1.52	4.60			N/A	N/A

D - A14 South-East	2.61	0.03	0.28	2.61	8.48			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.21	1.15	1.81	2.13			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.68	0.07	0.74	1.38	1.46			N/A	N/A
D - A14 South-East	0.97	0.06	0.65	1.92	2.77			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.07	0.77	1.35	1.78			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.42	0.04	0.36	1.20	1.37			N/A	N/A
D - A14 South-East	0.57	0.04	0.36	1.20	2.00			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	7.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	761	128.00
C - A1156 South-West	1709	80.70
D - A14 South-East	1995	131.50
E - Unnamed Road North-East	2406	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1711	100.000
B - A14 North-West		ONE HOUR	✓	1469	100.000
C - A1156 South-West		ONE HOUR	✓	485	100.000
D - A14 South-East		ONE HOUR	✓	703	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1031	288	390	1
	B - A14 North-West	1356	3	89	0	21
	C - A1156 South-West	232	77	0	147	28
	D - A14 South-East	368	0	336	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	4	2	1	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	5.10	2.6	5.8	A	1570	2356

B - A14 North-West	0.14	4.54	0.2	0.5	A	1357	156
C - A1156 South-West	0.59	9.67	1.4	4.4	A	445	667
D - A14 South-East	0.81	19.97	4.1	21.0	C	645	968
E - Unnamed Road North-East	0.08	11.69	0.1	0.5	B	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1288	1288	322	0	1021	216	2703	0.477	1285	450	0.0	0.9	2.533	A
B - A14 North-West	1113	85	21	1021	0	582	1100	0.077	85	848	0.0	0.1	3.545	A
C - A1156 South-West	365	365	91	0	0	1066	1283	0.284	363	539	0.0	0.4	3.910	A
D - A14 South-East	529	529	132	0	0	1078	1309	0.404	527	404	0.0	0.7	4.587	A
E - Unnamed Road North-East	19	19	5	0	0	1463	630	0.031	19	38	0.0	0.0	5.896	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	1539	385	0	1219	259	2655	0.579	1537	539	0.9	1.4	3.212	A
B - A14 North-West	1329	102	25	1219	0	696	1024	0.099	102	1014	0.1	0.1	3.904	A
C - A1156 South-West	436	436	109	0	0	1275	1124	0.388	435	645	0.4	0.6	5.216	A
D - A14 South-East	632	632	158	0	0	1290	1159	0.546	630	483	0.7	1.2	6.786	A
E - Unnamed Road North-East	23	23	6	0	0	1750	506	0.046	23	45	0.0	0.0	7.450	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1884	1884	471	0	1493	316	2591	0.727	1879	654	1.4	2.6	5.021	A
B - A14 North-West	1628	125	31	1493	0	846	923	0.135	124	1240	0.1	0.2	4.507	A
C - A1156 South-West	533	533	133	0	0	1556	911	0.585	530	785	0.6	1.4	9.376	A
D - A14 South-East	774	774	194	0	0	1578	954	0.811	763	591	1.2	3.9	17.944	C
E - Unnamed Road North-East	28	28	7	0	0	2140	339	0.084	28	55	0.0	0.1	11.588	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1884	1884	471	0	1493	317	2590	0.728	1884	661	2.6	2.6	5.098	A
B - A14 North-West	1628	125	31	1493	0	854	918	0.136	124	1243	0.2	0.2	4.538	A
C - A1156 South-West	533	533	133	0	0	1564	905	0.589	533	791	1.4	1.4	9.672	A
D - A14 South-East	774	774	194	0	0	1582	951	0.814	773	593	3.9	4.1	19.972	C
E - Unnamed Road North-East	28	28	7	0	0	2146	336	0.084	28	55	0.1	0.1	11.694	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	1539	385	0	1219	260	2653	0.580	1544	548	2.6	1.4	3.259	A
B - A14 North-West	1329	102	25	1219	0	706	1016	0.100	102	1019	0.2	0.1	3.938	A
C - A1156 South-West	436	436	109	0	0	1287	1115	0.391	439	653	1.4	0.6	5.344	A
D - A14 South-East	632	632	158	0	0	1296	1154	0.548	644	486	4.1	1.2	7.200	A
E - Unnamed Road North-East	23	23	6	0	0	1759	503	0.046	23	45	0.1	0.0	7.513	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1288	1288	322	0	1021	218	2701	0.477	1290	454	1.4	0.9	2.556	A
B - A14 North-West	1113	85	21	1021	0	586	1097	0.078	85	852	0.1	0.1	3.557	A
C - A1156 South-West	365	365	91	0	0	1072	1278	0.285	366	543	0.6	0.4	3.950	A
D - A14 South-East	529	529	132	0	0	1083	1305	0.406	532	406	1.2	0.7	4.664	A
E - Unnamed Road North-East	19	19	5	0	0	1470	627	0.031	19	38	0.0	0.0	5.927	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
D - A14 South-East	0.67	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.37	0.04	0.43	3.54	5.76			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.63	0.07	0.69	1.35	1.44			N/A	N/A
D - A14 South-East	1.18	0.05	0.48	2.84	4.36			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.61	0.03	0.27	2.61	2.61			N/A	N/A
B - A14 North-West	0.16	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.38	0.03	0.27	1.38	1.38			N/A	N/A
D - A14 South-East	3.89	0.03	0.34	8.18	21.01			N/A	N/A
E - Unnamed Road North-East	0.09	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.64	0.03	0.26	2.64	2.64			N/A	N/A
B - A14 North-West	0.16	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.41	0.03	0.28	1.41	4.35			N/A	N/A

D - A14 South-East	4.12	0.03	0.30	4.23	18.82			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.12	1.18	2.46	3.06			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.65	0.07	0.75	1.36	1.44			N/A	N/A
D - A14 South-East	1.23	0.04	0.45	3.03	4.85			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.06	0.64	1.80	2.55			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.40	0.04	0.35	1.16	1.33			N/A	N/A
D - A14 South-East	0.69	0.03	0.32	1.47	3.24			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	3.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	72	75.10
B - A14 North-West	258	128.00
C - A1156 South-West	916	80.70
D - A14 South-East	855	131.50
E - Unnamed Road North-East	1047	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	894	100.000
B - A14 North-West		ONE HOUR	✓	728	100.000
C - A1156 South-West		ONE HOUR	✓	60	100.000
D - A14 South-East		ONE HOUR	✓	254	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	618	77	198	1
	B - A14 North-West	659	8	51	0	11
	C - A1156 South-West	52	7	0	0	1
	D - A14 South-East	166	0	77	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	9	0
	B - A14 North-West	9	88	94	0	11
	C - A1156 South-West	41	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.11	0.6	2.7	A	821	1231

B - A14 North-West	0.10	5.03	0.1	0.5	A	428	96
C - A1156 South-West	0.06	3.73	0.1	0.5	A	55	83
D - A14 South-East	0.19	3.08	0.2	0.5	A	233	349
E - Unnamed Road North-East	0.04	4.10	0.0	0.5	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	673	673	168	0	496	62	2741	0.246	672	170	0.0	0.3	1.740	A
B - A14 North-West	351	52	13	496	0	180	831	0.063	52	490	0.0	0.1	4.621	A
C - A1156 South-West	45	45	11	0	0	625	1228	0.037	45	154	0.0	0.0	3.044	A
D - A14 South-East	191	191	48	0	0	588	1723	0.111	191	149	0.0	0.1	2.349	A
E - Unnamed Road North-East	22	22	5	0	0	715	1154	0.019	22	18	0.0	0.0	3.178	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	804	804	201	0	592	74	2719	0.296	804	204	0.3	0.4	1.879	A
B - A14 North-West	420	62	16	592	0	215	814	0.077	62	586	0.1	0.1	4.787	A
C - A1156 South-West	54	54	14	0	0	747	1144	0.047	54	184	0.0	0.0	3.300	A
D - A14 South-East	228	228	57	0	0	703	1606	0.142	228	179	0.1	0.2	2.611	A
E - Unnamed Road North-East	26	26	7	0	0	855	1051	0.025	26	22	0.0	0.0	3.510	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	985	985	246	0	725	91	2689	0.366	984	250	0.4	0.6	2.112	A
B - A14 North-West	514	77	19	725	0	264	792	0.097	76	718	0.1	0.1	5.032	A
C - A1156 South-West	66	66	17	0	0	915	1031	0.064	66	225	0.0	0.1	3.731	A
D - A14 South-East	279	279	70	0	0	861	1447	0.193	279	219	0.2	0.2	3.083	A
E - Unnamed Road North-East	32	32	8	0	0	1048	911	0.035	32	27	0.0	0.0	4.097	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	985	985	246	0	725	91	2688	0.366	985	250	0.6	0.6	2.112	A
B - A14 North-West	514	77	19	725	0	264	792	0.097	77	718	0.1	0.1	5.033	A
C - A1156 South-West	66	66	17	0	0	916	1030	0.064	66	225	0.1	0.1	3.733	A
D - A14 South-East	279	279	70	0	0	862	1446	0.193	279	219	0.2	0.2	3.084	A
E - Unnamed Road North-East	32	32	8	0	0	1048	910	0.035	32	27	0.0	0.0	4.100	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	804	804	201	0	592	74	2718	0.296	805	204	0.6	0.4	1.883	A
B - A14 North-West	420	62	16	592	0	216	814	0.077	63	587	0.1	0.1	4.789	A
C - A1156 South-West	54	54	14	0	0	748	1144	0.047	54	184	0.1	0.0	3.306	A
D - A14 South-East	228	228	57	0	0	704	1605	0.142	228	179	0.2	0.2	2.614	A
E - Unnamed Road North-East	26	26	7	0	0	857	1050	0.025	26	22	0.0	0.0	3.514	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	673	673	168	0	496	62	2740	0.246	674	171	0.4	0.3	1.741	A
B - A14 North-West	351	52	13	496	0	181	831	0.063	52	491	0.1	0.1	4.627	A
C - A1156 South-West	45	45	11	0	0	627	1226	0.037	45	154	0.0	0.0	3.047	A
D - A14 South-East	191	191	48	0	0	589	1721	0.111	191	150	0.2	0.1	2.352	A
E - Unnamed Road North-East	22	22	5	0	0	717	1153	0.019	22	18	0.0	0.0	3.183	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D - A14 South-East	0.12	0.00	0.00	0.12	0.12			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A14 North-West	0.08	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.16	0.00	0.00	0.16	0.16			N/A	N/A
E - Unnamed Road North-East	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - A14 North-West	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C - A1156 South-West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
D - A14 South-East	0.24	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.30	1.36	2.71			N/A	N/A
B - A14 North-West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C - A1156 South-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A

D - A14 South-East	0.24	0.03	0.26	0.46	0.49			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A14 North-West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A1156 South-West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D - A14 South-East	0.17	0.00	0.00	0.17	0.17			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D - A14 South-East	0.13	0.00	0.00	0.13	0.13			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	7.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	650	128.00
C - A1156 South-West	1750	80.70
D - A14 South-East	1697	131.50
E - Unnamed Road North-East	1946	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1510	100.000
B - A14 North-West		ONE HOUR	✓	1384	100.000
C - A1156 South-West		ONE HOUR	✓	336	100.000
D - A14 South-East		ONE HOUR	✓	550	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1054	192	260	4
	B - A14 North-West	1245	2	105	0	32
	C - A1156 South-West	216	52	0	62	6
	D - A14 South-East	339	3	193	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	45	0	19
	C - A1156 South-West	27	12	0	8	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.43	2.0	4.0	A	1386	2078

B - A14 North-West	0.21	6.35	0.3	1.2	A	1022	191
C - A1156 South-West	0.54	11.41	1.2	4.7	B	308	462
D - A14 South-East	0.70	13.87	2.3	8.3	B	505	757
E - Unnamed Road North-East	0.15	11.22	0.2	0.5	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1137	1137	284	0	937	166	2582	0.440	1134	417	0.0	0.8	2.481	A
B - A14 North-West	838	104	26	937	0	480	845	0.123	104	866	0.0	0.1	4.853	A
C - A1156 South-West	253	253	63	0	0	1095	1009	0.251	252	370	0.0	0.3	4.747	A
D - A14 South-East	414	414	104	0	0	1053	1263	0.328	412	243	0.0	0.5	4.220	A
E - Unnamed Road North-East	38	38	9	0	0	1258	686	0.055	38	42	0.0	0.1	5.554	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	1357	339	0	1119	199	2537	0.535	1356	500	0.8	1.1	3.044	A
B - A14 North-West	1001	125	31	1119	0	574	792	0.157	124	1036	0.1	0.2	5.389	A
C - A1156 South-West	302	302	76	0	0	1310	873	0.346	301	443	0.3	0.5	6.292	A
D - A14 South-East	495	495	124	0	0	1259	1095	0.451	493	291	0.5	0.8	5.964	A
E - Unnamed Road North-East	45	45	11	0	0	1505	555	0.081	45	50	0.1	0.1	7.051	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1663	1663	416	0	1371	243	2477	0.671	1659	608	1.1	2.0	4.385	A
B - A14 North-West	1226	152	38	1371	0	700	722	0.211	152	1268	0.2	0.3	6.316	A
C - A1156 South-West	370	370	92	0	0	1600	689	0.537	368	541	0.5	1.1	11.121	B
D - A14 South-East	606	606	151	0	0	1541	867	0.699	600	355	0.8	2.2	13.221	B
E - Unnamed Road North-East	55	55	14	0	0	1841	378	0.146	55	61	0.1	0.2	11.125	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1663	1663	416	0	1371	244	2475	0.672	1662	613	2.0	2.0	4.428	A
B - A14 North-West	1226	152	38	1371	0	705	719	0.212	152	1271	0.3	0.3	6.354	A
C - A1156 South-West	370	370	92	0	0	1606	685	0.540	370	543	1.1	1.2	11.415	B
D - A14 South-East	606	606	151	0	0	1544	864	0.701	605	356	2.2	2.3	13.873	B
E - Unnamed Road North-East	55	55	14	0	0	1845	376	0.147	55	62	0.2	0.2	11.222	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	1357	339	0	1119	200	2535	0.535	1361	506	2.0	1.2	3.076	A
B - A14 North-West	1001	125	31	1119	0	582	788	0.158	125	1041	0.3	0.2	5.429	A
C - A1156 South-West	302	302	76	0	0	1318	867	0.348	305	446	1.2	0.5	6.423	A
D - A14 South-East	495	495	124	0	0	1264	1091	0.453	500	292	2.3	0.8	6.146	A
E - Unnamed Road North-East	45	45	11	0	0	1511	552	0.082	45	51	0.2	0.1	7.106	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1137	1137	284	0	937	167	2580	0.441	1138	421	1.2	0.8	2.500	A
B - A14 North-West	838	104	26	937	0	484	843	0.124	104	870	0.2	0.1	4.878	A
C - A1156 South-West	253	253	63	0	0	1100	1005	0.252	254	372	0.5	0.3	4.795	A
D - A14 South-East	414	414	104	0	0	1057	1259	0.329	416	244	0.8	0.5	4.273	A
E - Unnamed Road North-East	38	38	9	0	0	1263	683	0.055	38	42	0.1	0.1	5.586	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - A14 South-East	0.48	0.00	0.00	0.48	0.48			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.05	0.49	2.69	3.99			N/A	N/A
B - A14 North-West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A1156 South-West	0.52	0.05	0.57	1.31	1.41			N/A	N/A
D - A14 South-East	0.81	0.06	0.64	1.48	1.92			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.03	0.26	2.01	2.01			N/A	N/A
B - A14 North-West	0.27	0.03	0.25	0.46	0.48			N/A	N/A
C - A1156 South-West	1.13	0.03	0.26	1.13	1.13			N/A	N/A
D - A14 South-East	2.21	0.03	0.29	2.21	8.33			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.03	0.03	0.26	2.03	2.03			N/A	N/A
B - A14 North-West	0.27	0.03	0.30	0.86	1.19			N/A	N/A
C - A1156 South-West	1.16	0.03	0.29	1.27	4.73			N/A	N/A

D - A14 South-East	2.28	0.03	0.28	2.28	7.76			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.23	1.11	1.69	1.92			N/A	N/A
B - A14 North-West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A1156 South-West	0.54	0.05	0.56	1.31	1.41			N/A	N/A
D - A14 South-East	0.84	0.06	0.66	1.55	1.98			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.07	0.76	1.09	1.61			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.34	0.03	0.30	0.92	1.21			N/A	N/A
D - A14 South-East	0.49	0.04	0.36	1.43	1.61			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	18.42	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	182	75.10
B - A14 North-West	946	128.00
C - A1156 South-West	1978	80.70
D - A14 South-East	2187	131.50
E - Unnamed Road North-East	2519	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1797	100.000
B - A14 North-West		ONE HOUR	✓	1595	100.000
C - A1156 South-West		ONE HOUR	✓	494	100.000
D - A14 South-East		ONE HOUR	✓	626	100.000
E - Unnamed Road North-East		ONE HOUR	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1109	316	367	4
	B - A14 North-West	1438	6	141	0	11
	C - A1156 South-West	318	74	0	100	2
	D - A14 South-East	360	0	250	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	5	10	0
	B - A14 North-West	9	67	20	0	0
	C - A1156 South-West	23	5	0	1	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	7.86	4.2	14.7	A	1649	2473

B - A14 North-West	0.25	6.75	0.3	1.4	A	1344	217
C - A1156 South-West	0.82	28.81	4.1	21.8	D	453	680
D - A14 South-East	0.97	70.82	13.1	55.3	F	574	861
E - Unnamed Road North-East	0.40	25.24	0.7	2.8	D	80	120

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1353	1353	338	0	1082	206	2547	0.531	1348	514	0.0	1.1	2.993	A
B - A14 North-West	1103	119	30	1082	0	602	874	0.136	118	932	0.0	0.2	4.757	A
C - A1156 South-West	372	372	93	0	0	1165	1007	0.369	370	545	0.0	0.6	5.627	A
D - A14 South-East	471	471	118	0	0	1242	1115	0.422	468	354	0.0	0.7	5.538	A
E - Unnamed Road North-East	66	66	16	0	0	1530	544	0.121	65	24	0.0	0.1	7.519	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1615	1615	404	0	1292	246	2499	0.646	1613	615	1.1	1.8	4.047	A
B - A14 North-West	1317	142	35	1292	0	720	802	0.177	141	1115	0.2	0.2	5.448	A
C - A1156 South-West	444	444	111	0	0	1393	861	0.516	442	652	0.6	1.0	8.555	A
D - A14 South-East	563	563	141	0	0	1486	946	0.595	560	423	0.7	1.4	9.254	A
E - Unnamed Road North-East	79	79	20	0	0	1831	416	0.189	78	28	0.1	0.2	10.663	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1978	1978	495	0	1583	299	2438	0.812	1969	731	1.8	4.1	7.535	A
B - A14 North-West	1613	173	43	1583	0	857	718	0.241	173	1360	0.2	0.3	6.600	A
C - A1156 South-West	544	544	136	0	0	1684	675	0.806	534	786	1.0	3.6	23.883	C
D - A14 South-East	689	689	172	0	0	1814	718	0.960	656	515	1.4	9.7	44.604	E
E - Unnamed Road North-East	96	96	24	0	0	2234	243	0.396	95	34	0.2	0.6	23.998	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1978	1978	495	0	1583	302	2435	0.813	1978	748	4.1	4.2	7.860	A
B - A14 North-West	1613	173	43	1583	0	876	707	0.245	173	1368	0.3	0.3	6.751	A
C - A1156 South-West	544	544	136	0	0	1702	664	0.820	542	796	3.6	4.1	28.805	D
D - A14 South-East	689	689	172	0	0	1822	712	0.968	676	519	9.7	13.1	70.821	F
E - Unnamed Road North-East	96	96	24	0	0	2245	239	0.404	96	34	0.6	0.7	25.237	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1615	1615	404	0	1292	251	2494	0.648	1625	652	4.2	1.9	4.183	A
B - A14 North-West	1317	142	35	1292	0	761	777	0.182	142	1126	0.3	0.2	5.668	A
C - A1156 South-West	444	444	111	0	0	1432	837	0.531	456	675	4.1	1.2	9.728	A
D - A14 South-East	563	563	141	0	0	1498	937	0.600	609	429	13.1	1.5	12.494	B
E - Unnamed Road North-East	79	79	20	0	0	1846	409	0.192	80	30	0.7	0.2	11.008	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1353	1353	338	0	1082	208	2544	0.532	1356	521	1.9	1.1	3.034	A
B - A14 North-West	1103	119	30	1082	0	610	869	0.136	119	938	0.2	0.2	4.799	A
C - A1156 South-West	372	372	93	0	0	1174	1001	0.371	374	550	1.2	0.6	5.761	A
D - A14 South-East	471	471	118	0	0	1249	1110	0.424	474	356	1.5	0.7	5.689	A
E - Unnamed Road North-East	66	66	16	0	0	1539	540	0.122	66	24	0.2	0.1	7.611	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A1156 South-West	0.58	0.55	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.72	0.18	0.92	1.39	1.44			N/A	N/A
E - Unnamed Road North-East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.04	0.41	4.83	8.57			N/A	N/A
B - A14 North-West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A1156 South-West	1.04	0.05	0.56	2.29	3.34			N/A	N/A
D - A14 South-East	1.43	0.04	0.42	3.75	6.32			N/A	N/A
E - Unnamed Road North-East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.13	0.03	0.29	4.13	14.71			N/A	N/A
B - A14 North-West	0.32	0.03	0.25	0.46	0.48			N/A	N/A
C - A1156 South-West	3.64	0.04	0.37	8.85	19.54			N/A	N/A
D - A14 South-East	9.71	0.14	3.95	25.69	36.61			N/A	N/A
E - Unnamed Road North-East	0.63	0.03	0.26	0.63	0.91			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.23	0.03	0.27	4.23	4.23			N/A	N/A
B - A14 North-West	0.32	0.03	0.32	1.10	1.37			N/A	N/A
C - A1156 South-West	4.11	0.03	0.33	7.57	21.80			N/A	N/A

D - A14 South-East	13.09	0.11	3.76	36.89	55.27			N/A	N/A
E - Unnamed Road North-East	0.66	0.03	0.35	1.52	2.75			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.06	0.97	4.53	6.57			N/A	N/A
B - A14 North-West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A1156 South-West	1.16	0.04	0.44	2.85	4.54			N/A	N/A
D - A14 South-East	1.54	0.03	0.35	3.70	7.94			N/A	N/A
E - Unnamed Road North-East	0.24	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.04	0.40	2.89	4.94			N/A	N/A
B - A14 North-West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A1156 South-West	0.60	0.03	0.31	1.08	2.79			N/A	N/A
D - A14 South-East	0.75	0.03	0.28	0.75	2.45			N/A	N/A
E - Unnamed Road North-East	0.14	0.03	0.25	0.45	0.48			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	7.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	116	75.10
B - A14 North-West	940	128.00
C - A1156 South-West	1816	80.70
D - A14 South-East	2071	131.50
E - Unnamed Road North-East	2422	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1593	100.000
B - A14 North-West		ONE HOUR	✓	1272	100.000
C - A1156 South-West		ONE HOUR	✓	524	100.000
D - A14 South-East		ONE HOUR	✓	620	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	954	323	312	4
	B - A14 North-West	1171	4	57	0	40
	C - A1156 South-West	334	79	4	102	5
	D - A14 South-East	369	0	249	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	11	4	7	33
	B - A14 North-West	6	0	30	0	12
	C - A1156 South-West	15	3	0	1	0
	D - A14 South-East	6	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	4.64	2.2	4.7	A	1462	2193

B - A14 North-West	0.16	6.13	0.2	0.5	A	1029	139
C - A1156 South-West	0.70	14.34	2.2	8.3	B	481	722
D - A14 South-East	0.73	14.39	2.7	11.1	B	569	853
E - Unnamed Road North-East	0.10	10.18	0.1	0.5	B	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1200	1200	300	0	882	160	2617	0.458	1196	532	0.0	0.8	2.526	A
B - A14 North-West	844	76	19	882	0	616	866	0.088	76	797	0.0	0.1	4.551	A
C - A1156 South-West	395	395	99	0	0	1021	1162	0.340	393	477	0.0	0.5	4.670	A
D - A14 South-East	466	466	117	0	0	1033	1282	0.364	464	314	0.0	0.6	4.387	A
E - Unnamed Road North-East	28	28	7	0	0	1319	684	0.041	28	37	0.0	0.0	5.485	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1432	1432	358	0	1053	191	2581	0.555	1431	637	0.8	1.2	3.127	A
B - A14 North-West	1008	91	23	1053	0	738	796	0.114	91	954	0.1	0.1	5.105	A
C - A1156 South-West	471	471	118	0	0	1221	1021	0.462	470	570	0.5	0.8	6.517	A
D - A14 South-East	557	557	139	0	0	1236	1135	0.491	555	375	0.6	1.0	6.199	A
E - Unnamed Road North-East	34	34	8	0	0	1578	563	0.060	34	44	0.0	0.1	6.806	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1754	1754	439	0	1290	233	2532	0.693	1751	775	1.2	2.2	4.586	A
B - A14 North-West	1234	111	28	1290	0	898	703	0.158	111	1166	0.1	0.2	6.076	A
C - A1156 South-West	577	577	144	0	0	1492	832	0.694	572	696	0.8	2.2	13.607	B
D - A14 South-East	682	682	171	0	0	1512	934	0.731	676	459	1.0	2.6	13.630	B
E - Unnamed Road North-East	41	41	10	0	0	1930	397	0.104	41	54	0.1	0.1	10.106	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1754	1754	439	0	1290	235	2530	0.693	1754	782	2.2	2.2	4.638	A
B - A14 North-West	1234	111	28	1290	0	906	698	0.159	111	1170	0.2	0.2	6.130	A
C - A1156 South-West	577	577	144	0	0	1498	827	0.698	577	700	2.2	2.2	14.341	B
D - A14 South-East	682	682	171	0	0	1516	931	0.733	682	460	2.6	2.7	14.392	B
E - Unnamed Road North-East	41	41	10	0	0	1935	395	0.105	41	54	0.1	0.1	10.181	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1432	1432	358	0	1053	193	2579	0.556	1436	646	2.2	1.3	3.163	A
B - A14 North-West	1008	91	23	1053	0	748	789	0.115	91	958	0.2	0.1	5.156	A
C - A1156 South-West	471	471	118	0	0	1230	1015	0.464	477	575	2.2	0.9	6.754	A
D - A14 South-East	557	557	139	0	0	1241	1131	0.492	564	378	2.7	1.0	6.419	A
E - Unnamed Road North-East	34	34	8	0	0	1585	559	0.060	34	44	0.1	0.1	6.854	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1200	1200	300	0	882	161	2616	0.459	1201	537	1.3	0.9	2.547	A
B - A14 North-West	844	76	19	882	0	622	863	0.088	76	801	0.1	0.1	4.575	A
C - A1156 South-West	395	395	99	0	0	1026	1158	0.341	396	480	0.9	0.5	4.735	A
D - A14 South-East	466	466	117	0	0	1038	1279	0.365	468	315	1.0	0.6	4.449	A
E - Unnamed Road North-East	28	28	7	0	0	1325	681	0.041	28	37	0.1	0.0	5.512	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.51	0.51	1.00	1.40	1.45			N/A	N/A
D - A14 South-East	0.57	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.05	0.47	3.00	4.74			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	0.85	0.06	0.70	1.52	1.94			N/A	N/A
D - A14 South-East	0.95	0.05	0.63	1.90	2.74			N/A	N/A
E - Unnamed Road North-East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.22	0.03	0.26	2.22	2.22			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.17	0.03	0.29	2.17	8.29			N/A	N/A
D - A14 South-East	2.57	0.03	0.30	2.57	11.11			N/A	N/A
E - Unnamed Road North-East	0.11	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.24	0.03	0.26	2.24	2.24			N/A	N/A
B - A14 North-West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.24	0.03	0.28	2.24	7.57			N/A	N/A

D - A14 South-East	2.66	0.03	0.29	2.66	8.77			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.18	1.15	1.89	2.41			N/A	N/A
B - A14 North-West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A1156 South-West	0.88	0.06	0.68	1.66	2.20			N/A	N/A
D - A14 South-East	0.98	0.05	0.64	1.96	2.85			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.06	0.75	1.46	1.88			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.52	0.04	0.36	1.47	1.72			N/A	N/A
D - A14 South-East	0.58	0.04	0.35	1.24	2.09			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	7.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	773	128.00
C - A1156 South-West	1718	80.70
D - A14 South-East	2020	131.50
E - Unnamed Road North-East	2453	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1645	100.000
B - A14 North-West		ONE HOUR	✓	1461	100.000
C - A1156 South-West		ONE HOUR	✓	488	100.000
D - A14 South-East		ONE HOUR	✓	709	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	994	257	392	1
	B - A14 North-West	1345	3	92	0	21
	C - A1156 South-West	244	77	0	138	28
	D - A14 South-East	369	0	341	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	2	2	0
	B - A14 North-West	4	33	3	0	11
	C - A1156 South-West	5	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.91	2.4	5.2	A	1510	2265

B - A14 North-West	0.14	4.77	0.2	0.5	A	1320	160
C - A1156 South-West	0.60	10.11	1.5	4.5	B	447	671
D - A14 South-East	0.80	17.72	3.7	18.5	C	651	976
E - Unnamed Road North-East	0.08	10.93	0.1	0.5	B	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1239	1239	310	0	1013	212	2654	0.467	1235	460	0.0	0.9	2.531	A
B - A14 North-West	1083	87	22	1013	0	585	1064	0.082	87	820	0.0	0.1	3.686	A
C - A1156 South-West	367	367	92	0	0	1039	1257	0.292	365	522	0.0	0.4	4.031	A
D - A14 South-East	534	534	133	0	0	1030	1328	0.402	531	399	0.0	0.7	4.505	A
E - Unnamed Road North-East	19	19	5	0	0	1409	641	0.030	19	38	0.0	0.0	5.786	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1479	1479	370	0	1209	253	2608	0.567	1478	550	0.9	1.3	3.181	A
B - A14 North-West	1293	104	26	1209	0	699	988	0.106	104	981	0.1	0.1	4.075	A
C - A1156 South-West	438	438	110	0	0	1243	1104	0.397	437	624	0.4	0.7	5.395	A
D - A14 South-East	638	638	159	0	0	1232	1182	0.539	636	477	0.7	1.2	6.561	A
E - Unnamed Road North-East	23	23	6	0	0	1686	522	0.044	23	45	0.0	0.0	7.214	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1812	1812	453	0	1481	310	2546	0.712	1807	669	1.3	2.4	4.844	A
B - A14 North-West	1583	128	32	1481	0	851	887	0.144	128	1199	0.1	0.2	4.738	A
C - A1156 South-West	537	537	134	0	0	1517	898	0.598	534	761	0.7	1.4	9.800	A
D - A14 South-East	781	781	195	0	0	1506	984	0.793	771	583	1.2	3.5	16.237	C
E - Unnamed Road North-East	28	28	7	0	0	2062	360	0.079	28	55	0.0	0.1	10.845	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1812	1812	453	0	1481	311	2544	0.712	1812	675	2.4	2.4	4.910	A
B - A14 North-West	1583	128	32	1481	0	858	882	0.145	128	1203	0.2	0.2	4.770	A
C - A1156 South-West	537	537	134	0	0	1524	892	0.602	537	766	1.4	1.5	10.113	B
D - A14 South-East	781	781	195	0	0	1510	982	0.795	780	585	3.5	3.7	17.716	C
E - Unnamed Road North-East	28	28	7	0	0	2067	358	0.079	28	55	0.1	0.1	10.930	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1479	1479	370	0	1209	255	2606	0.568	1484	559	2.4	1.3	3.222	A
B - A14 North-West	1293	104	26	1209	0	709	981	0.106	105	985	0.2	0.1	4.108	A
C - A1156 South-West	438	438	110	0	0	1253	1096	0.400	442	631	1.5	0.7	5.525	A
D - A14 South-East	638	638	159	0	0	1237	1179	0.541	648	480	3.7	1.2	6.903	A
E - Unnamed Road North-East	23	23	6	0	0	1693	519	0.045	23	45	0.1	0.0	7.270	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1239	1239	310	0	1013	213	2652	0.467	1241	464	1.3	0.9	2.552	A
B - A14 North-West	1083	87	22	1013	0	589	1061	0.082	88	824	0.1	0.1	3.701	A
C - A1156 South-West	367	367	92	0	0	1045	1252	0.293	368	525	0.7	0.4	4.076	A
D - A14 South-East	534	534	133	0	0	1034	1325	0.403	536	401	1.2	0.7	4.576	A
E - Unnamed Road North-East	19	19	5	0	0	1416	639	0.030	19	38	0.0	0.0	5.817	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
D - A14 South-East	0.67	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.04	0.45	3.29	5.25			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.65	0.07	0.71	1.37	1.45			N/A	N/A
D - A14 South-East	1.15	0.05	0.49	2.72	4.06			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.42	0.03	0.27	2.42	2.42			N/A	N/A
B - A14 North-West	0.17	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.45	0.03	0.27	1.45	1.45			N/A	N/A
D - A14 South-East	3.53	0.03	0.33	6.24	18.52			N/A	N/A
E - Unnamed Road North-East	0.08	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.45	0.03	0.26	2.45	2.45			N/A	N/A
B - A14 North-West	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.48	0.03	0.28	1.48	4.48			N/A	N/A

D - A14 South-East	3.70	0.03	0.30	3.70	15.31			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.14	1.17	2.12	2.77			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.67	0.07	0.75	1.38	1.45			N/A	N/A
D - A14 South-East	1.20	0.05	0.47	2.88	4.46			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.06	0.69	1.65	2.17			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.42	0.04	0.36	1.19	1.36			N/A	N/A
D - A14 South-East	0.68	0.03	0.33	1.53	3.05			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	918	100.000
B - A14 North-West		ONE HOUR	✓	607	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	240	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	636	77	204	1
	B - A14 North-West	585	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	158	0	71	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.00	0.6	2.6	A	843	1264

B - A14 North-West	0.02	3.43	0.0	0.5	A	450	30
C - A1156 South-West	0.03	2.73	0.0	0.5	A	35	53
D - A14 South-East	0.17	2.88	0.2	0.5	A	220	331
E - Unnamed Road North-East	0.03	3.89	0.0	0.5	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	691	691	173	0	440	26	2825	0.245	690	148	0.0	0.3	1.686	A
B - A14 North-West	369	16	4	440	0	158	1114	0.015	16	504	0.0	0.0	3.278	A
C - A1156 South-West	29	29	7	0	0	633	1627	0.018	29	113	0.0	0.0	2.252	A
D - A14 South-East	181	181	45	0	0	566	1767	0.102	180	154	0.0	0.1	2.269	A
E - Unnamed Road North-East	23	23	6	0	0	697	1186	0.019	23	19	0.0	0.0	3.094	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	826	826	206	0	526	32	2817	0.293	825	177	0.3	0.4	1.806	A
B - A14 North-West	441	20	5	526	0	189	1097	0.018	20	603	0.0	0.0	3.342	A
C - A1156 South-West	34	34	9	0	0	758	1515	0.023	34	135	0.0	0.0	2.430	A
D - A14 South-East	216	216	54	0	0	677	1661	0.130	216	184	0.1	0.1	2.490	A
E - Unnamed Road North-East	27	27	7	0	0	834	1090	0.025	27	23	0.0	0.0	3.385	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1011	1011	253	0	644	39	2808	0.360	1010	217	0.4	0.6	2.003	A
B - A14 North-West	540	24	6	644	0	232	1072	0.022	24	738	0.0	0.0	3.433	A
C - A1156 South-West	42	42	11	0	0	928	1362	0.031	42	166	0.0	0.0	2.726	A
D - A14 South-East	265	265	66	0	0	829	1516	0.175	264	225	0.1	0.2	2.876	A
E - Unnamed Road North-East	33	33	8	0	0	1021	959	0.035	33	28	0.0	0.0	3.886	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1011	1011	253	0	644	39	2808	0.360	1011	217	0.6	0.6	2.003	A
B - A14 North-West	540	24	6	644	0	232	1072	0.022	24	739	0.0	0.0	3.434	A
C - A1156 South-West	42	42	11	0	0	928	1362	0.031	42	166	0.0	0.0	2.727	A
D - A14 South-East	265	265	66	0	0	830	1515	0.175	265	225	0.2	0.2	2.877	A
E - Unnamed Road North-East	33	33	8	0	0	1022	959	0.035	33	28	0.0	0.0	3.888	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	826	826	206	0	526	32	2817	0.293	826	178	0.6	0.4	1.810	A
B - A14 North-West	441	20	5	526	0	190	1096	0.018	20	604	0.0	0.0	3.345	A
C - A1156 South-West	34	34	9	0	0	759	1514	0.023	34	135	0.0	0.0	2.434	A
D - A14 South-East	216	216	54	0	0	678	1660	0.130	216	184	0.2	0.2	2.494	A
E - Unnamed Road North-East	27	27	7	0	0	835	1090	0.025	27	23	0.0	0.0	3.390	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	691	691	173	0	440	27	2824	0.245	692	149	0.4	0.3	1.687	A
B - A14 North-West	369	16	4	440	0	159	1114	0.015	16	505	0.0	0.0	3.282	A
C - A1156 South-West	29	29	7	0	0	635	1625	0.018	29	113	0.0	0.0	2.254	A
D - A14 South-East	181	181	45	0	0	568	1766	0.102	181	154	0.2	0.1	2.271	A
E - Unnamed Road North-East	23	23	6	0	0	699	1185	0.019	23	19	0.0	0.0	3.100	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.25	0.56	0.56			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D - A14 South-East	0.21	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.30	1.39	2.64			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A

D - A14 South-East	0.21	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	5.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	173	75.10
B - A14 North-West	671	128.00
C - A1156 South-West	1782	80.70
D - A14 South-East	1755	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1566	100.000
B - A14 North-West		ONE HOUR	✓	1344	100.000
C - A1156 South-West		ONE HOUR	✓	298	100.000
D - A14 South-East		ONE HOUR	✓	562	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1096	192	274	4
	B - A14 North-West	1249	2	60	0	33
	C - A1156 South-West	162	52	0	78	6
	D - A14 South-East	338	3	205	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	9	100	5	0	19
	C - A1156 South-West	2	12	0	5	100
	D - A14 South-East	4	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.18	2.0	4.0	A	1437	2156

B - A14 North-West	0.11	4.19	0.1	0.5	A	1205	130
C - A1156 South-West	0.43	8.21	0.7	3.6	A	274	410
D - A14 South-East	0.67	11.96	2.0	5.9	B	515	773
E - Unnamed Road North-East	0.14	10.51	0.2	0.5	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1179	1179	295	0	940	146	2665	0.442	1176	376	0.0	0.8	2.412	A
B - A14 North-West	989	71	18	940	0	452	1101	0.065	71	899	0.0	0.1	3.496	A
C - A1156 South-West	225	225	56	0	0	1127	1142	0.197	224	346	0.0	0.2	3.915	A
D - A14 South-East	423	423	106	0	0	1052	1298	0.326	421	265	0.0	0.5	4.094	A
E - Unnamed Road North-East	39	39	10	0	0	1278	695	0.056	39	44	0.0	0.1	5.490	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1408	1408	352	0	1123	175	2631	0.535	1406	451	0.8	1.1	2.937	A
B - A14 North-West	1180	85	21	1123	0	540	1043	0.082	85	1076	0.1	0.1	3.756	A
C - A1156 South-West	268	268	67	0	0	1349	984	0.272	268	414	0.2	0.4	5.019	A
D - A14 South-East	505	505	126	0	0	1258	1139	0.443	504	318	0.5	0.8	5.660	A
E - Unnamed Road North-East	47	47	12	0	0	1529	571	0.082	47	52	0.1	0.1	6.868	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1724	1724	431	0	1375	214	2586	0.667	1721	549	1.1	2.0	4.148	A
B - A14 North-West	1446	104	26	1375	0	659	966	0.108	104	1316	0.1	0.1	4.175	A
C - A1156 South-West	328	328	82	0	0	1648	771	0.426	327	505	0.4	0.7	8.085	A
D - A14 South-East	618	618	155	0	0	1540	921	0.671	614	388	0.8	2.0	11.536	B
E - Unnamed Road North-East	57	57	14	0	0	1871	402	0.143	57	64	0.1	0.2	10.434	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1724	1724	431	0	1375	215	2585	0.667	1724	553	2.0	2.0	4.182	A
B - A14 North-West	1446	104	26	1375	0	663	964	0.108	104	1319	0.1	0.1	4.187	A
C - A1156 South-West	328	328	82	0	0	1654	767	0.428	328	507	0.7	0.7	8.207	A
D - A14 South-East	618	618	155	0	0	1543	919	0.673	618	389	2.0	2.0	11.957	B
E - Unnamed Road North-East	57	57	14	0	0	1875	400	0.143	57	64	0.2	0.2	10.506	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1408	1408	352	0	1123	176	2630	0.535	1411	455	2.0	1.2	2.960	A
B - A14 North-West	1180	85	21	1123	0	546	1040	0.082	85	1080	0.1	0.1	3.774	A
C - A1156 South-West	268	268	67	0	0	1356	979	0.274	270	416	0.7	0.4	5.085	A
D - A14 South-East	505	505	126	0	0	1263	1135	0.445	510	319	2.0	0.8	5.797	A
E - Unnamed Road North-East	47	47	12	0	0	1535	568	0.082	47	52	0.2	0.1	6.917	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1179	1179	295	0	940	147	2664	0.443	1181	379	1.2	0.8	2.428	A
B - A14 North-West	989	71	18	940	0	455	1098	0.065	71	903	0.1	0.1	3.507	A
C - A1156 South-West	225	225	56	0	0	1133	1138	0.197	225	348	0.4	0.2	3.944	A
D - A14 South-East	423	423	106	0	0	1056	1295	0.327	424	267	0.8	0.5	4.139	A
E - Unnamed Road North-East	39	39	10	0	0	1284	692	0.057	39	44	0.1	0.1	5.518	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - A14 South-East	0.48	0.00	0.00	0.48	0.48			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.05	0.49	2.69	3.99			N/A	N/A
B - A14 North-West	0.09	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - A14 South-East	0.79	0.06	0.68	1.30	1.78			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.97	0.03	0.26	1.97	1.97			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.73	0.03	0.26	0.73	0.73			N/A	N/A
D - A14 South-East	1.97	0.03	0.28	1.97	5.55			N/A	N/A
E - Unnamed Road North-East	0.16	0.03	0.26	0.47	0.49			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.03	0.26	1.99	1.99			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.74	0.03	0.30	1.12	3.60			N/A	N/A

D - A14 South-East	2.01	0.03	0.28	2.01	5.86			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.27	1.11	1.65	1.89			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - A14 South-East	0.81	0.06	0.73	1.31	1.77			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.07	0.79	1.01	1.56			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - A14 South-East	0.49	0.04	0.37	1.33	1.33			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	18.17	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	177	75.10
B - A14 North-West	971	128.00
C - A1156 South-West	2035	80.70
D - A14 South-East	2308	131.50
E - Unnamed Road North-East	2658	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1884	100.000
B - A14 North-West		ONE HOUR	✓	1602	100.000
C - A1156 South-West		ONE HOUR	✓	476	100.000
D - A14 South-East		ONE HOUR	✓	646	100.000
E - Unnamed Road North-East		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1143	373	363	4
	B - A14 North-West	1473	6	113	0	11
	C - A1156 South-West	261	74	0	139	2
	D - A14 South-East	357	0	273	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	8	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	6	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	8.45	4.8	18.9	A	1729	2593

B - A14 North-West	0.16	4.91	0.2	0.5	A	1541	179
C - A1156 South-West	0.71	16.94	2.4	9.8	C	437	655
D - A14 South-East	0.99	80.55	15.7	59.9	F	593	890
E - Unnamed Road North-East	0.42	26.07	0.7	3.0	D	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1418	1418	355	0	1109	215	2606	0.544	1414	470	0.0	1.2	3.006	A
B - A14 North-West	1264	98	24	1109	0	587	1052	0.093	97	959	0.0	0.1	3.768	A
C - A1156 South-West	358	358	90	0	0	1190	1110	0.323	357	585	0.0	0.5	4.768	A
D - A14 South-East	487	487	122	0	0	1291	1117	0.436	484	380	0.0	0.8	5.659	A
E - Unnamed Road North-East	68	68	17	0	0	1604	534	0.128	68	24	0.0	0.1	7.709	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1694	1694	423	0	1324	257	2560	0.661	1691	562	1.2	1.9	4.125	A
B - A14 North-West	1509	117	29	1324	0	702	976	0.120	117	1148	0.1	0.1	4.190	A
C - A1156 South-West	428	428	107	0	0	1423	950	0.451	427	699	0.5	0.8	6.861	A
D - A14 South-East	581	581	145	0	0	1545	951	0.611	578	455	0.8	1.5	9.575	A
E - Unnamed Road North-East	82	82	20	0	0	1918	410	0.199	81	29	0.1	0.2	10.946	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2074	2074	519	0	1621	313	2500	0.830	2063	667	1.9	4.6	8.044	A
B - A14 North-West	1849	143	36	1621	0	837	887	0.161	143	1400	0.1	0.2	4.837	A
C - A1156 South-West	524	524	131	0	0	1718	748	0.701	519	840	0.8	2.2	15.344	C
D - A14 South-East	712	712	178	0	0	1885	728	0.977	673	554	1.5	11.1	48.246	E
E - Unnamed Road North-East	100	100	25	0	0	2341	242	0.412	98	35	0.2	0.7	24.701	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2074	2074	519	0	1621	315	2498	0.830	2074	681	4.6	4.8	8.454	A
B - A14 North-West	1849	143	36	1621	0	853	876	0.163	143	1408	0.2	0.2	4.908	A
C - A1156 South-West	524	524	131	0	0	1737	735	0.713	524	851	2.2	2.4	16.936	C
D - A14 South-East	712	712	178	0	0	1895	722	0.986	693	558	11.1	15.7	80.550	F
E - Unnamed Road North-East	100	100	25	0	0	2353	238	0.421	100	36	0.7	0.7	26.066	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1694	1694	423	0	1324	261	2556	0.663	1705	599	4.8	2.0	4.281	A
B - A14 North-West	1509	117	29	1324	0	743	949	0.123	117	1159	0.2	0.1	4.329	A
C - A1156 South-West	428	428	107	0	0	1468	920	0.465	434	728	2.4	0.9	7.498	A
D - A14 South-East	581	581	145	0	0	1559	942	0.617	637	460	15.7	1.7	14.028	B
E - Unnamed Road North-East	82	82	20	0	0	1935	403	0.202	83	31	0.7	0.3	11.316	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1418	1418	355	0	1109	217	2604	0.545	1421	476	2.0	1.2	3.051	A
B - A14 North-West	1264	98	24	1109	0	594	1047	0.093	98	965	0.1	0.1	3.793	A
C - A1156 South-West	358	358	90	0	0	1200	1103	0.325	360	590	0.9	0.5	4.852	A
D - A14 South-East	487	487	122	0	0	1299	1112	0.438	490	383	1.7	0.8	5.826	A
E - Unnamed Road North-East	68	68	17	0	0	1613	531	0.129	69	25	0.3	0.1	7.805	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.19	0.56	1.06	1.19	1.54			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.47	0.00	0.00	0.47	0.47			N/A	N/A
D - A14 South-East	0.76	0.17	0.92	1.39	1.45			N/A	N/A
E - Unnamed Road North-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.93	0.04	0.40	5.17	9.40			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.81	0.06	0.68	1.40	1.85			N/A	N/A
D - A14 South-East	1.53	0.04	0.42	4.02	6.88			N/A	N/A
E - Unnamed Road North-East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.63	0.03	0.30	4.63	18.93			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.22	0.03	0.29	2.22	9.44			N/A	N/A
D - A14 South-East	11.10	0.21	5.54	28.12	38.88			N/A	N/A
E - Unnamed Road North-East	0.67	0.03	0.27	0.67	1.07			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.76	0.03	0.27	4.76	6.01			N/A	N/A
B - A14 North-West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.39	0.03	0.29	2.39	9.76			N/A	N/A

D - A14 South-East	15.69	0.17	6.58	41.98	59.87			N/A	N/A
E - Unnamed Road North-East	0.70	0.03	0.34	1.64	3.01			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.06	0.88	5.00	7.49			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.88	0.06	0.68	1.67	2.23			N/A	N/A
D - A14 South-East	1.66	0.03	0.34	3.88	8.63			N/A	N/A
E - Unnamed Road North-East	0.26	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.04	0.38	3.04	5.53			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.48	0.03	0.35	1.43	1.67			N/A	N/A
D - A14 South-East	0.79	0.03	0.28	0.79	2.34			N/A	N/A
E - Unnamed Road North-East	0.15	0.03	0.25	0.45	0.48			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	8.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	138	75.10
B - A14 North-West	1026	128.00
C - A1156 South-West	1785	80.70
D - A14 South-East	2100	131.50
E - Unnamed Road North-East	2484	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1667	100.000
B - A14 North-West		ONE HOUR	✓	1351	100.000
C - A1156 South-West		ONE HOUR	✓	527	100.000
D - A14 South-East		ONE HOUR	✓	694	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	952	399	311	4
	B - A14 North-West	1263	4	42	0	41
	C - A1156 South-West	314	79	4	124	5
	D - A14 South-East	398	0	294	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.66	2.4	5.1	A	1529	2294

B - A14 North-West	0.12	5.18	0.1	0.5	A	1211	120
C - A1156 South-West	0.64	11.22	1.8	5.1	B	483	725
D - A14 South-East	0.82	20.99	4.3	21.8	C	636	955
E - Unnamed Road North-East	0.11	10.37	0.1	0.5	B	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1255	1255	314	0	951	166	2693	0.466	1251	539	0.0	0.9	2.490	A
B - A14 North-West	993	66	16	951	0	640	974	0.068	65	797	0.0	0.1	3.961	A
C - A1156 South-West	396	396	99	0	0	1042	1262	0.314	395	556	0.0	0.5	4.141	A
D - A14 South-East	522	522	131	0	0	1079	1284	0.407	519	330	0.0	0.7	4.694	A
E - Unnamed Road North-East	29	29	7	0	0	1379	677	0.043	29	38	0.0	0.0	5.558	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1498	1498	375	0	1136	199	2657	0.564	1497	645	0.9	1.3	3.099	A
B - A14 North-West	1186	79	20	1136	0	766	897	0.088	78	953	0.1	0.1	4.397	A
C - A1156 South-West	473	473	118	0	0	1246	1110	0.426	472	665	0.5	0.7	5.633	A
D - A14 South-East	624	624	156	0	0	1290	1136	0.549	621	394	0.7	1.2	6.969	A
E - Unnamed Road North-East	35	35	9	0	0	1650	556	0.063	35	46	0.0	0.1	6.906	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1835	1835	459	0	1391	243	2608	0.704	1831	784	1.3	2.3	4.608	A
B - A14 North-West	1452	96	24	1391	0	931	796	0.121	96	1165	0.1	0.1	5.138	A
C - A1156 South-West	580	580	145	0	0	1520	906	0.640	576	811	0.7	1.7	10.769	B
D - A14 South-East	764	764	191	0	0	1579	934	0.817	752	482	1.2	4.0	18.747	C
E - Unnamed Road North-East	43	43	11	0	0	2018	392	0.109	43	56	0.1	0.1	10.289	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1835	1835	459	0	1391	244	2607	0.704	1835	792	2.3	2.4	4.663	A
B - A14 North-West	1452	96	24	1391	0	940	791	0.122	96	1168	0.1	0.1	5.182	A
C - A1156 South-West	580	580	145	0	0	1529	900	0.644	580	816	1.7	1.8	11.219	B
D - A14 South-East	764	764	191	0	0	1582	932	0.820	763	484	4.0	4.3	20.991	C
E - Unnamed Road North-East	43	43	11	0	0	2023	390	0.110	43	56	0.1	0.1	10.369	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1498	1498	375	0	1136	201	2655	0.564	1502	656	2.4	1.3	3.136	A
B - A14 North-West	1186	79	20	1136	0	778	889	0.088	79	957	0.1	0.1	4.441	A
C - A1156 South-West	473	473	118	0	0	1258	1101	0.430	477	673	1.8	0.8	5.805	A
D - A14 South-East	624	624	156	0	0	1296	1132	0.551	636	397	4.3	1.2	7.419	A
E - Unnamed Road North-East	35	35	9	0	0	1657	553	0.063	35	46	0.1	0.1	6.957	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1255	1255	314	0	951	167	2692	0.466	1256	544	1.3	0.9	2.510	A
B - A14 North-West	993	66	16	951	0	645	971	0.068	66	800	0.1	0.1	3.978	A
C - A1156 South-West	396	396	99	0	0	1048	1258	0.315	398	560	0.8	0.5	4.192	A
D - A14 South-East	522	522	131	0	0	1083	1281	0.408	524	331	1.2	0.7	4.772	A
E - Unnamed Road North-East	29	29	7	0	0	1385	674	0.043	29	39	0.1	0.0	5.585	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.45	0.00	0.00	0.45	0.45			N/A	N/A
D - A14 South-East	0.68	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.05	0.45	3.22	5.09			N/A	N/A
B - A14 North-West	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.74	0.06	0.71	1.45	1.45			N/A	N/A
D - A14 South-East	1.20	0.05	0.48	2.87	4.44			N/A	N/A
E - Unnamed Road North-East	0.07	0.03	0.26	0.46	0.49			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.33	0.03	0.27	2.33	2.33			N/A	N/A
B - A14 North-West	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.72	0.03	0.27	1.72	3.39			N/A	N/A
D - A14 South-East	4.01	0.03	0.35	8.90	21.78			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.36	0.03	0.26	2.36	2.36			N/A	N/A
B - A14 North-West	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.77	0.03	0.28	1.77	5.12			N/A	N/A

D - A14 South-East	4.26	0.03	0.31	4.89	20.06			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.16	1.17	1.98	2.63			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.76	0.07	0.76	1.47	1.47			N/A	N/A
D - A14 South-East	1.25	0.04	0.44	3.12	5.00			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.06	0.73	1.58	1.98			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.46	0.04	0.38	1.30	1.47			N/A	N/A
D - A14 South-East	0.69	0.03	0.32	1.44	3.31			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	9.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	162	75.10
B - A14 North-West	901	128.00
C - A1156 South-West	1885	80.70
D - A14 South-East	2153	131.50
E - Unnamed Road North-East	2578	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1766	100.000
B - A14 North-West		ONE HOUR	✓	1579	100.000
C - A1156 South-West		ONE HOUR	✓	530	100.000
D - A14 South-East		ONE HOUR	✓	712	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1071	317	375	1
	B - A14 North-West	1465	3	89	0	22
	C - A1156 South-West	231	77	0	192	29
	D - A14 South-East	379	0	334	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	2	0	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	5.84	3.1	6.7	A	1620	2430

B - A14 North-West	0.15	4.87	0.2	0.5	A	1445	157
C - A1156 South-West	0.65	11.62	1.8	5.5	B	486	729
D - A14 South-East	0.84	24.18	5.0	25.6	C	653	980
E - Unnamed Road North-East	0.09	12.57	0.1	0.5	B	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1329	1329	332	0	1103	251	2692	0.494	1325	458	0.0	1.0	2.626	A
B - A14 North-West	1185	86	21	1103	0	623	1053	0.081	85	878	0.0	0.1	3.719	A
C - A1156 South-West	399	399	100	0	0	1105	1261	0.316	397	559	0.0	0.5	4.160	A
D - A14 South-East	536	536	134	0	0	1131	1283	0.418	533	427	0.0	0.7	4.781	A
E - Unnamed Road North-East	20	20	5	0	0	1537	605	0.033	20	39	0.0	0.0	6.156	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1587	1587	397	0	1317	301	2636	0.602	1585	547	1.0	1.5	3.417	A
B - A14 North-West	1415	102	26	1317	0	746	974	0.105	102	1050	0.1	0.1	4.129	A
C - A1156 South-West	476	476	119	0	0	1321	1106	0.431	475	669	0.5	0.7	5.695	A
D - A14 South-East	640	640	160	0	0	1353	1134	0.565	638	510	0.7	1.3	7.222	A
E - Unnamed Road North-East	24	24	6	0	0	1839	483	0.050	24	47	0.0	0.1	7.838	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1944	1944	486	0	1613	367	2562	0.759	1938	664	1.5	3.1	5.711	A
B - A14 North-West	1733	125	31	1613	0	906	871	0.144	125	1284	0.1	0.2	4.828	A
C - A1156 South-West	583	583	146	0	0	1610	899	0.648	579	814	0.7	1.8	11.091	B
D - A14 South-East	784	784	196	0	0	1654	932	0.842	771	623	1.3	4.6	20.869	C
E - Unnamed Road North-East	29	29	7	0	0	2247	319	0.092	29	57	0.1	0.1	12.426	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1944	1944	486	0	1613	369	2560	0.759	1944	672	3.1	3.1	5.840	A
B - A14 North-West	1733	125	31	1613	0	915	864	0.145	125	1288	0.2	0.2	4.871	A
C - A1156 South-West	583	583	146	0	0	1621	892	0.654	583	821	1.8	1.8	11.619	B
D - A14 South-East	784	784	196	0	0	1659	928	0.845	783	626	4.6	5.0	24.180	C
E - Unnamed Road North-East	29	29	7	0	0	2255	316	0.093	29	58	0.1	0.1	12.574	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1587	1587	397	0	1317	303	2633	0.603	1593	559	3.1	1.5	3.481	A
B - A14 North-West	1415	102	26	1317	0	760	965	0.106	103	1056	0.2	0.1	4.175	A
C - A1156 South-West	476	476	119	0	0	1336	1096	0.435	480	679	1.8	0.8	5.890	A
D - A14 South-East	640	640	160	0	0	1360	1129	0.567	655	514	5.0	1.3	7.816	A
E - Unnamed Road North-East	24	24	6	0	0	1850	479	0.050	24	47	0.1	0.1	7.920	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1329	1329	332	0	1103	253	2690	0.494	1331	462	1.5	1.0	2.653	A
B - A14 North-West	1185	86	21	1103	0	629	1050	0.082	86	882	0.1	0.1	3.736	A
C - A1156 South-West	399	399	100	0	0	1111	1256	0.318	400	563	0.8	0.5	4.211	A
D - A14 South-East	536	536	134	0	0	1136	1280	0.419	539	429	1.3	0.7	4.872	A
E - Unnamed Road North-East	20	20	5	0	0	1545	602	0.033	20	39	0.1	0.0	6.195	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D - A14 South-East	0.71	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.04	0.42	3.93	6.72			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.75	0.06	0.70	1.49	1.54			N/A	N/A
D - A14 South-East	1.27	0.05	0.46	3.15	4.94			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.07	0.03	0.27	3.07	4.71			N/A	N/A
B - A14 North-West	0.17	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.78	0.03	0.28	1.78	3.97			N/A	N/A
D - A14 South-East	4.62	0.04	0.38	11.67	24.99			N/A	N/A
E - Unnamed Road North-East	0.10	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.11	0.03	0.26	3.11	3.11			N/A	N/A
B - A14 North-West	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.84	0.03	0.28	1.84	5.48			N/A	N/A

D - A14 South-East	5.00	0.03	0.32	7.91	25.63			N/A	N/A
E - Unnamed Road North-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.09	1.15	3.00	4.04			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.78	0.07	0.75	1.02	1.57			N/A	N/A
D - A14 South-East	1.33	0.04	0.42	3.46	5.74			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.05	0.48	2.18	3.28			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.47	0.04	0.38	1.32	1.49			N/A	N/A
D - A14 South-East	0.73	0.03	0.31	1.34	3.54			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2034 Operational Forecast, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Forecast	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	918	100.000
B - A14 North-West		ONE HOUR	✓	607	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	240	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	636	77	204	1
	B - A14 North-West	585	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	158	0	71	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.00	0.6	2.6	A	843	1264

B - A14 North-West	0.02	3.43	0.0	0.5	A	450	30
C - A1156 South-West	0.03	2.73	0.0	0.5	A	35	53
D - A14 South-East	0.17	2.88	0.2	0.5	A	220	331
E - Unnamed Road North-East	0.03	3.89	0.0	0.5	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	691	691	173	0	440	26	2824	0.245	690	148	0.0	0.3	1.686	A
B - A14 North-West	369	16	4	440	0	158	1114	0.015	16	504	0.0	0.0	3.278	A
C - A1156 South-West	29	29	7	0	0	633	1627	0.018	29	113	0.0	0.0	2.252	A
D - A14 South-East	181	181	45	0	0	566	1767	0.102	180	154	0.0	0.1	2.269	A
E - Unnamed Road North-East	23	23	6	0	0	697	1186	0.019	23	19	0.0	0.0	3.094	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	826	826	206	0	526	32	2817	0.293	825	177	0.3	0.4	1.806	A
B - A14 North-West	441	20	5	526	0	189	1097	0.018	20	603	0.0	0.0	3.342	A
C - A1156 South-West	34	34	9	0	0	758	1515	0.023	34	135	0.0	0.0	2.430	A
D - A14 South-East	216	216	54	0	0	677	1661	0.130	216	184	0.1	0.1	2.490	A
E - Unnamed Road North-East	27	27	7	0	0	834	1090	0.025	27	23	0.0	0.0	3.385	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1011	1011	253	0	644	39	2808	0.360	1010	217	0.4	0.6	2.003	A
B - A14 North-West	540	24	6	644	0	232	1072	0.022	24	738	0.0	0.0	3.433	A
C - A1156 South-West	42	42	11	0	0	928	1362	0.031	42	166	0.0	0.0	2.726	A
D - A14 South-East	265	265	66	0	0	829	1516	0.175	264	225	0.1	0.2	2.876	A
E - Unnamed Road North-East	33	33	8	0	0	1021	959	0.035	33	28	0.0	0.0	3.887	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1011	1011	253	0	644	39	2807	0.360	1011	217	0.6	0.6	2.003	A
B - A14 North-West	540	24	6	644	0	232	1072	0.022	24	739	0.0	0.0	3.434	A
C - A1156 South-West	42	42	11	0	0	928	1362	0.031	42	166	0.0	0.0	2.727	A
D - A14 South-East	265	265	66	0	0	830	1515	0.175	265	225	0.2	0.2	2.877	A
E - Unnamed Road North-East	33	33	8	0	0	1022	959	0.035	33	28	0.0	0.0	3.888	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	826	826	206	0	526	32	2817	0.293	826	178	0.6	0.4	1.807	A
B - A14 North-West	441	20	5	526	0	190	1096	0.018	20	604	0.0	0.0	3.345	A
C - A1156 South-West	34	34	9	0	0	759	1514	0.023	34	135	0.0	0.0	2.434	A
D - A14 South-East	216	216	54	0	0	678	1660	0.130	216	184	0.2	0.2	2.494	A
E - Unnamed Road North-East	27	27	7	0	0	835	1090	0.025	27	23	0.0	0.0	3.387	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	691	691	173	0	440	27	2824	0.245	692	149	0.4	0.3	1.687	A
B - A14 North-West	369	16	4	440	0	159	1114	0.015	16	505	0.0	0.0	3.282	A
C - A1156 South-West	29	29	7	0	0	635	1625	0.018	29	113	0.0	0.0	2.254	A
D - A14 South-East	181	181	45	0	0	568	1766	0.102	181	154	0.2	0.1	2.271	A
E - Unnamed Road North-East	23	23	6	0	0	699	1185	0.019	23	19	0.0	0.0	3.097	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - A14 North-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.02	0.02	0.25	0.45	0.48			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.03	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.25	0.56	0.56			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D - A14 South-East	0.21	0.03	0.25	0.46	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.30	1.39	2.64			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.03	0.00	0.00	0.03	0.03			N/A	N/A

D - A14 South-East	0.21	0.03	0.25	0.45	0.48			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - A14 North-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C - A1156 South-West	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D - A14 South-East	0.11	0.00	0.00	0.11	0.11			N/A	N/A
E - Unnamed Road North-East	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2034 Operational Forecast, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	5.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	174	75.10
B - A14 North-West	673	128.00
C - A1156 South-West	1781	80.70
D - A14 South-East	1754	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Forecast	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1578	100.000
B - A14 North-West		ONE HOUR	✓	1345	100.000
C - A1156 South-West		ONE HOUR	✓	298	100.000
D - A14 South-East		ONE HOUR	✓	562	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1106	192	276	4
	B - A14 North-West	1250	2	60	0	33
	C - A1156 South-West	162	52	0	78	6
	D - A14 South-East	338	3	205	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	9	100	5	0	19
	C - A1156 South-West	2	12	0	4	100
	D - A14 South-East	4	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.25	2.0	4.2	A	1448	2172

B - A14 North-West	0.11	4.19	0.1	0.5	A	1207	130
C - A1156 South-West	0.43	8.36	0.8	3.7	A	274	410
D - A14 South-East	0.68	12.31	2.1	6.2	B	515	773
E - Unnamed Road North-East	0.15	10.71	0.2	0.5	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1188	1188	297	0	941	146	2665	0.446	1185	376	0.0	0.8	2.427	A
B - A14 North-West	990	71	18	941	0	452	1100	0.065	71	907	0.0	0.1	3.497	A
C - A1156 South-West	225	225	56	0	0	1135	1137	0.197	224	346	0.0	0.2	3.937	A
D - A14 South-East	423	423	106	0	0	1059	1293	0.327	421	267	0.0	0.5	4.121	A
E - Unnamed Road North-East	39	39	10	0	0	1287	690	0.057	39	44	0.0	0.1	5.528	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1419	1419	355	0	1124	175	2631	0.539	1417	451	0.8	1.2	2.961	A
B - A14 North-West	1183	85	21	1124	0	540	1043	0.082	85	1085	0.1	0.1	3.757	A
C - A1156 South-West	268	268	67	0	0	1357	978	0.274	268	414	0.2	0.4	5.064	A
D - A14 South-East	505	505	126	0	0	1267	1132	0.446	504	319	0.5	0.8	5.720	A
E - Unnamed Road North-East	47	47	12	0	0	1540	565	0.083	47	52	0.1	0.1	6.938	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1738	1738	434	0	1376	214	2586	0.672	1734	549	1.2	2.0	4.211	A
B - A14 North-West	1449	104	26	1376	0	659	966	0.108	104	1327	0.1	0.1	4.175	A
C - A1156 South-West	328	328	82	0	0	1659	763	0.430	327	505	0.4	0.7	8.228	A
D - A14 South-East	618	618	155	0	0	1551	913	0.678	613	391	0.8	2.0	11.846	B
E - Unnamed Road North-East	57	57	14	0	0	1884	395	0.145	57	64	0.1	0.2	10.631	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1738	1738	434	0	1376	215	2585	0.672	1737	553	2.0	2.0	4.248	A
B - A14 North-West	1449	104	26	1376	0	663	964	0.108	104	1330	0.1	0.1	4.188	A
C - A1156 South-West	328	328	82	0	0	1665	759	0.433	328	507	0.7	0.8	8.358	A
D - A14 South-East	618	618	155	0	0	1554	910	0.679	618	392	2.0	2.1	12.307	B
E - Unnamed Road North-East	57	57	14	0	0	1888	393	0.146	57	64	0.2	0.2	10.709	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1419	1419	355	0	1124	176	2630	0.539	1422	455	2.0	1.2	2.990	A
B - A14 North-West	1183	85	21	1124	0	546	1039	0.082	85	1089	0.1	0.1	3.773	A
C - A1156 South-West	268	268	67	0	0	1365	973	0.276	270	417	0.8	0.4	5.131	A
D - A14 South-East	505	505	126	0	0	1272	1128	0.448	510	321	2.1	0.8	5.868	A
E - Unnamed Road North-East	47	47	12	0	0	1546	563	0.083	47	52	0.2	0.1	6.989	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1188	1188	297	0	941	147	2664	0.446	1190	379	1.2	0.8	2.443	A
B - A14 North-West	990	71	18	941	0	455	1098	0.065	71	911	0.1	0.1	3.505	A
C - A1156 South-West	225	225	56	0	0	1140	1133	0.198	225	348	0.4	0.2	3.967	A
D - A14 South-East	423	423	106	0	0	1064	1289	0.328	424	268	0.8	0.5	4.168	A
E - Unnamed Road North-East	39	39	10	0	0	1293	687	0.057	39	44	0.1	0.1	5.556	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - A14 South-East	0.48	0.00	0.00	0.48	0.48			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.05	0.48	2.76	4.17			N/A	N/A
B - A14 North-West	0.09	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - A14 South-East	0.80	0.06	0.67	1.36	1.82			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.02	0.03	0.26	2.02	2.02			N/A	N/A
B - A14 North-West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	0.74	0.03	0.26	0.74	0.74			N/A	N/A
D - A14 South-East	2.02	0.03	0.28	2.02	6.12			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.26	0.47	0.49			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.03	0.26	2.04	2.04			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.76	0.03	0.30	1.12	3.66			N/A	N/A

D - A14 South-East	2.07	0.03	0.28	2.07	6.20			N/A	N/A
E - Unnamed Road North-East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.25	1.12	1.70	1.93			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D - A14 South-East	0.82	0.06	0.72	1.38	1.83			N/A	N/A
E - Unnamed Road North-East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.07	0.79	1.12	1.63			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - A14 South-East	0.49	0.04	0.37	1.39	1.42			N/A	N/A
E - Unnamed Road North-East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Operational Forecast, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	20.31	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	163	75.10
B - A14 North-West	957	128.00
C - A1156 South-West	2034	80.70
D - A14 South-East	2301	131.50
E - Unnamed Road North-East	2637	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Forecast	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1903	100.000
B - A14 North-West		ONE HOUR	✓	1636	100.000
C - A1156 South-West		ONE HOUR	✓	485	100.000
D - A14 South-East		ONE HOUR	✓	647	100.000
E - Unnamed Road North-East		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1139	391	368	4
	B - A14 North-West	1507	6	113	0	11
	C - A1156 South-West	261	74	0	148	2
	D - A14 South-East	358	0	273	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	4	8	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	9.12	5.2	22.4	A	1746	2619

B - A14 North-West	0.16	4.93	0.2	0.5	A	1573	179
C - A1156 South-West	0.72	17.52	2.5	10.4	C	445	668
D - A14 South-East	1.01	94.48	18.9	63.8	F	594	891
E - Unnamed Road North-East	0.45	29.30	0.8	3.5	D	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1433	1433	358	0	1134	222	2599	0.551	1428	471	0.0	1.2	3.061	A
B - A14 North-West	1290	98	24	1134	0	595	1049	0.093	97	956	0.0	0.1	3.781	A
C - A1156 South-West	365	365	91	0	0	1188	1110	0.329	363	598	0.0	0.5	4.806	A
D - A14 South-East	487	487	122	0	0	1302	1107	0.440	484	391	0.0	0.8	5.751	A
E - Unnamed Road North-East	68	68	17	0	0	1625	525	0.130	68	24	0.0	0.1	7.862	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1711	1711	428	0	1354	265	2552	0.670	1708	563	1.2	2.0	4.247	A
B - A14 North-West	1541	117	29	1354	0	711	971	0.120	117	1144	0.1	0.1	4.212	A
C - A1156 South-West	436	436	109	0	0	1421	950	0.459	435	716	0.5	0.8	6.965	A
D - A14 South-East	582	582	145	0	0	1557	940	0.619	579	467	0.8	1.6	9.884	A
E - Unnamed Road North-East	82	82	20	0	0	1943	398	0.205	81	29	0.1	0.3	11.350	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2095	2095	524	0	1659	322	2490	0.841	2083	665	2.0	5.0	8.601	A
B - A14 North-West	1887	143	36	1659	0	844	883	0.162	143	1395	0.1	0.2	4.860	A
C - A1156 South-West	534	534	134	0	0	1711	751	0.712	528	857	0.8	2.3	15.779	C
D - A14 South-East	713	713	178	0	0	1899	716	0.996	668	569	1.6	12.7	53.501	F
E - Unnamed Road North-East	100	100	25	0	0	2371	228	0.439	98	35	0.3	0.7	27.401	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2095	2095	524	0	1659	325	2488	0.842	2094	678	5.0	5.2	9.117	A
B - A14 North-West	1887	143	36	1659	0	860	873	0.164	143	1403	0.2	0.2	4.932	A
C - A1156 South-West	534	534	134	0	0	1730	737	0.724	533	868	2.3	2.5	17.524	C
D - A14 South-East	713	713	178	0	0	1910	708	1.006	688	573	12.7	18.9	94.484	F
E - Unnamed Road North-East	100	100	25	0	0	2384	222	0.450	100	35	0.7	0.8	29.299	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1711	1711	428	0	1354	270	2547	0.672	1723	607	5.2	2.1	4.433	A
B - A14 North-West	1541	117	29	1354	0	760	939	0.124	117	1156	0.2	0.1	4.382	A
C - A1156 South-West	436	436	109	0	0	1473	914	0.477	442	750	2.5	0.9	7.729	A
D - A14 South-East	582	582	145	0	0	1573	930	0.626	651	473	18.9	1.7	16.240	C
E - Unnamed Road North-East	82	82	20	0	0	1962	391	0.209	84	31	0.8	0.3	11.802	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1433	1433	358	0	1134	223	2597	0.552	1436	477	2.1	1.2	3.109	A
B - A14 North-West	1290	98	24	1134	0	602	1044	0.094	98	963	0.1	0.1	3.807	A
C - A1156 South-West	365	365	91	0	0	1198	1104	0.331	367	604	0.9	0.5	4.896	A
D - A14 South-East	487	487	122	0	0	1310	1102	0.442	491	393	1.7	0.8	5.929	A
E - Unnamed Road North-East	68	68	17	0	0	1635	521	0.131	69	25	0.3	0.2	7.968	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.10	1.39	1.70			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.49	0.00	0.00	0.49	0.49			N/A	N/A
D - A14 South-East	0.78	0.14	0.90	1.40	1.47			N/A	N/A
E - Unnamed Road North-East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.04	0.40	5.39	9.86			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.84	0.06	0.67	1.52	1.95			N/A	N/A
D - A14 South-East	1.58	0.04	0.41	4.19	7.23			N/A	N/A
E - Unnamed Road North-East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.01	0.03	0.30	5.01	22.37			N/A	N/A
B - A14 North-West	0.19	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	2.33	0.03	0.30	2.33	10.36			N/A	N/A
D - A14 South-East	12.66	0.37	7.44	30.28	40.55			N/A	N/A
E - Unnamed Road North-East	0.74	0.03	0.27	0.74	1.43			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.17	0.03	0.28	5.17	8.77			N/A	N/A
B - A14 North-West	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	2.51	0.03	0.29	2.51	10.45			N/A	N/A

D - A14 South-East	18.95	0.38	10.62	46.95	63.77			N/A	N/A
E - Unnamed Road North-East	0.79	0.03	0.35	1.85	3.54			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.08	0.06	0.80	5.38	8.13			N/A	N/A
B - A14 North-West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A1156 South-West	0.93	0.06	0.68	1.79	2.49			N/A	N/A
D - A14 South-East	1.73	0.03	0.34	3.91	9.02			N/A	N/A
E - Unnamed Road North-East	0.27	0.03	0.25	0.46	0.48			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.04	0.37	3.13	5.89			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.50	0.03	0.34	1.47	1.78			N/A	N/A
D - A14 South-East	0.80	0.03	0.27	0.80	1.99			N/A	N/A
E - Unnamed Road North-East	0.15	0.03	0.25	0.45	0.48			N/A	N/A

2034 Operational Forecast, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	8.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms
[same as above]

Roundabout Geometry
[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	137	75.10
B - A14 North-West	1028	128.00
C - A1156 South-West	1786	80.70
D - A14 South-East	2097	131.50
E - Unnamed Road North-East	2479	37.20

Bypass
[same as above]

Slope / Intercept / Capacity
[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Forecast	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1660	100.000
B - A14 North-West		ONE HOUR	✓	1349	100.000
C - A1156 South-West		ONE HOUR	✓	530	100.000
D - A14 South-East		ONE HOUR	✓	694	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	946	397	312	4
	B - A14 North-West	1261	4	42	0	41
	C - A1156 South-West	318	79	4	123	5
	D - A14 South-East	398	0	294	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.62	2.3	5.0	A	1523	2284

B - A14 North-West	0.12	5.20	0.1	0.5	A	1209	120
C - A1156 South-West	0.65	11.20	1.8	5.1	B	486	729
D - A14 South-East	0.82	20.46	4.2	21.3	C	636	955
E - Unnamed Road North-East	0.11	10.29	0.1	0.5	B	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1249	1249	312	0	950	166	2692	0.464	1246	542	0.0	0.9	2.484	A
B - A14 North-West	992	66	16	950	0	642	972	0.068	65	792	0.0	0.1	3.968	A
C - A1156 South-West	399	399	100	0	0	1038	1265	0.315	397	555	0.0	0.5	4.139	A
D - A14 South-East	522	522	131	0	0	1073	1287	0.406	519	330	0.0	0.7	4.672	A
E - Unnamed Road North-East	29	29	7	0	0	1373	679	0.043	29	38	0.0	0.0	5.539	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1492	1492	373	0	1134	198	2655	0.562	1490	649	0.9	1.3	3.086	A
B - A14 North-West	1184	79	20	1134	0	769	895	0.088	78	948	0.1	0.1	4.407	A
C - A1156 South-West	476	476	119	0	0	1241	1113	0.428	475	664	0.5	0.7	5.630	A
D - A14 South-East	624	624	156	0	0	1283	1140	0.547	621	394	0.7	1.2	6.916	A
E - Unnamed Road North-East	35	35	9	0	0	1643	559	0.063	35	46	0.0	0.1	6.874	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1827	1827	457	0	1389	242	2607	0.701	1823	788	1.3	2.3	4.571	A
B - A14 North-West	1450	96	24	1389	0	934	794	0.121	96	1159	0.1	0.1	5.155	A
C - A1156 South-West	583	583	146	0	0	1514	910	0.641	579	809	0.7	1.7	10.758	B
D - A14 South-East	764	764	191	0	0	1570	939	0.813	753	482	1.2	3.9	18.360	C
E - Unnamed Road North-East	43	43	11	0	0	2009	395	0.108	43	56	0.1	0.1	10.210	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1827	1827	457	0	1389	243	2605	0.701	1827	796	2.3	2.3	4.623	A
B - A14 North-West	1450	96	24	1389	0	943	789	0.122	96	1162	0.1	0.1	5.198	A
C - A1156 South-West	583	583	146	0	0	1522	904	0.645	583	814	1.7	1.8	11.202	B
D - A14 South-East	764	764	191	0	0	1573	936	0.816	763	484	3.9	4.2	20.460	C
E - Unnamed Road North-East	43	43	11	0	0	2014	393	0.109	43	56	0.1	0.1	10.287	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1492	1492	373	0	1134	200	2654	0.562	1496	660	2.3	1.3	3.120	A
B - A14 North-West	1184	79	20	1134	0	781	888	0.088	79	952	0.1	0.1	4.450	A
C - A1156 South-West	476	476	119	0	0	1253	1105	0.431	480	671	1.8	0.8	5.800	A
D - A14 South-East	624	624	156	0	0	1288	1136	0.549	635	397	4.2	1.2	7.348	A
E - Unnamed Road North-East	35	35	9	0	0	1650	555	0.063	35	46	0.1	0.1	6.924	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1249	1249	312	0	950	167	2690	0.464	1251	547	1.3	0.9	2.505	A
B - A14 North-West	992	66	16	950	0	648	969	0.068	66	796	0.1	0.1	3.987	A
C - A1156 South-West	399	399	100	0	0	1043	1260	0.316	400	558	0.8	0.5	4.190	A
D - A14 South-East	522	522	131	0	0	1077	1284	0.407	524	331	1.2	0.7	4.752	A
E - Unnamed Road North-East	29	29	7	0	0	1379	676	0.043	29	39	0.1	0.0	5.568	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D - A14 South-East	0.68	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.05	0.45	3.17	4.99			N/A	N/A
B - A14 North-West	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	0.74	0.06	0.71	1.48	1.48			N/A	N/A
D - A14 South-East	1.19	0.05	0.48	2.85	4.38			N/A	N/A
E - Unnamed Road North-East	0.07	0.03	0.26	0.46	0.49			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.31	0.03	0.27	2.31	2.31			N/A	N/A
B - A14 North-West	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.73	0.03	0.27	1.73	3.43			N/A	N/A
D - A14 South-East	3.92	0.03	0.35	8.47	21.26			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.26	0.47	0.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.33	0.03	0.26	2.33	2.33			N/A	N/A
B - A14 North-West	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.78	0.03	0.28	1.78	5.10			N/A	N/A

D - A14 South-East	4.16	0.03	0.31	4.49	19.26			N/A	N/A
E - Unnamed Road North-East	0.12	0.03	0.25	0.45	0.48			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.17	1.17	1.95	2.57			N/A	N/A
B - A14 North-West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C - A1156 South-West	0.77	0.07	0.76	1.48	1.48			N/A	N/A
D - A14 South-East	1.24	0.04	0.45	3.07	4.92			N/A	N/A
E - Unnamed Road North-East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.06	0.74	1.55	1.95			N/A	N/A
B - A14 North-West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A1156 South-West	0.47	0.04	0.38	1.30	1.47			N/A	N/A
D - A14 South-East	0.69	0.03	0.32	1.46	3.27			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Forecast, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout	A, E, D, C, B	9.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	164	75.10
B - A14 North-West	909	128.00
C - A1156 South-West	1886	80.70
D - A14 South-East	2154	131.50
E - Unnamed Road North-East	2582	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Forecast	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1765	100.000
B - A14 North-West		ONE HOUR	✓	1580	100.000
C - A1156 South-West		ONE HOUR	✓	531	100.000
D - A14 South-East		ONE HOUR	✓	712	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1071	316	375	1
	B - A14 North-West	1466	3	89	0	22
	C - A1156 South-West	231	77	0	193	29
	D - A14 South-East	379	0	334	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	2	0	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	5.85	3.1	6.7	A	1619	2429

B - A14 North-West	0.15	4.88	0.2	0.5	A	1445	157
C - A1156 South-West	0.65	11.66	1.9	5.5	B	487	730
D - A14 South-East	0.84	24.06	5.0	25.5	C	653	980
E - Unnamed Road North-East	0.09	12.56	0.1	0.5	B	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1328	1328	332	0	1104	252	2690	0.494	1325	458	0.0	1.0	2.628	A
B - A14 North-West	1186	86	21	1104	0	624	1052	0.082	85	878	0.0	0.1	3.725	A
C - A1156 South-West	399	399	100	0	0	1105	1261	0.317	398	559	0.0	0.5	4.164	A
D - A14 South-East	536	536	134	0	0	1130	1284	0.418	533	427	0.0	0.7	4.778	A
E - Unnamed Road North-East	20	20	5	0	0	1537	605	0.033	20	39	0.0	0.0	6.156	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1586	1586	397	0	1318	302	2635	0.602	1584	547	1.0	1.5	3.419	A
B - A14 North-West	1416	102	26	1318	0	747	973	0.105	102	1050	0.1	0.1	4.136	A
C - A1156 South-West	477	477	119	0	0	1321	1106	0.431	476	668	0.5	0.8	5.704	A
D - A14 South-East	640	640	160	0	0	1352	1135	0.564	638	511	0.7	1.3	7.214	A
E - Unnamed Road North-East	24	24	6	0	0	1839	483	0.050	24	47	0.0	0.1	7.835	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1943	1943	486	0	1614	368	2560	0.759	1936	664	1.5	3.1	5.716	A
B - A14 North-West	1734	125	31	1614	0	907	869	0.144	125	1284	0.1	0.2	4.838	A
C - A1156 South-West	584	584	146	0	0	1610	899	0.650	580	813	0.8	1.8	11.128	B
D - A14 South-East	784	784	196	0	0	1652	932	0.841	771	624	1.3	4.6	20.794	C
E - Unnamed Road North-East	29	29	7	0	0	2247	319	0.092	29	57	0.1	0.1	12.411	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1943	1943	486	0	1614	370	2558	0.759	1943	672	3.1	3.1	5.845	A
B - A14 North-West	1734	125	31	1614	0	916	863	0.145	125	1288	0.2	0.2	4.881	A
C - A1156 South-West	584	584	146	0	0	1621	892	0.655	584	820	1.8	1.9	11.657	B
D - A14 South-East	784	784	196	0	0	1658	929	0.844	783	627	4.6	5.0	24.063	C
E - Unnamed Road North-East	29	29	7	0	0	2255	316	0.093	29	58	0.1	0.1	12.558	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1586	1586	397	0	1318	304	2632	0.603	1593	559	3.1	1.5	3.483	A
B - A14 North-West	1416	102	26	1318	0	760	964	0.106	103	1056	0.2	0.1	4.181	A
C - A1156 South-West	477	477	119	0	0	1336	1096	0.435	481	678	1.9	0.8	5.901	A
D - A14 South-East	640	640	160	0	0	1359	1130	0.567	655	515	5.0	1.3	7.802	A
E - Unnamed Road North-East	24	24	6	0	0	1850	479	0.050	24	47	0.1	0.1	7.917	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1328	1328	332	0	1104	254	2689	0.494	1331	462	1.5	1.0	2.654	A
B - A14 North-West	1186	86	21	1104	0	630	1048	0.082	86	882	0.1	0.1	3.742	A
C - A1156 South-West	399	399	100	0	0	1111	1256	0.318	401	563	0.8	0.5	4.217	A
D - A14 South-East	536	536	134	0	0	1135	1280	0.419	539	430	1.3	0.7	4.869	A
E - Unnamed Road North-East	20	20	5	0	0	1545	602	0.033	20	39	0.1	0.0	6.192	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.55	1.00	1.40	1.45			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D - A14 South-East	0.71	0.55	1.00	1.40	1.45			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.04	0.42	3.93	6.72			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.75	0.06	0.70	1.50	1.56			N/A	N/A
D - A14 South-East	1.27	0.05	0.46	3.14	4.93			N/A	N/A
E - Unnamed Road North-East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.07	0.03	0.27	3.07	4.72			N/A	N/A
B - A14 North-West	0.17	0.03	0.26	0.46	0.49			N/A	N/A
C - A1156 South-West	1.79	0.03	0.28	1.79	4.06			N/A	N/A
D - A14 South-East	4.61	0.04	0.38	11.58	24.89			N/A	N/A
E - Unnamed Road North-East	0.10	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.11	0.03	0.26	3.11	3.11			N/A	N/A
B - A14 North-West	0.17	0.03	0.25	0.45	0.48			N/A	N/A
C - A1156 South-West	1.85	0.03	0.28	1.85	5.51			N/A	N/A

D - A14 South-East	4.98	0.03	0.32	7.81	25.46			N/A	N/A
E - Unnamed Road North-East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.09	1.15	3.00	4.05			N/A	N/A
B - A14 North-West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A1156 South-West	0.78	0.07	0.75	1.04	1.59			N/A	N/A
D - A14 South-East	1.33	0.04	0.42	3.45	5.73			N/A	N/A
E - Unnamed Road North-East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

18:00 - 18:15

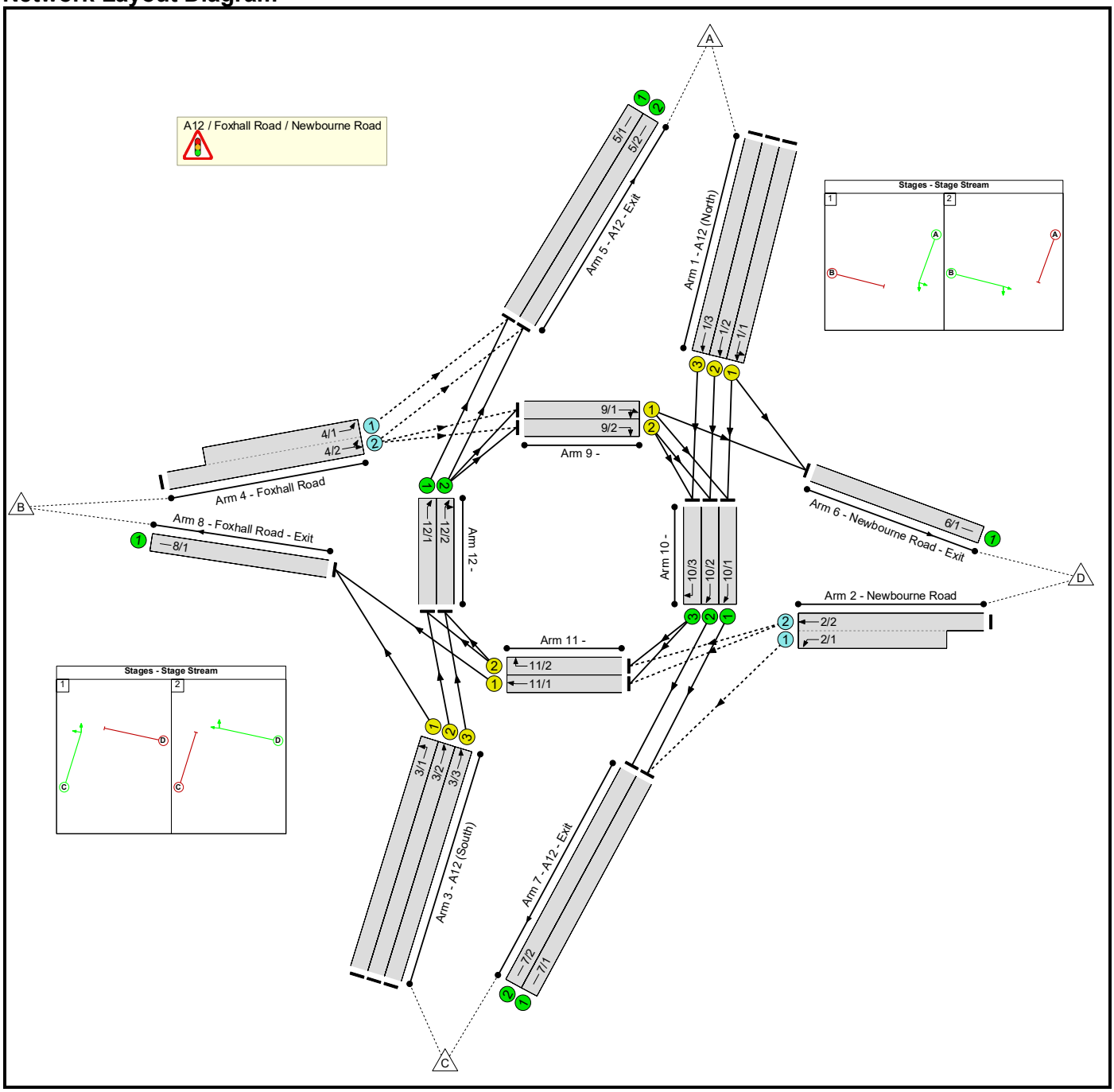
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.05	0.48	2.18	3.28			N/A	N/A
B - A14 North-West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A1156 South-West	0.47	0.04	0.38	1.32	1.50			N/A	N/A
D - A14 South-East	0.73	0.03	0.31	1.35	3.53			N/A	N/A
E - Unnamed Road North-East	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Full Input Data And Results

User and Project Details

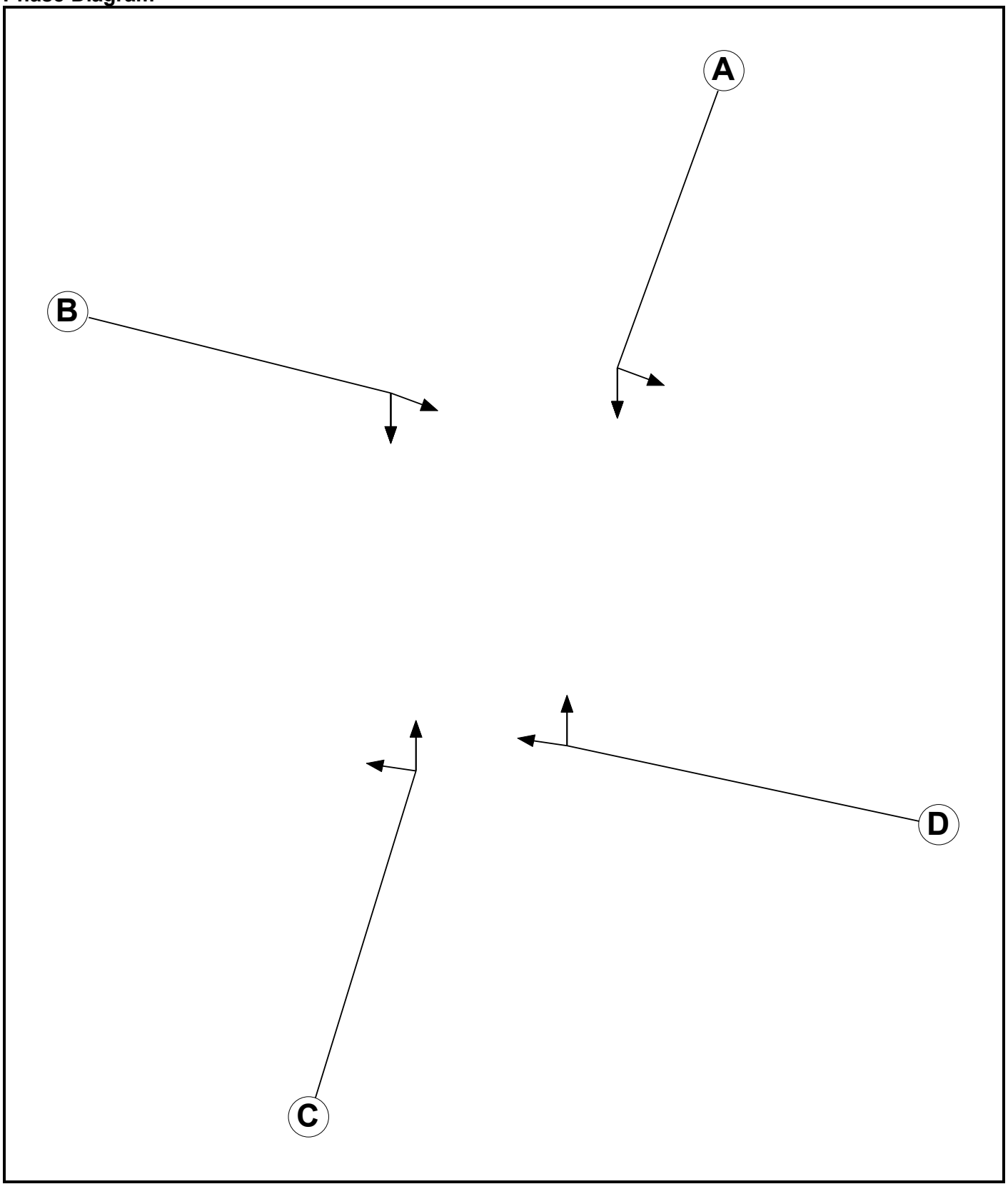
Project:	
Title:	
Location:	
Additional detail:	
File name:	2019.10.23 J22_Model_v16 sens miti.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Phase Intergreens Matrix

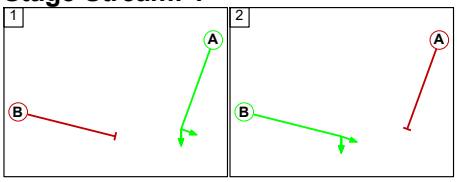
Terminating Phase \ Starting Phase	A	B	C	D
A		5	-	-
B	5		-	-
C	-	-		5
D	-	-	5	

Phases in Stage

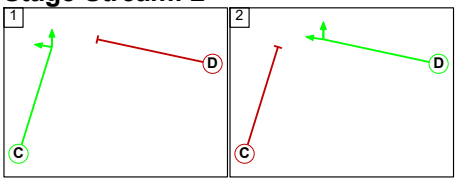
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Full Input Data And Results

Prohibited Stage Change

Stage Stream: 1

From Stage \ To Stage		1	2
	1		5
	2	5	

Stage Stream: 2

From Stage \ To Stage		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Newbourne Road)	7/1 (Left)	1000	0	10/1	0.33	All	-	-	-	-	-
				10/2	0.33	All					
				10/3	0.33	All					
2/2 (Newbourne Road)	11/1 (Ahead)	1000	0	10/1	0.33	All	-	-	-	-	-
				10/2	0.33	All					
				10/3	0.33	All					
	11/2 (Ahead)	1000	0	10/1	0.33	All					
				10/2	0.33	All					
				10/3	0.33	All					
4/1 (Foxhall Road)	5/1 (Left)	1000	0	12/1	0.33	All	-	-	-	-	-
				12/2	0.33	All					
4/2 (Foxhall Road)	5/2 (Left)	1000	0	12/1	0.33	All	-	-	-	-	-
				12/2	0.33	All					
	9/1 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					
	9/2 (Ahead)	1000	0	12/1	0.33	All					
				12/2	0.33	All					

Full Input Data And Results

Lane Input Data

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A12 (North))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	Inf
											Arm 10 Ahead	23.00
1/2 (A12 (North))	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 10 Ahead	23.00
1/3 (A12 (North))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Ahead	23.00
2/1 (Newbourne Road)	O		2	3	20.9	Geom	-	3.50	0.00	Y	Arm 7 Left	14.00
2/2 (Newbourne Road)	O		2	3	34.8	Geom	-	3.50	0.00	Y	Arm 11 Ahead	22.00
3/1 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm 8 Left	20.00
3/2 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	N	Arm 12 Ahead	20.00
3/3 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm 12 Ahead	20.00
4/1 (Foxhall Road)	O		2	3	20.9	Geom	-	3.50	0.00	Y	Arm 5 Left	20.00
4/2 (Foxhall Road)	O		2	3	34.8	Geom	-	3.50	0.00	Y	Arm 5 Left	20.00
											Arm 9 Ahead	20.00
5/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
5/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
6/1 (Newbourne Road - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
7/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
7/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
8/1 (Foxhall Road - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
9/1	U	B	2	3	10.8	Geom	-	3.25	0.00	Y	Arm 6 Ahead	18.00
											Arm 10 Right	18.00
9/2	U	B	2	3	10.8	Geom	-	3.25	0.00	Y	Arm 10 Right	Inf
10/1	U		2	3	8.9	Inf	-	-	-	-	-	-

10/2	U		2	3	8.9	Inf	-	-	-	-	-	-
10/3	U		2	3	8.9	Inf	-	-	-	-	-	-
11/1	U	D	2	3	9.6	Geom	-	3.25	0.00	Y	Arm 8 Ahead	15.00
11/2	U	D	2	3	9.6	Geom	-	3.25	0.00	Y	Arm 12 Right	15.00
12/1	U		2	3	10.4	Inf	-	-	-	-	-	-
12/2	U		2	3	10.4	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '28RC 06:00-07:00'	06:00	07:00	01:00	
2: '28RC 07:00-08:00'	07:00	08:00	01:00	
3: '28RC 08:00-09:00'	08:00	09:00	01:00	
4: '28RC 15:00-16:00'	15:00	16:00	01:00	
5: '28RC 17:00-18:00'	17:00	18:00	01:00	
6: '28PC 06:00-07:00'	06:00	07:00	01:00	
7: '28PC 07:00-08:00'	07:00	08:00	01:00	
8: '28PC 08:00-09:00'	08:00	09:00	01:00	
9: '28PC 15:00-16:00'	15:00	16:00	01:00	
10: '28PC 17:00-18:00'	17:00	18:00	01:00	
11: '34RC 06:00-07:00'	06:00	07:00	01:00	
12: '34RC 07:00-08:00'	07:00	08:00	01:00	
13: '34RC 08:00-09:00'	08:00	09:00	01:00	
14: '34RC 15:00-16:00'	15:00	16:00	01:00	
15: '34RC 17:00-18:00'	17:00	18:00	01:00	
16: '34OP 06:00-07:00'	06:00	07:00	01:00	
17: '34OP 07:00-08:00'	07:00	08:00	01:00	
18: '34OP 08:00-09:00'	08:00	09:00	01:00	
19: '34OP 15:00-16:00'	15:00	16:00	01:00	
20: '34OP 17:00-18:00'	17:00	18:00	01:00	

Scenario 1: '28RC 06:00-07:00' (FG1: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	39	867	33	939
	B	101	0	94	24	219
	C	763	40	0	34	837
	D	16	25	47	0	88
	Tot.	880	104	1008	91	2083

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 28RC 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	420
1/2	480
1/3	39
2/1 (short)	47
2/2 (with short)	88(In) 41(Out)
3/1	40
3/2	428
3/3	369
4/1 (short)	56
4/2 (with short)	219(In) 163(Out)
5/1	492
5/2	388
6/1	91
7/1	444
7/2	564
8/1	104
9/1	68
9/2	84
10/1	397
10/2	564
10/3	39
11/1	64
11/2	16
12/1	436
12/2	377

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	7.9 %	1854	1854
				Arm 10 Ahead	23.00	92.1 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	27.6 %	1828	1828
				Arm 9 Ahead	20.00	72.4 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	85.3 %	1791	1791
				Arm 10 Right	18.00	14.7 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	183	1481	72	1736
	B	296	0	181	62	539
	C	1632	100	0	63	1795
	D	158	46	92	0	296
	Tot.	2086	329	1754	197	4366

Traffic Lane Flows

Lane	Scenario 2: 28RC 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	741
1/2	812
1/3	183
2/1 (short)	92
2/2 (with short)	296(In) 204(Out)
3/1	100
3/2	887
3/3	808
4/1 (short)	269
4/2 (with short)	539(In) 270(Out)
5/1	1235
5/2	851
6/1	197
7/1	777
7/2	977
8/1	329
9/1	141
9/2	165
10/1	685
10/2	977
10/3	183
11/1	229
11/2	158
12/1	966
12/2	887

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.7 %	1856	1856
				Arm 10 Ahead	23.00	90.3 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	10.0 %	1828	1828
				Arm 9 Ahead	20.00	90.0 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	88.7 %	1791	1791
				Arm 10 Right	18.00	11.3 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	160	1662	152	1974
	B	346	0	208	70	624
	C	2102	183	1	126	2412
	D	271	60	144	0	475
	Tot.	2719	403	2015	348	5485

Traffic Lane Flows

Lane	Scenario 3: 28RC 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	873
1/2	941
1/3	160
2/1 (short)	144
2/2 (with short)	475(In) 331(Out)
3/1	183
3/2	1156
3/3	1073
4/1 (short)	312
4/2 (with short)	624(In) 312(Out)
5/1	1604
5/2	1115
6/1	348
7/1	866
7/2	1149
8/1	403
9/1	197
9/2	208
10/1	722
10/2	1149
10/3	160
11/1	220
11/2	271
12/1	1292
12/2	1208

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	17.4 %	1865	1865
				Arm 10 Ahead	23.00	82.6 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	10.9 %	1828	1828
				Arm 9 Ahead	20.00	89.1 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	99.5 %	1791	1791
				Arm 10 Right	18.00	0.5 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	289	1487	180	1958
	B	319	0	160	57	536
	C	1708	235	1	80	2024
	D	143	104	131	1	379
	Tot.	2172	628	1779	318	4897

Traffic Lane Flows

Lane	Scenario 4: 28RC 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	801
1/2	866
1/3	291
2/1 (short)	131
2/2 (with short)	379(In) 248(Out)
3/1	235
3/2	932
3/3	857
4/1 (short)	268
4/2 (with short)	536(In) 268(Out)
5/1	1273
5/2	899
6/1	318
7/1	754
7/2	1025
8/1	628
9/1	140
9/2	159
10/1	623
10/2	1025
10/3	291
11/1	393
11/2	146
12/1	1005
12/2	930

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	22.5 %	1870	1870
				Arm 10 Ahead	23.00	77.5 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	19.0 %	1828	1828
				Arm 9 Ahead	20.00	81.0 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	98.6 %	1791	1791
				Arm 10 Right	18.00	1.4 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	334	1555	165	2056
	B	253	0	136	65	454
	C	1755	341	1	59	2156
	D	101	132	101	0	334
	Tot.	2111	807	1793	289	5000

Traffic Lane Flows

Lane	Scenario 5: 28RC 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	826
1/2	894
1/3	336
2/1 (short)	101
2/2 (with short)	334(In) 233(Out)
3/1	341
3/2	943
3/3	872
4/1 (short)	227
4/2 (with short)	454(In) 227(Out)
5/1	1222
5/2	889
6/1	289
7/1	762
7/2	1031
8/1	807
9/1	124
9/2	137
10/1	661
10/2	1031
10/3	336
11/1	466
11/2	103
12/1	995
12/2	923

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	20.0 %	1868	1868
				Arm 10 Ahead	23.00	80.0 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	11.5 %	1828	1828
				Arm 9 Ahead	20.00	88.5 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	39	870	33	942
	B	108	0	94	24	226
	C	903	40	0	34	977
	D	18	25	47	0	90
	Tot.	1029	104	1011	91	2235

Traffic Lane Flows

Lane	Scenario 6: 28PC 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	421
1/2	482
1/3	39
2/1 (short)	47
2/2 (with short)	90(In) 43(Out)
3/1	40
3/2	500
3/3	437
4/1 (short)	74
4/2 (with short)	226(In) 152(Out)
5/1	583
5/2	446
6/1	91
7/1	444
7/2	567
8/1	104
9/1	67
9/2	85
10/1	397
10/2	567
10/3	39
11/1	64
11/2	18
12/1	509
12/2	446

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	7.8 %	1854	1854
				Arm 10 Ahead	23.00	92.2 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	22.4 %	1828	1828
				Arm 9 Ahead	20.00	77.6 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	86.6 %	1791	1791
				Arm 10 Right	18.00	13.4 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	177	1464	72	1713
	B	296	0	181	62	539
	C	1741	100	0	63	1904
	D	160	46	92	0	298
	Tot.	2197	323	1737	197	4454

Traffic Lane Flows

Lane	Scenario 7: 28PC 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	733
1/2	803
1/3	177
2/1 (short)	92
2/2 (with short)	298(In) 206(Out)
3/1	100
3/2	943
3/3	861
4/1 (short)	269
4/2 (with short)	539(In) 270(Out)
5/1	1292
5/2	905
6/1	197
7/1	768
7/2	969
8/1	323
9/1	140
9/2	166
10/1	676
10/2	969
10/3	177
11/1	223
11/2	160
12/1	1023
12/2	941

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.8 %	1856	1856
				Arm 10 Ahead	23.00	90.2 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	10.0 %	1828	1828
				Arm 9 Ahead	20.00	90.0 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	89.3 %	1791	1791
				Arm 10 Right	18.00	10.7 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '28PC 08:00-09:00' (FG8: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	166	1649	152	1967
	B	313	0	208	70	591
	C	2128	183	1	125	2437
	D	272	62	141	0	475
	Tot.	2713	411	1999	347	5470

Traffic Lane Flows

Lane	Scenario 8: 28PC 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	866
1/2	935
1/3	166
2/1 (short)	141
2/2 (with short)	475(In) 334(Out)
3/1	183
3/2	1170
3/3	1084
4/1 (short)	295
4/2 (with short)	591(In) 296(Out)
5/1	1601
5/2	1112
6/1	347
7/1	855
7/2	1144
8/1	411
9/1	195
9/2	209
10/1	714
10/2	1144
10/3	166
11/1	228
11/2	272
12/1	1306
12/2	1220

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	17.6 %	1865	1865
				Arm 10 Ahead	23.00	82.4 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	6.1 %	1828	1828
				Arm 9 Ahead	20.00	93.9 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	278	1461	177	1918
	B	284	0	160	58	502
	C	1723	235	1	80	2039
	D	143	110	125	1	379
	Tot.	2152	623	1747	316	4838

Traffic Lane Flows

Lane	Scenario 9: 28PC 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	786
1/2	852
1/3	280
2/1 (short)	125
2/2 (with short)	379(In) 254(Out)
3/1	235
3/2	940
3/3	864
4/1 (short)	251
4/2 (with short)	502(In) 251(Out)
5/1	1264
5/2	888
6/1	316
7/1	735
7/2	1012
8/1	623
9/1	140
9/2	160
10/1	610
10/2	1012
10/3	280
11/1	388
11/2	146
12/1	1013
12/2	937

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	22.5 %	1870	1870
				Arm 10 Ahead	23.00	77.5 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	13.1 %	1828	1828
				Arm 9 Ahead	20.00	86.9 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	99.3 %	1791	1791
				Arm 10 Right	18.00	0.7 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	312	1501	162	1977
	B	251	0	136	66	453
	C	1757	341	1	59	2158
	D	102	141	91	0	334
	Tot.	2112	794	1729	287	4922

Traffic Lane Flows

Lane	Scenario 10: 28PC 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	798
1/2	865
1/3	314
2/1 (short)	91
2/2 (with short)	334(In) 243(Out)
3/1	341
3/2	945
3/3	872
4/1 (short)	226
4/2 (with short)	453(In) 227(Out)
5/1	1223
5/2	889
6/1	287
7/1	727
7/2	1002
8/1	794
9/1	125
9/2	137
10/1	636
10/2	1002
10/3	314
11/1	453
11/2	104
12/1	997
12/2	924

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	20.3 %	1868	1868
				Arm 10 Ahead	23.00	79.7 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	11.0 %	1828	1828
				Arm 9 Ahead	20.00	89.0 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	39	890	35	964
	B	144	0	95	27	266
	C	794	41	0	36	871
	D	16	27	49	0	92
	Tot.	954	107	1034	98	2193

Traffic Lane Flows

Lane	Scenario 11: 34RC 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	433
1/2	492
1/3	39
2/1 (short)	49
2/2 (with short)	92(In) 43(Out)
3/1	41
3/2	446
3/3	384
4/1 (short)	93
4/2 (with short)	266(In) 173(Out)
5/1	547
5/2	407
6/1	98
7/1	454
7/2	580
8/1	107
9/1	70
9/2	88
10/1	405
10/2	580
10/3	39
11/1	66
11/2	16
12/1	454
12/2	392

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	8.1 %	1854	1854
				Arm 10 Ahead	23.00	91.9 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	29.5 %	1828	1828
				Arm 9 Ahead	20.00	70.5 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	90.0 %	1791	1791
				Arm 10 Right	18.00	10.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	234	1549	74	1857
	B	366	0	182	70	618
	C	1691	101	0	65	1857
	D	173	51	100	0	324
	Tot.	2230	386	1831	209	4656

Traffic Lane Flows

Lane	Scenario 12: 34RC 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	776
1/2	847
1/3	234
2/1 (short)	100
2/2 (with short)	324(In) 224(Out)
3/1	101
3/2	917
3/3	839
4/1 (short)	309
4/2 (with short)	618(In) 309(Out)
5/1	1313
5/2	917
6/1	209
7/1	813
7/2	1018
8/1	386
9/1	146
9/2	171
10/1	713
10/2	1018
10/3	234
11/1	285
11/2	173
12/1	1004
12/2	925

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.5 %	1856	1856
				Arm 10 Ahead	23.00	90.5 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	18.4 %	1828	1828
				Arm 9 Ahead	20.00	81.6 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	92.5 %	1791	1791
				Arm 10 Right	18.00	7.5 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	176	1728	153	2057
	B	337	0	209	82	628
	C	2111	183	1	131	2426
	D	310	55	174	0	539
	Tot.	2758	414	2112	366	5650

Traffic Lane Flows

Lane	Scenario 13: 34RC 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	905
1/2	976
1/3	176
2/1 (short)	174
2/2 (with short)	539(In) 365(Out)
3/1	183
3/2	1163
3/3	1080
4/1 (short)	314
4/2 (with short)	628(In) 314(Out)
5/1	1632
5/2	1126
6/1	366
7/1	926
7/2	1186
8/1	414
9/1	213
9/2	210
10/1	752
10/2	1186
10/3	176
11/1	231
11/2	310
12/1	1318
12/2	1235

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	16.9 %	1864	1864
				Arm 10 Ahead	23.00	83.1 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	7.3 %	1828	1828
				Arm 9 Ahead	20.00	92.7 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	303	1532	204	2041
	B	430	0	160	66	656
	C	1862	238	1	93	2194
	D	165	98	162	1	426
	Tot.	2459	639	1855	364	5317

Traffic Lane Flows

Lane	Scenario 14: 34RC 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	836
1/2	900
1/3	305
2/1 (short)	162
2/2 (with short)	426(In) 264(Out)
3/1	238
3/2	1017
3/3	939
4/1 (short)	328
4/2 (with short)	656(In) 328(Out)
5/1	1429
5/2	1030
6/1	364
7/1	794
7/2	1061
8/1	639
9/1	160
9/2	161
10/1	632
10/2	1061
10/3	305
11/1	401
11/2	168
12/1	1101
12/2	1023

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	24.4 %	1873	1873
				Arm 10 Ahead	23.00	75.6 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	31.1 %	1828	1828
				Arm 9 Ahead	20.00	68.9 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	356	1604	182	2144
	B	351	0	137	96	584
	C	1900	345	1	120	2366
	D	116	127	136	0	379
	Tot.	2369	828	1878	398	5473

Traffic Lane Flows

Lane	Scenario 15: 34RC 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	859
1/2	927
1/3	358
2/1 (short)	136
2/2 (with short)	379(In) 243(Out)
3/1	345
3/2	1047
3/3	974
4/1 (short)	292
4/2 (with short)	584(In) 292(Out)
5/1	1398
5/2	971
6/1	398
7/1	813
7/2	1065
8/1	828
9/1	216
9/2	138
10/1	677
10/2	1065
10/3	358
11/1	483
11/2	118
12/1	1106
12/2	1033

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	21.2 %	1869	1869
				Arm 10 Ahead	23.00	78.8 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	20.2 %	1828	1828
				Arm 9 Ahead	20.00	79.8 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	39	891	35	965
	B	144	0	95	27	266
	C	795	41	0	36	872
	D	16	27	49	0	92
	Tot.	955	107	1035	98	2195

Traffic Lane Flows

Lane	Scenario 16: 34OP 06:00-07:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	433
1/2	493
1/3	39
2/1 (short)	49
2/2 (with short)	92(In) 43(Out)
3/1	41
3/2	447
3/3	384
4/1 (short)	92
4/2 (with short)	266(In) 174(Out)
5/1	547
5/2	408
6/1	98
7/1	454
7/2	581
8/1	107
9/1	70
9/2	88
10/1	405
10/2	581
10/3	39
11/1	66
11/2	16
12/1	455
12/2	392

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	8.1 %	1854	1854
				Arm 10 Ahead	23.00	91.9 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	29.9 %	1828	1828
				Arm 9 Ahead	20.00	70.1 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	90.0 %	1791	1791
				Arm 10 Right	18.00	10.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	242	1561	75	1878
	B	353	0	182	70	605
	C	1693	101	0	64	1858
	D	173	51	100	0	324
	Tot.	2219	394	1843	209	4665

Traffic Lane Flows

Lane	Scenario 17: 34OP 07:00-08:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	782
1/2	854
1/3	242
2/1 (short)	100
2/2 (with short)	324(In) 224(Out)
3/1	101
3/2	918
3/3	839
4/1 (short)	303
4/2 (with short)	605(In) 302(Out)
5/1	1308
5/2	911
6/1	209
7/1	818
7/2	1025
8/1	394
9/1	145
9/2	171
10/1	718
10/2	1025
10/3	242
11/1	293
11/2	173
12/1	1005
12/2	925

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	9.6 %	1856	1856
				Arm 10 Ahead	23.00	90.4 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	16.6 %	1828	1828
				Arm 9 Ahead	20.00	83.4 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	92.4 %	1791	1791
				Arm 10 Right	18.00	7.6 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	181	1737	155	2073
	B	358	0	209	82	649
	C	2147	183	1	131	2462
	D	310	39	190	0	539
	Tot.	2815	403	2137	368	5723

Traffic Lane Flows

Lane	Scenario 18: 34OP 08:00-09:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	918
1/2	974
1/3	181
2/1 (short)	190
2/2 (with short)	539(In) 349(Out)
3/1	183
3/2	1179
3/3	1100
4/1 (short)	325
4/2 (with short)	649(In) 324(Out)
5/1	1659
5/2	1156
6/1	368
7/1	990
7/2	1147
8/1	403
9/1	250
9/2	173
10/1	800
10/2	1147
10/3	181
11/1	220
11/2	310
12/1	1334
12/2	1255

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	16.9 %	1864	1864
				Arm 10 Ahead	23.00	83.1 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	10.2 %	1828	1828
				Arm 9 Ahead	20.00	89.8 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	85.2 %	1791	1791
				Arm 10 Right	18.00	14.8 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	300	1527	205	2034
	B	430	0	160	66	656
	C	1863	238	1	93	2195
	D	165	101	159	1	426
	Tot.	2460	639	1847	365	5311

Traffic Lane Flows

Lane	Scenario 19: 34OP 15:00-16:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	834
1/2	898
1/3	302
2/1 (short)	159
2/2 (with short)	426(In) 267(Out)
3/1	238
3/2	1018
3/3	939
4/1 (short)	328
4/2 (with short)	656(In) 328(Out)
5/1	1430
5/2	1030
6/1	365
7/1	788
7/2	1059
8/1	639
9/1	160
9/2	161
10/1	629
10/2	1059
10/3	302
11/1	401
11/2	168
12/1	1102
12/2	1023

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	24.6 %	1873	1873
				Arm 10 Ahead	23.00	75.4 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	31.1 %	1828	1828
				Arm 9 Ahead	20.00	68.9 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	2	350	1610	182	2144
	B	313	0	137	97	547
	C	1903	345	1	119	2368
	D	116	132	131	0	379
	Tot.	2334	827	1879	398	5438

Traffic Lane Flows

Lane	Scenario 20: 34OP 17:00-18:00
Junction: A12 / Foxhall Road / Newbourne Road	
1/1	862
1/2	930
1/3	352
2/1 (short)	131
2/2 (with short)	379(In) 248(Out)
3/1	345
3/2	1047
3/3	976
4/1 (short)	273
4/2 (with short)	547(In) 274(Out)
5/1	1379
5/2	955
6/1	398
7/1	811
7/2	1068
8/1	827
9/1	216
9/2	138
10/1	680
10/2	1068
10/3	352
11/1	482
11/2	118
12/1	1106
12/2	1035

Full Input Data And Results

Lane Saturation Flows

Junction: A12 / Foxhall Road / Newbourne Road

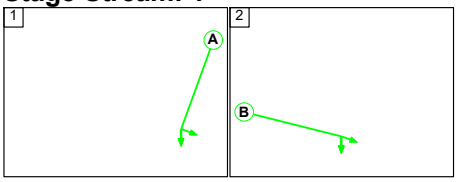
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 (North))	3.50	0.00	Y	Arm 6 Left	Inf	21.1 %	1869	1869
				Arm 10 Ahead	23.00	78.9 %		
1/2 (A12 (North))	3.50	0.00	N	Arm 10 Ahead	23.00	100.0 %	1976	1976
1/3 (A12 (North))	3.50	0.00	Y	Arm 10 Ahead	23.00	100.0 %	1845	1845
2/1 (Newbourne Road)	3.50	0.00	Y	Arm 7 Left	14.00	100.0 %	1775	1775
2/2 (Newbourne Road)	3.50	0.00	Y	Arm 11 Ahead	22.00	100.0 %	1840	1840
3/1 (A12 (South))	3.50	0.00	Y	Arm 8 Left	20.00	100.0 %	1828	1828
3/2 (A12 (South))	3.50	0.00	N	Arm 12 Ahead	20.00	100.0 %	1958	1958
3/3 (A12 (South))	3.50	0.00	Y	Arm 12 Ahead	20.00	100.0 %	1828	1828
4/1 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	100.0 %	1828	1828
4/2 (Foxhall Road)	3.50	0.00	Y	Arm 5 Left	20.00	14.6 %	1828	1828
				Arm 9 Ahead	20.00	85.4 %		
5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Newbourne Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Foxhall Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1	3.25	0.00	Y	Arm 6 Ahead	18.00	100.0 %	1791	1791
				Arm 10 Right	18.00	0.0 %		
9/2	3.25	0.00	Y	Arm 10 Right	Inf	100.0 %	1940	1940
10/1	Infinite Saturation Flow						Inf	Inf
10/2	Infinite Saturation Flow						Inf	Inf
10/3	Infinite Saturation Flow						Inf	Inf
11/1	3.25	0.00	Y	Arm 8 Ahead	15.00	100.0 %	1764	1764
11/2	3.25	0.00	Y	Arm 12 Right	15.00	100.0 %	1764	1764
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

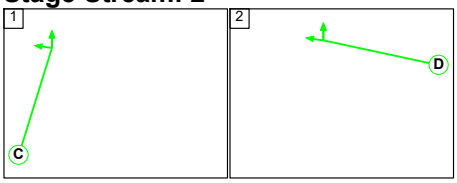
Scenario 1: '28RC 06:00-07:00' (FG1: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

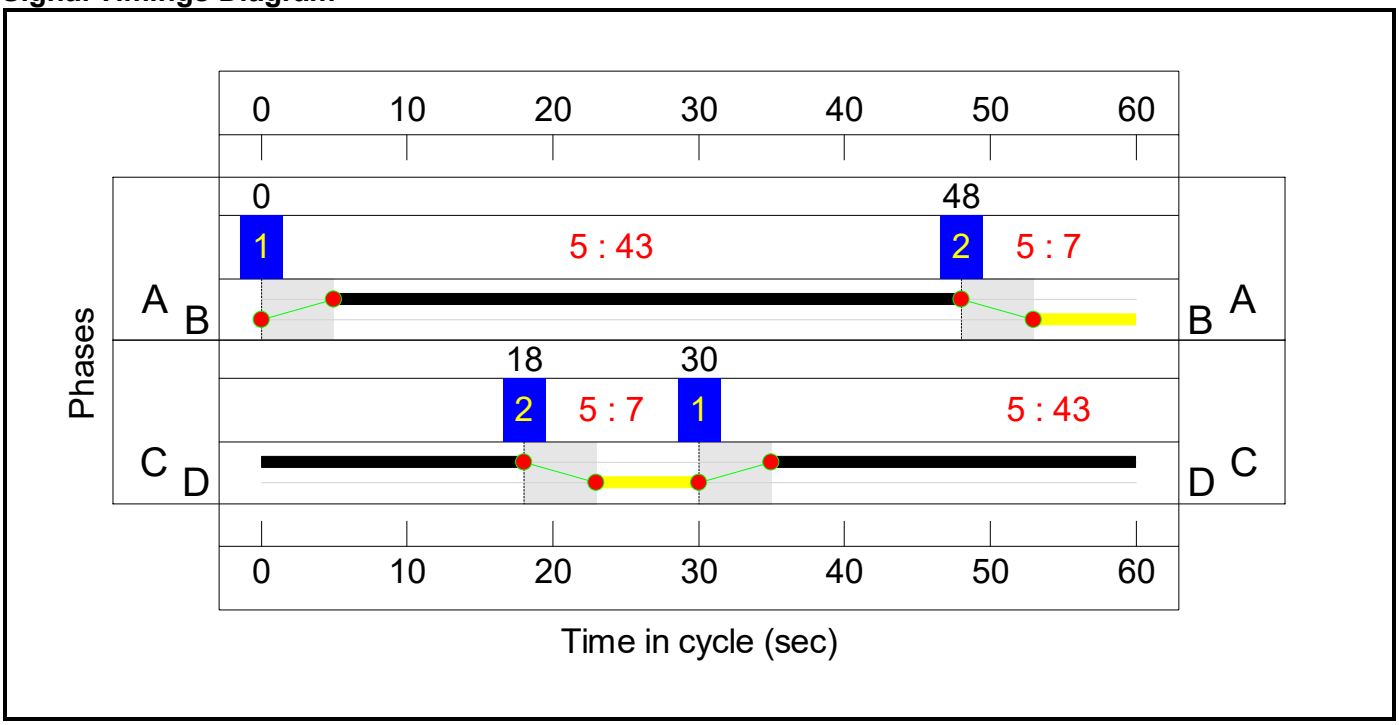
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	30	18

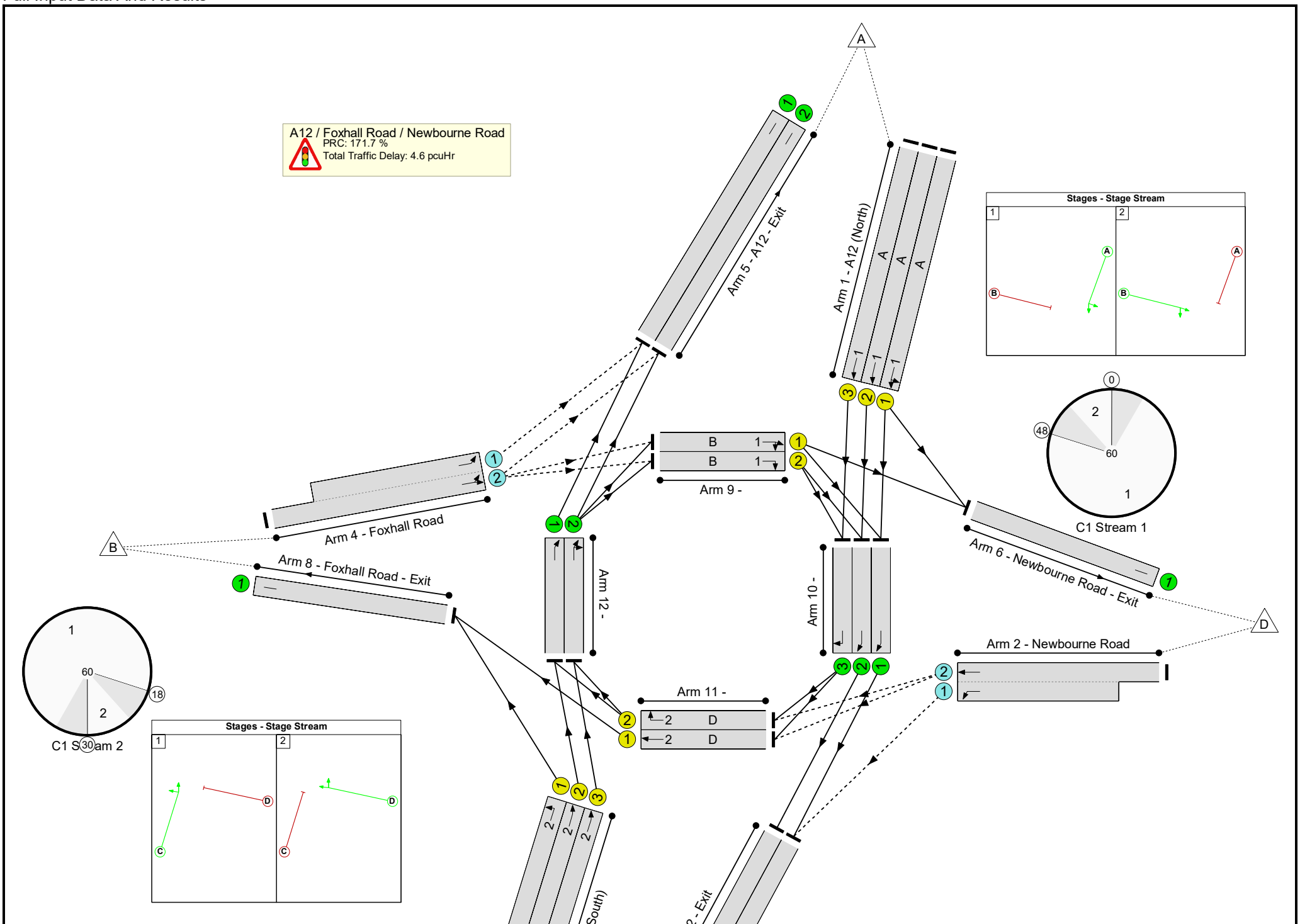
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**33.1%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**33.1%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	420	1854	1360	30.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	480	1976	1449	33.1%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	39	1845	1353	2.9%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	88	1840:1775	672+672	6.1 : 7.0%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	40	1828	1341	3.0%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	428	1958	1436	29.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	369	1828	1341	27.5%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	219	1828:1828	731+252	22.3 : 22.2%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	91	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	444	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	104	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	68	1791	239	28.5%
9/2	Right	U	1	N/A	B		1	7	-	84	1940	259	32.5%
10/1	Ahead	U	N/A	N/A	-		-	-	-	397	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	64	1764	235	27.2%
11/2	Right	U	2	N/A	D		1	7	-	16	1764	235	6.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	436	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**614**	**0**	**0**	**2.8**	**1.7**	**0.0**	**4.6**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**614**	**0**	**0**	**2.8**	**1.7**	**0.0**	**4.6**	**-**	**-**	**-**	**-**
1/1	420	420	-	-	-	0.3	0.2	-	0.5	4.7	2.3	0.2	2.6
1/2	480	480	-	-	-	0.4	0.2	-	0.6	4.7	2.8	0.2	3.0
1/3	39	39	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	88	88	176	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.1
3/1	40	40	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	428	428	-	-	-	0.3	0.2	-	0.5	4.5	2.4	0.2	2.6
3/3	369	369	-	-	-	0.3	0.2	-	0.5	4.5	2.0	0.2	2.2
4/2+4/1	219	219	438	0	0	0.0	0.1	-	0.1	2.4	0.1	0.1	0.3
5/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	91	91	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	104	104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	68	68	-	-	-	0.4	0.2	-	0.6	33.0	1.0	0.2	1.2
9/2	84	84	-	-	-	0.6	0.2	-	0.8	33.9	1.3	0.2	1.5
10/1	397	397	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	64	64	-	-	-	0.4	0.2	-	0.6	32.5	0.9	0.2	1.1
11/2	16	16	-	-	-	0.1	0.0	-	0.1	31.2	0.2	0.0	0.3
12/1	436	436	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

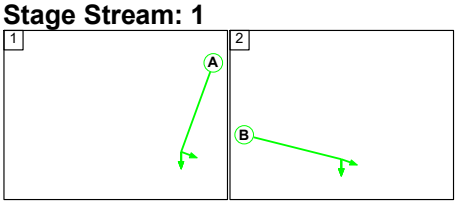
C1	Stream: 1	PRC for Signalled Lanes (%):	171.7	Total Delay for Signalled Lanes (pcuHr):	2.62	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	201.9	Total Delay for Signalled Lanes (pcuHr):	1.76	Cycle Time (s):	60
		PRC Over All Lanes (%):	171.7	Total Delay Over All Lanes(pcuHr):	4.56		

Full Input Data And Results

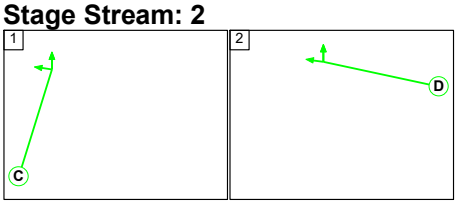
Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

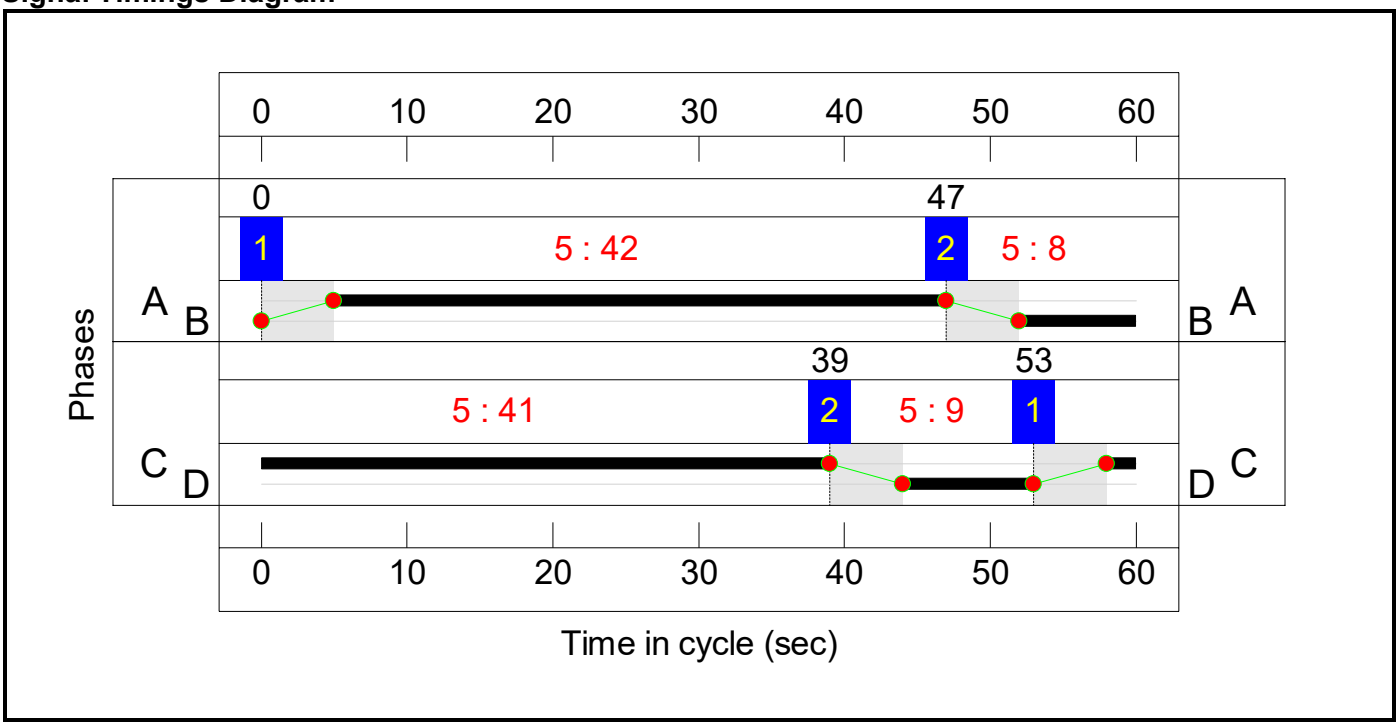
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	41	9
Change Point	53	39

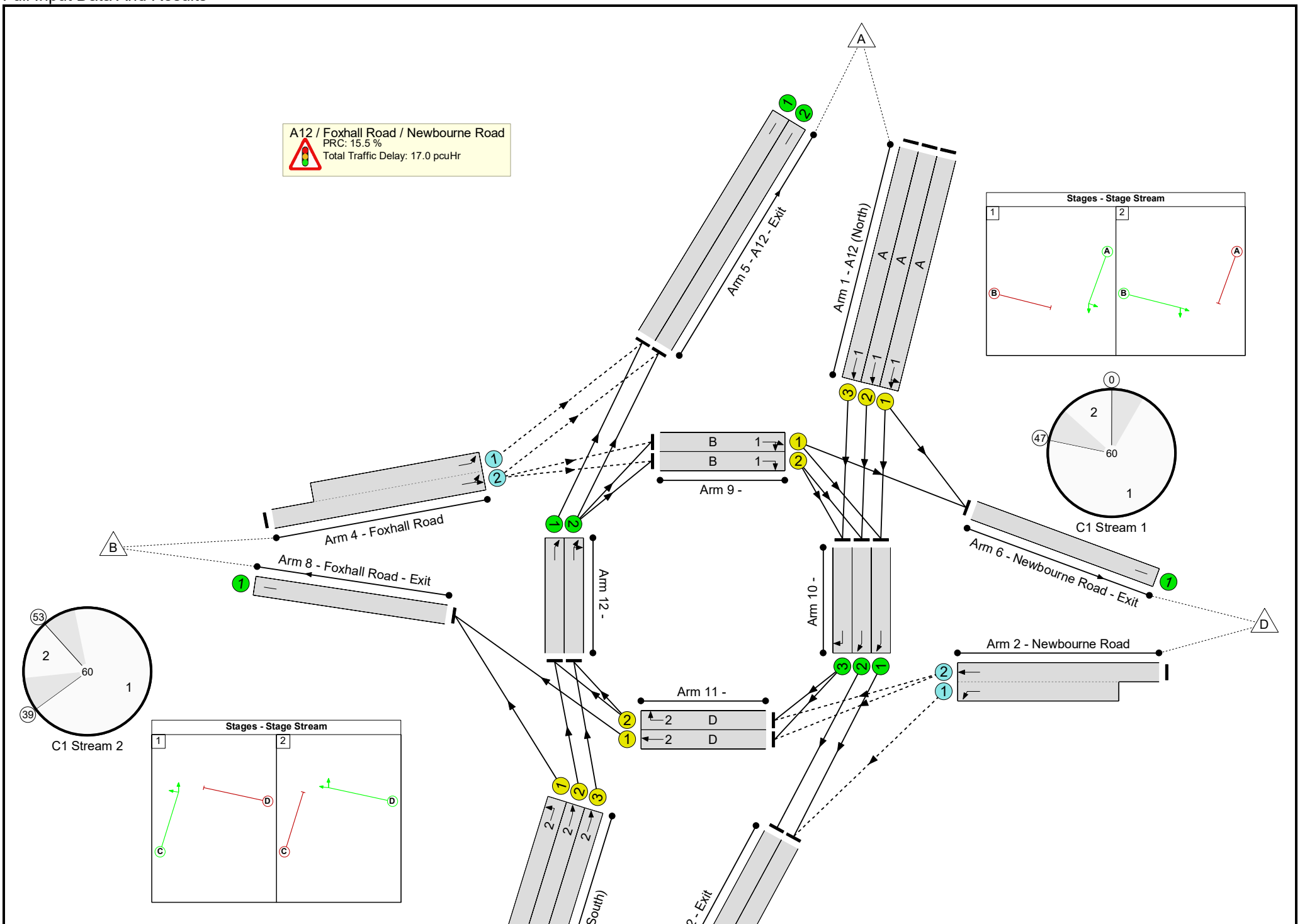
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.9%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.9%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	741	1856	1330	55.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	812	1976	1416	57.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	183	1845	1322	13.8%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	296	1840:1775	429+270	47.6 : 34.0%
3/1	A12 (South) Left	U	2	N/A	C		1	41	-	100	1828	1280	7.8%
3/2	A12 (South) Ahead	U	2	N/A	C		1	41	-	887	1958	1371	64.7%
3/3	A12 (South) Ahead	U	2	N/A	C		1	41	-	808	1828	1280	63.1%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	539	1828:1828	424+424	63.7 : 63.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1235	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	851	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	197	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	977	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	329	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	141	1791	269	52.5%
9/2	Right	U	1	N/A	B		1	8	-	165	1940	291	56.7%
10/1	Ahead	U	N/A	N/A	-		-	-	-	685	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	977	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	183	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	9	-	229	1764	294	77.9%
11/2	Right	U	2	N/A	D		1	9	-	158	1764	294	53.7%
12/1	Ahead	U	N/A	N/A	-		-	-	-	966	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	887	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1670**	**0**	**0**	**9.1**	**7.9**	**0.0**	**17.0**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1670**	**0**	**0**	**9.1**	**7.9**	**0.0**	**17.0**	**-**	**-**	**-**	**-**
1/1	741	741	-	-	-	0.8	0.6	-	1.5	7.1	5.8	0.6	6.4
1/2	812	812	-	-	-	0.9	0.7	-	1.6	7.1	6.3	0.7	7.0
1/3	183	183	-	-	-	0.1	0.1	-	0.2	4.3	0.9	0.1	1.0
2/2+2/1	296	296	592	0	0	0.2	0.4	-	0.6	6.8	1.4	0.4	1.7
3/1	100	100	-	-	-	0.1	0.0	-	0.1	4.4	0.5	0.0	0.6
3/2	887	887	-	-	-	1.2	0.9	-	2.1	8.6	7.9	0.9	8.8
3/3	808	808	-	-	-	1.1	0.9	-	1.9	8.6	7.2	0.9	8.0
4/2+4/1	539	539	1078	0	0	0.7	0.9	-	1.6	10.8	3.0	0.9	3.9
5/1	1235	1235	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	851	851	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	197	197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	977	977	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	329	329	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	141	141	-	-	-	0.8	0.5	-	1.4	34.9	2.2	0.5	2.8
9/2	165	165	-	-	-	0.9	0.6	-	1.5	33.0	2.5	0.6	3.1
10/1	685	685	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	977	977	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	183	183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	229	229	-	-	-	1.4	1.7	-	3.0	47.6	3.6	1.7	5.3
11/2	158	158	-	-	-	0.9	0.6	-	1.5	33.4	2.4	0.6	2.9
12/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	887	887	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

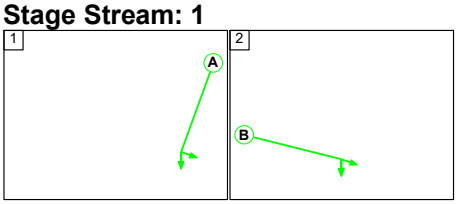
C1	Stream: 1	PRC for Signalled Lanes (%):	57.0	Total Delay for Signalled Lanes (pcuHr):	6.14	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	15.5	Total Delay for Signalled Lanes (pcuHr):	8.69	Cycle Time (s):	60
		PRC Over All Lanes (%):	15.5	Total Delay Over All Lanes(pcuHr):	17.00		

Full Input Data And Results

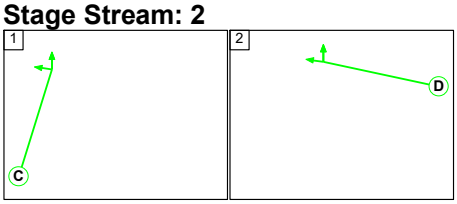
Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

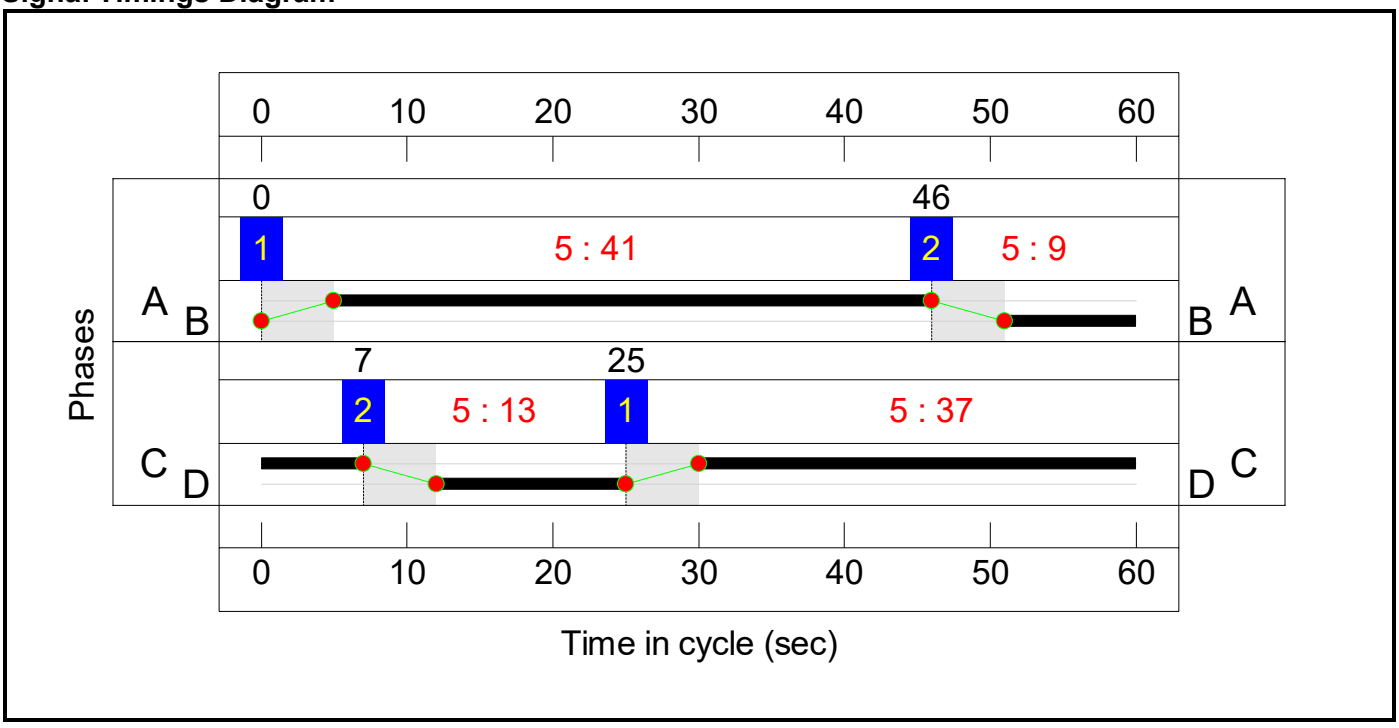
Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

Stage	1	2
Duration	37	13
Change Point	25	7

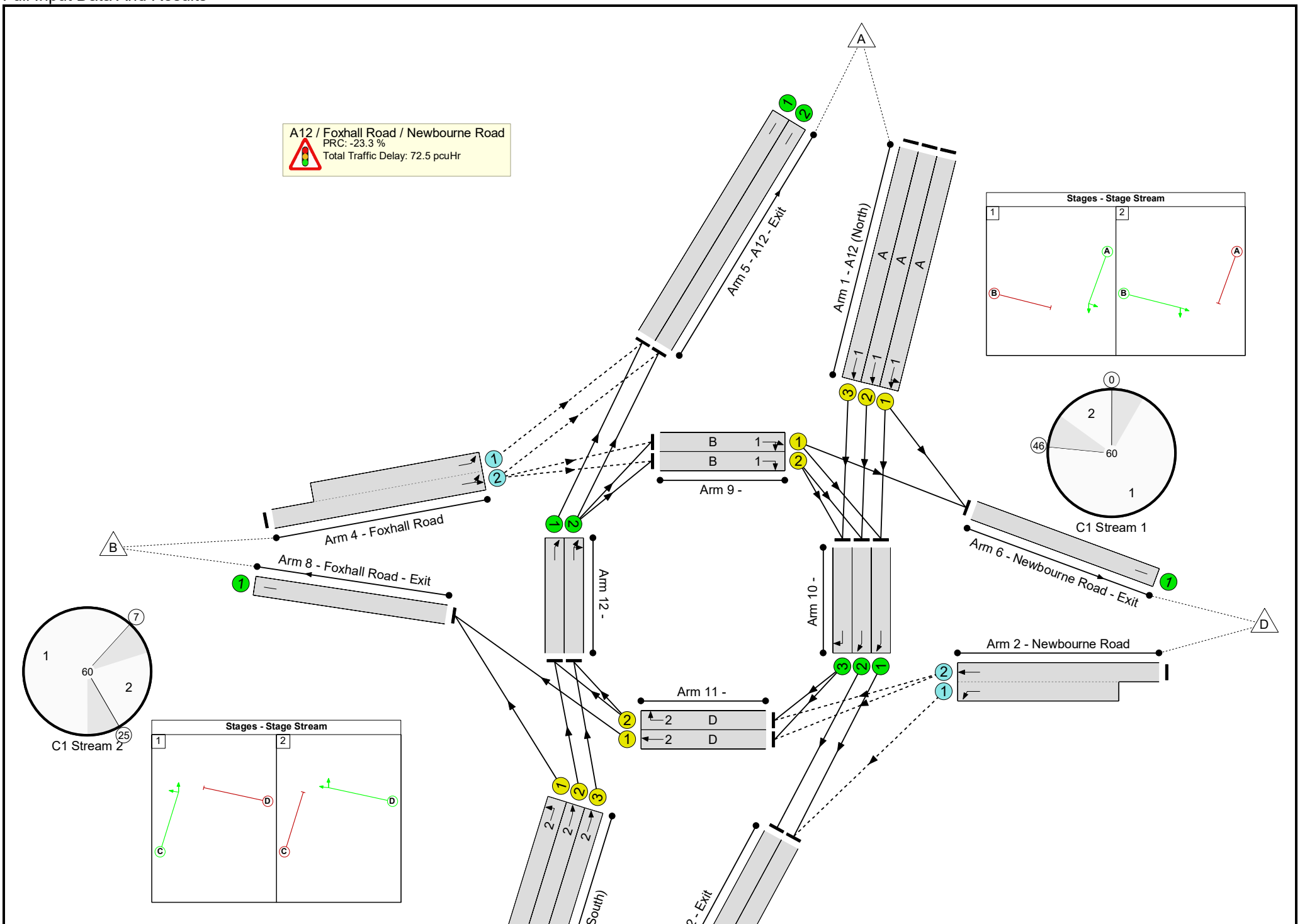
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.9%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.9%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	41	-	873	1865	1306	66.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	41	-	941	1976	1383	68.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	41	-	160	1845	1292	12.4%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	475	1840:1775	380+291	87.1 : 49.6%
3/1	A12 (South) Left	U	2	N/A	C		1	37	-	183	1828	1158	15.8%
3/2	A12 (South) Ahead	U	2	N/A	C		1	37	-	1156	1958	1240	93.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	37	-	1073	1828	1158	92.7%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	624	1828:1828	281+281	110.9 : 110.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1604	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1115	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	866	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1149	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	9	-	197	1791	299	63.7%
9/2	Right	U	1	N/A	B		1	9	-	208	1940	323	58.0%
10/1	Ahead	U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1149	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	160	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	13	-	220	1764	412	53.4%
11/2	Right	U	2	N/A	D		1	13	-	271	1764	412	65.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1292	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1208	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2075**	**0**	**0**	**19.2**	**53.3**	**0.0**	**72.5**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2075**	**0**	**0**	**19.2**	**53.3**	**0.0**	**72.5**	**-**	**-**	**-**	**-**
1/1	873	873	-	-	-	1.2	1.0	-	2.2	9.2	8.0	1.0	9.0
1/2	941	941	-	-	-	1.3	1.1	-	2.4	9.2	8.9	1.1	9.9
1/3	160	160	-	-	-	0.1	0.1	-	0.2	4.6	0.8	0.1	0.9
2/2+2/1	475	475	950	0	0	1.1	1.2	-	2.3	17.3	5.0	1.2	6.2
3/1	183	183	-	-	-	0.2	0.1	-	0.3	6.3	1.2	0.1	1.3
3/2	1156	1156	-	-	-	3.2	6.0	-	9.2	28.6	17.0	6.0	23.0
3/3	1073	1073	-	-	-	2.9	5.6	-	8.5	28.5	15.8	5.6	21.4
4/2+4/1	624	562	1125	0	0	4.6	35.2	-	39.8	229.7	12.0	35.2	47.2
5/1	1573	1573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1112	1112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	866	866	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1129	1129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	190	190	-	-	-	1.2	0.9	-	2.1	39.1	2.9	0.9	3.7
9/2	188	188	-	-	-	0.9	0.7	-	1.6	30.9	3.1	0.7	3.8
10/1	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1129	1129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	220	220	-	-	-	1.1	0.6	-	1.6	26.9	2.7	0.6	3.3
11/2	271	271	-	-	-	1.3	1.0	-	2.2	29.5	4.5	1.0	5.4
12/1	1292	1292	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1208	1208	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

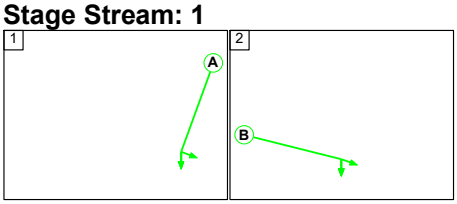
C1	Stream: 1	PRC for Signalled Lanes (%):	32.3	Total Delay for Signalled Lanes (pcuHr):	8.52	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-3.6	Total Delay for Signalled Lanes (pcuHr):	21.87	Cycle Time (s):	60
		PRC Over All Lanes (%):	-23.3	Total Delay Over All Lanes(pcuHr):	72.49		

Full Input Data And Results

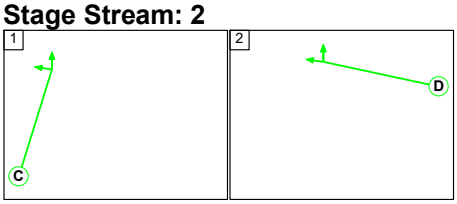
Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

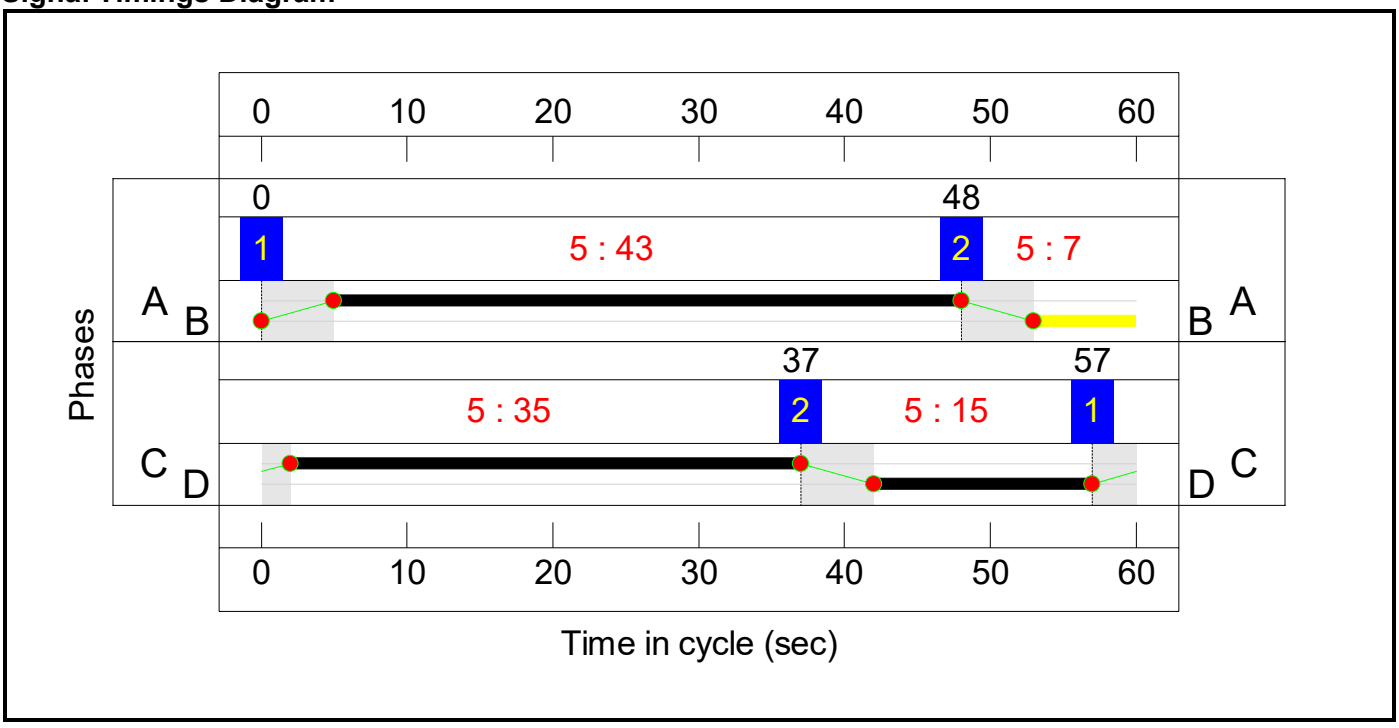
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	35	15
Change Point	57	37

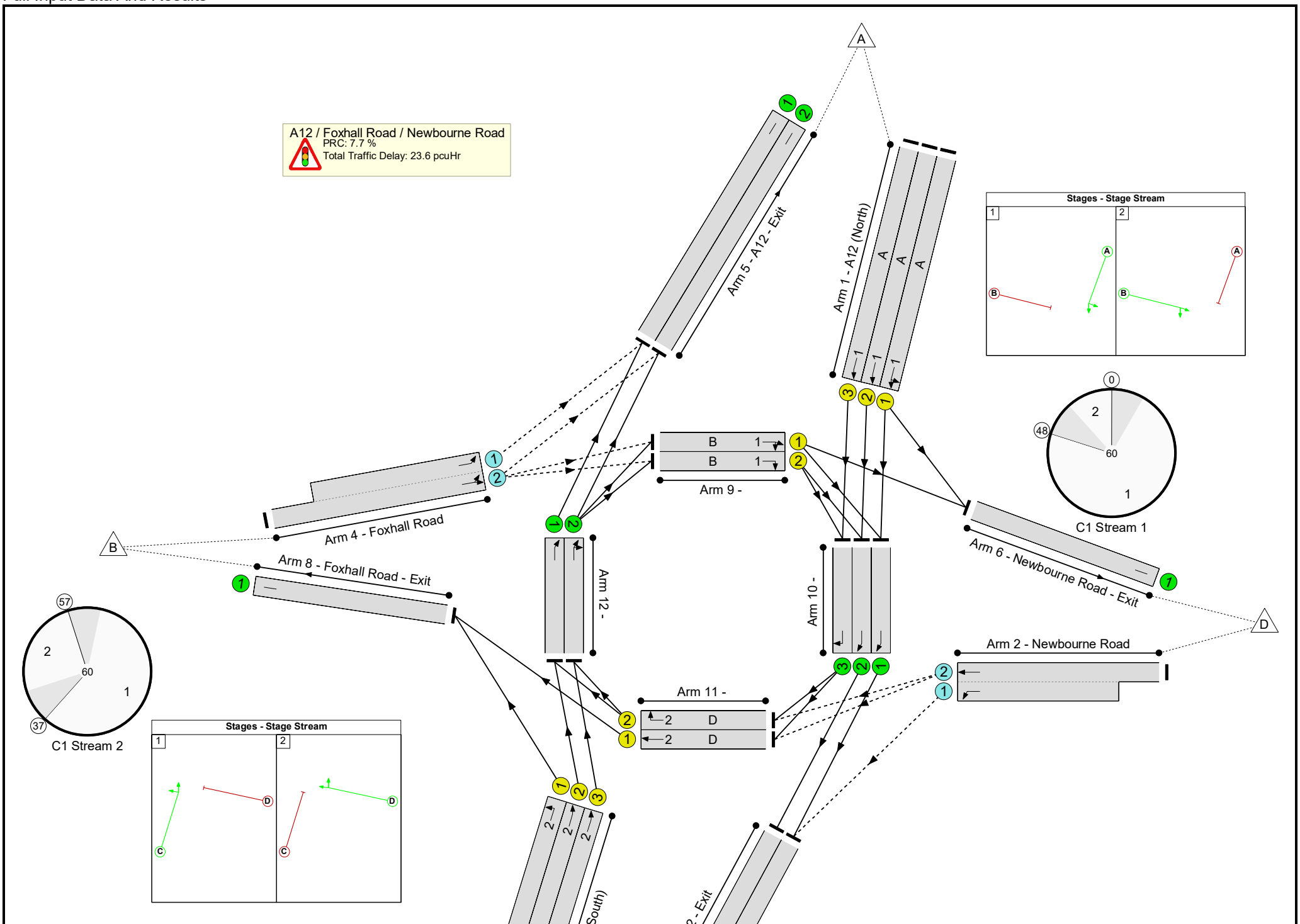
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.5%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.5%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	801	1870	1371	58.4%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	866	1976	1449	59.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	291	1845	1353	21.5%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	379	1840:1775	403+403	61.6 : 32.5%
3/1	A12 (South) Left	U	2	N/A	C		1	35	-	235	1828	1097	21.4%
3/2	A12 (South) Ahead	U	2	N/A	C		1	35	-	932	1958	1175	79.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	35	-	857	1828	1097	78.1%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	536	1828:1828	425+425	63.0 : 63.0%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1273	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	754	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1025	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	140	1791	239	58.6%
9/2	Right	U	1	N/A	B		1	7	-	159	1940	259	61.5%
10/1	Ahead	U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1025	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	291	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	15	-	393	1764	470	83.5%
11/2	Right	U	2	N/A	D		1	15	-	146	1764	470	31.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1005	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	930	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1830**	**0**	**0**	**12.8**	**10.8**	**0.0**	**23.6**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1830**	**0**	**0**	**12.8**	**10.8**	**0.0**	**23.6**	**-**	**-**	**-**	**-**
1/1	801	801	-	-	-	0.8	0.7	-	1.5	6.9	6.0	0.7	6.7
1/2	866	866	-	-	-	0.9	0.7	-	1.7	6.9	6.7	0.7	7.5
1/3	291	291	-	-	-	0.2	0.1	-	0.3	4.2	1.5	0.1	1.6
2/2+2/1	379	379	758	0	0	0.4	0.4	-	0.8	7.6	2.4	0.4	2.9
3/1	235	235	-	-	-	0.4	0.1	-	0.5	7.6	1.8	0.1	1.9
3/2	932	932	-	-	-	2.4	1.9	-	4.3	16.5	11.7	1.9	13.5
3/3	857	857	-	-	-	2.2	1.8	-	3.9	16.4	10.7	1.8	12.5
4/2+4/1	536	536	1072	0	0	1.3	0.8	-	2.2	14.7	3.3	0.8	4.1
5/1	1273	1273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	318	318	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	754	754	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1025	1025	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	140	140	-	-	-	0.8	0.7	-	1.5	39.6	2.2	0.7	2.9
9/2	159	159	-	-	-	0.9	0.8	-	1.7	38.6	2.2	0.8	3.0
10/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1025	1025	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	291	291	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	393	393	-	-	-	2.0	2.4	-	4.3	39.8	6.1	2.4	8.5
11/2	146	146	-	-	-	0.6	0.2	-	0.8	19.7	1.7	0.2	1.9
12/1	1005	1005	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	930	930	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

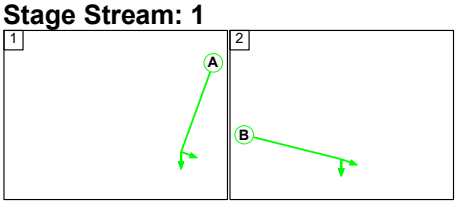
C1	Stream: 1	PRC for Signalled Lanes (%):	46.4	Total Delay for Signalled Lanes (pcuHr):	6.77	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	7.7	Total Delay for Signalled Lanes (pcuHr):	13.81	Cycle Time (s):	60
		PRC Over All Lanes (%):	7.7	Total Delay Over All Lanes(pcuHr):	23.58		

Full Input Data And Results

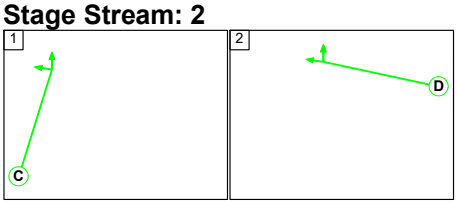
Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

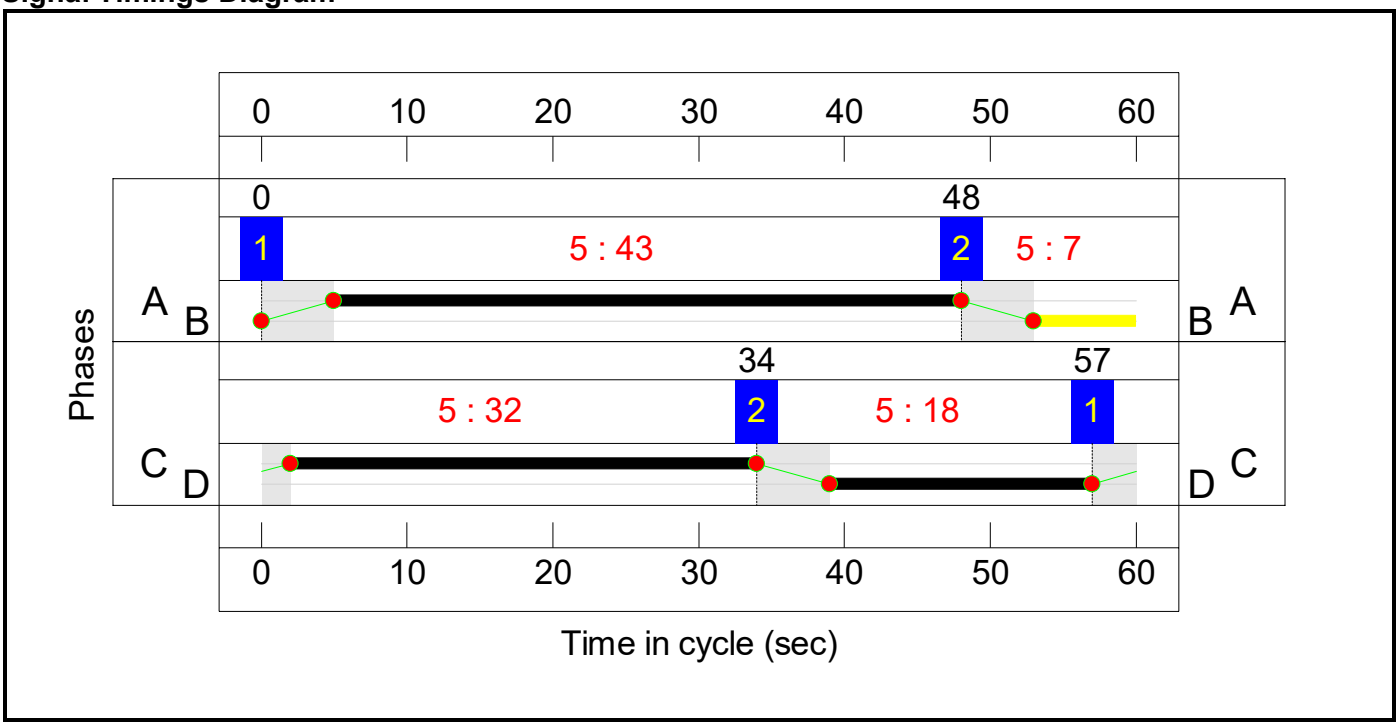
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	32	18
Change Point	57	34

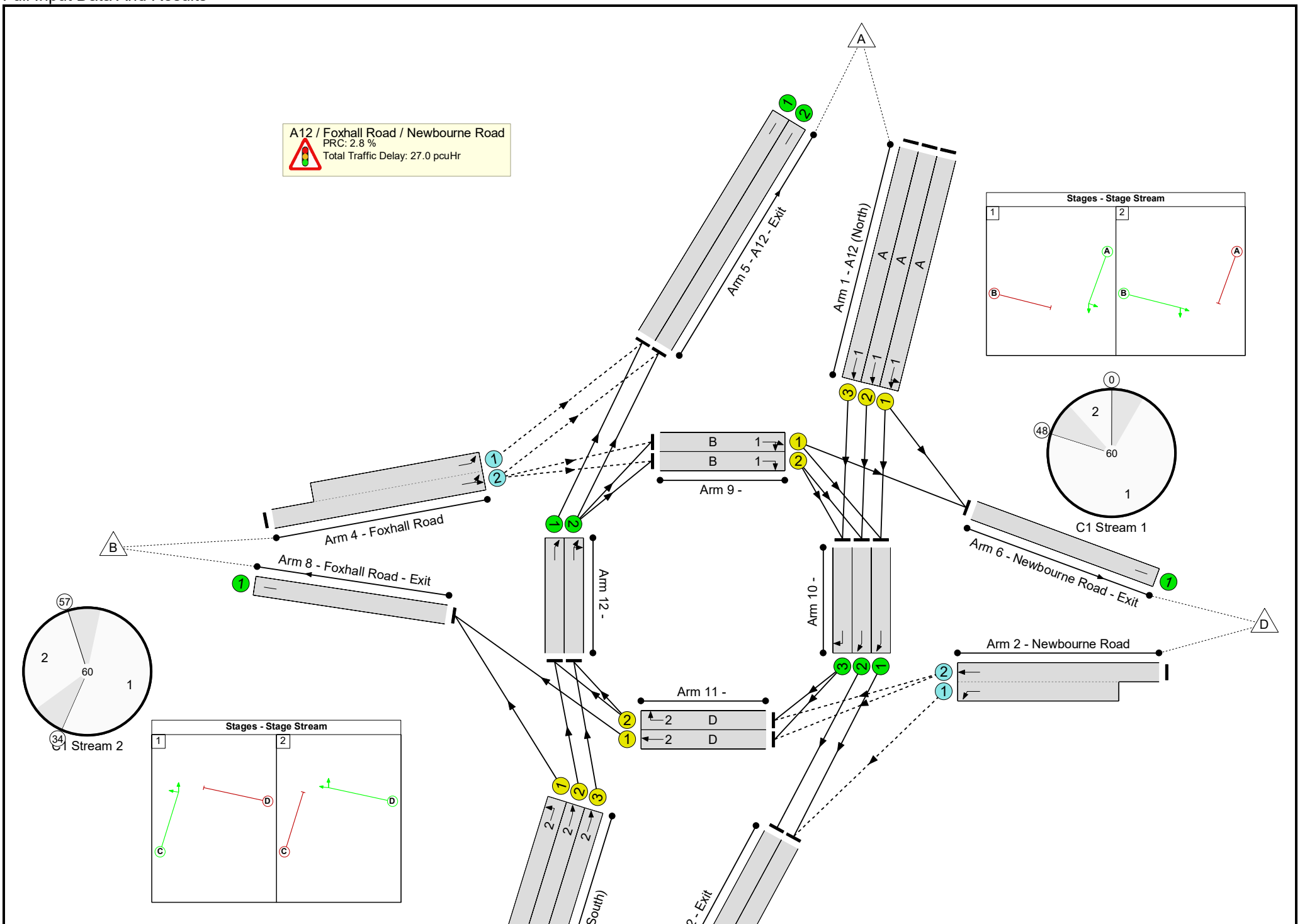
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.6%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.6%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	826	1868	1370	60.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	894	1976	1449	61.7%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	336	1845	1353	24.8%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	334	1840:1775	386+294	60.4 : 34.4%
3/1	A12 (South) Left	U	2	N/A	C		1	32	-	341	1828	1005	33.9%
3/2	A12 (South) Ahead	U	2	N/A	C		1	32	-	943	1958	1077	87.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	32	-	872	1828	1005	86.7%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	454	1828:1828	445+445	51.0 : 51.0%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1222	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	889	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1031	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	807	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	124	1791	239	51.9%
9/2	Right	U	1	N/A	B		1	7	-	137	1940	259	53.0%
10/1	Ahead	U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1031	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	336	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	18	-	466	1764	559	83.4%
11/2	Right	U	2	N/A	D		1	18	-	103	1764	559	18.4%
12/1	Ahead	U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	923	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1576**	**0**	**0**	**14.0**	**13.1**	**0.0**	**27.0**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1576**	**0**	**0**	**14.0**	**13.1**	**0.0**	**27.0**	**-**	**-**	**-**	**-**
1/1	826	826	-	-	-	0.9	0.8	-	1.6	7.1	6.4	0.8	7.2
1/2	894	894	-	-	-	1.0	0.8	-	1.8	7.1	7.2	0.8	8.0
1/3	336	336	-	-	-	0.2	0.2	-	0.4	4.4	1.8	0.2	1.9
2/2+2/1	334	334	668	0	0	0.4	0.5	-	0.9	9.3	2.5	0.5	3.0
3/1	341	341	-	-	-	0.7	0.3	-	1.0	10.2	3.1	0.3	3.4
3/2	943	943	-	-	-	3.1	3.4	-	6.4	24.5	13.6	3.4	17.0
3/3	872	872	-	-	-	2.8	3.1	-	5.9	24.5	12.4	3.1	15.5
4/2+4/1	454	454	908	0	0	1.1	0.5	-	1.7	13.2	2.5	0.5	3.0
5/1	1222	1222	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	889	889	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1031	1031	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	807	807	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	124	124	-	-	-	0.7	0.5	-	1.2	35.2	1.8	0.5	2.3
9/2	137	137	-	-	-	0.7	0.6	-	1.2	32.0	1.8	0.6	2.3
10/1	661	661	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1031	1031	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	466	466	-	-	-	2.1	2.4	-	4.5	34.5	7.0	2.4	9.4
11/2	103	103	-	-	-	0.4	0.1	-	0.5	16.2	0.9	0.1	1.0
12/1	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	923	923	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

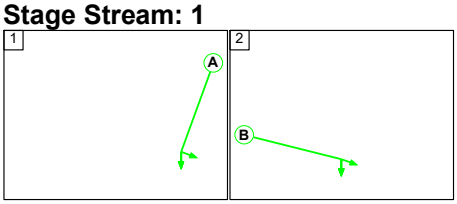
C1	Stream: 1	PRC for Signalled Lanes (%):	45.9	Total Delay for Signalled Lanes (pcuHr):	6.25	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	2.8	Total Delay for Signalled Lanes (pcuHr):	18.26	Cycle Time (s):	60
		PRC Over All Lanes (%):	2.8	Total Delay Over All Lanes(pcuHr):	27.03		

Full Input Data And Results

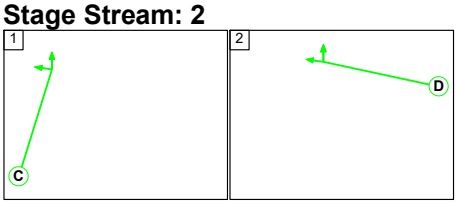
Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

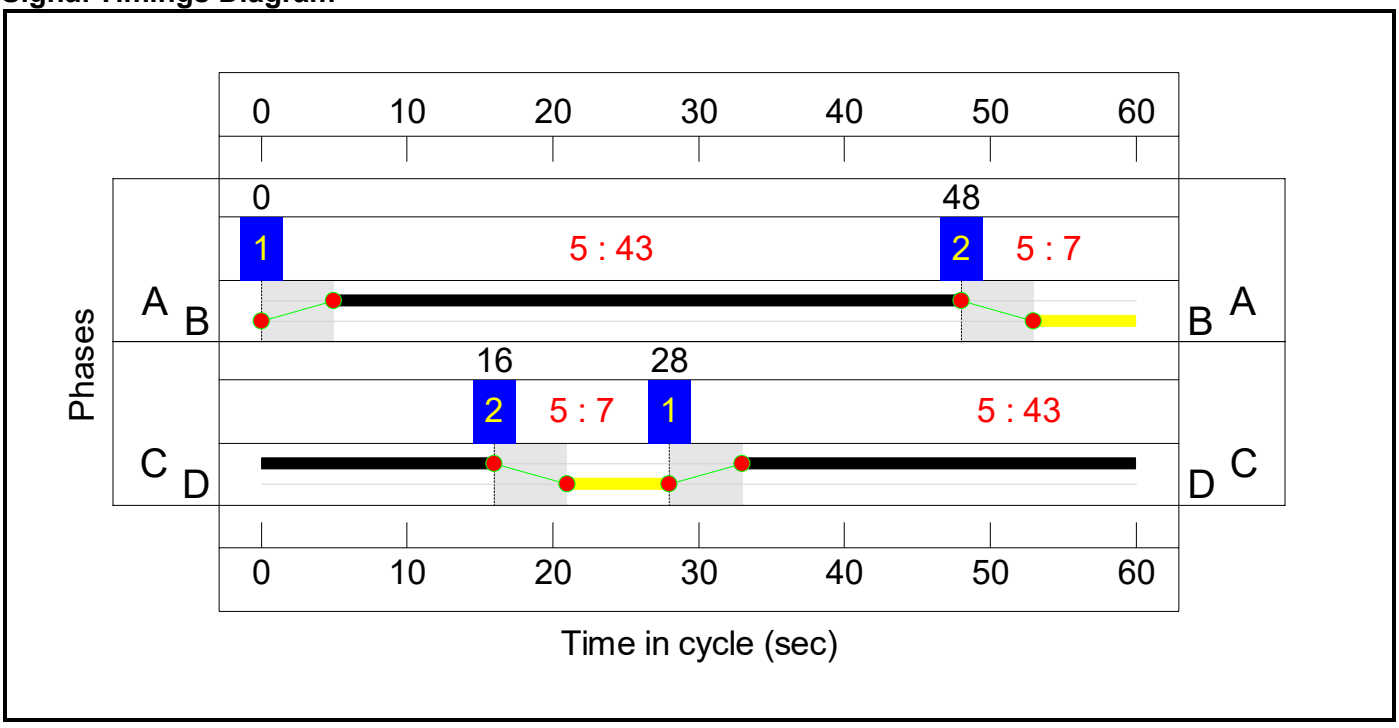
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	28	16

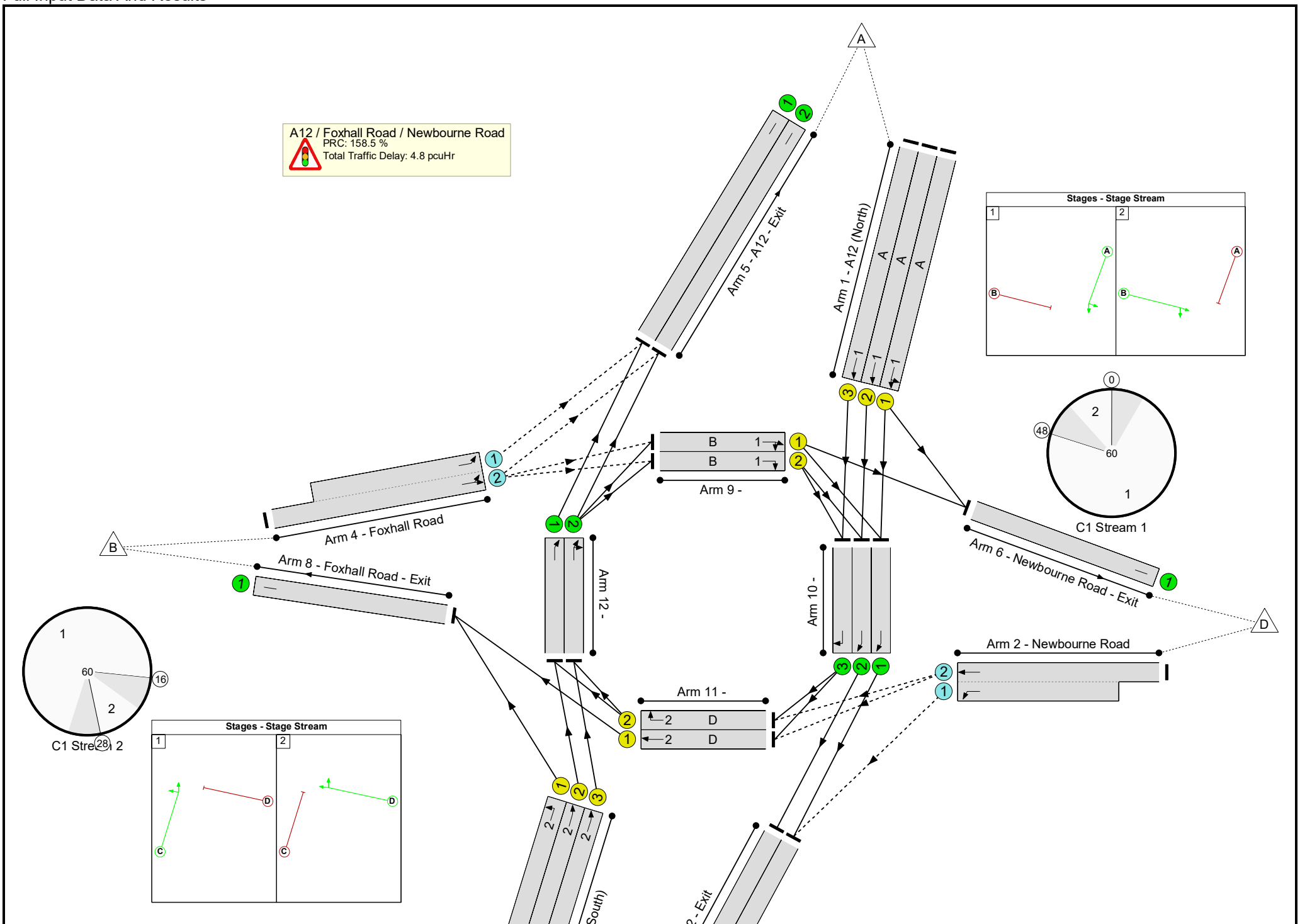
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.8%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.8%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	421	1854	1360	31.0%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	482	1976	1449	33.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	39	1845	1353	2.9%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	90	1840:1775	671+671	6.4 : 7.0%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	40	1828	1341	3.0%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	500	1958	1436	34.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	437	1828	1341	32.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	226	1828:1828	686+433	22.2 : 17.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	583	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	91	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	444	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	567	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	104	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	67	1791	239	28.1%
9/2	Right	U	1	N/A	B		1	7	-	85	1940	259	32.9%
10/1	Ahead	U	N/A	N/A	-		-	-	-	397	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	567	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	64	1764	235	27.2%
11/2	Right	U	2	N/A	D		1	7	-	18	1764	235	7.7%
12/1	Ahead	U	N/A	N/A	-		-	-	-	509	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**632**	**0**	**0**	**3.0**	**1.8**	**0.0**	**4.8**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**632**	**0**	**0**	**3.0**	**1.8**	**0.0**	**4.8**	**-**	**-**	**-**	**-**
1/1	421	421	-	-	-	0.3	0.2	-	0.5	4.7	2.3	0.2	2.6
1/2	482	482	-	-	-	0.4	0.2	-	0.6	4.7	2.8	0.2	3.1
1/3	39	39	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	90	90	180	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.1
3/1	40	40	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	500	500	-	-	-	0.4	0.3	-	0.7	4.8	2.9	0.3	3.2
3/3	437	437	-	-	-	0.3	0.2	-	0.6	4.8	2.5	0.2	2.8
4/2+4/1	226	226	452	0	0	0.0	0.1	-	0.1	2.1	0.2	0.1	0.3
5/1	583	583	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	91	91	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	567	567	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	104	104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	67	67	-	-	-	0.4	0.2	-	0.6	32.7	0.9	0.2	1.1
9/2	85	85	-	-	-	0.6	0.2	-	0.8	33.9	1.3	0.2	1.5
10/1	397	397	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	567	567	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	64	64	-	-	-	0.4	0.2	-	0.6	32.6	0.9	0.2	1.1
11/2	18	18	-	-	-	0.1	0.0	-	0.2	31.3	0.3	0.0	0.3
12/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

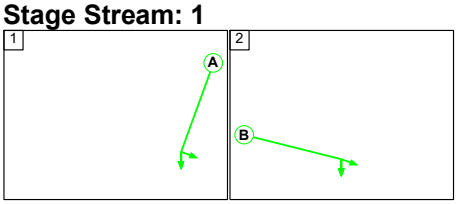
C1	Stream: 1	PRC for Signalled Lanes (%):	170.6	Total Delay for Signalled Lanes (pcuHr):	2.62	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	158.5	Total Delay for Signalled Lanes (pcuHr):	2.02	Cycle Time (s):	60
		PRC Over All Lanes (%):	158.5	Total Delay Over All Lanes(pcuHr):	4.82		

Full Input Data And Results

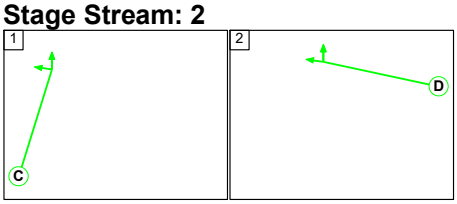
Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

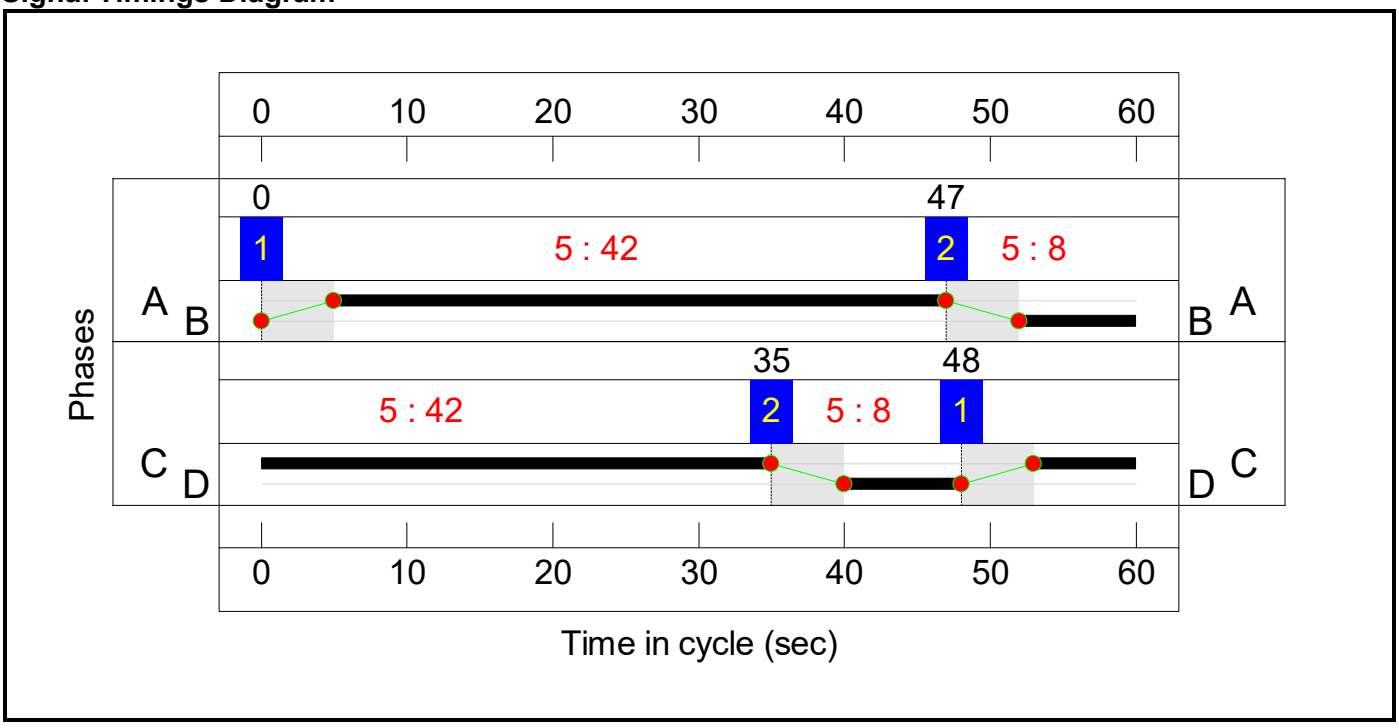
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	48	35

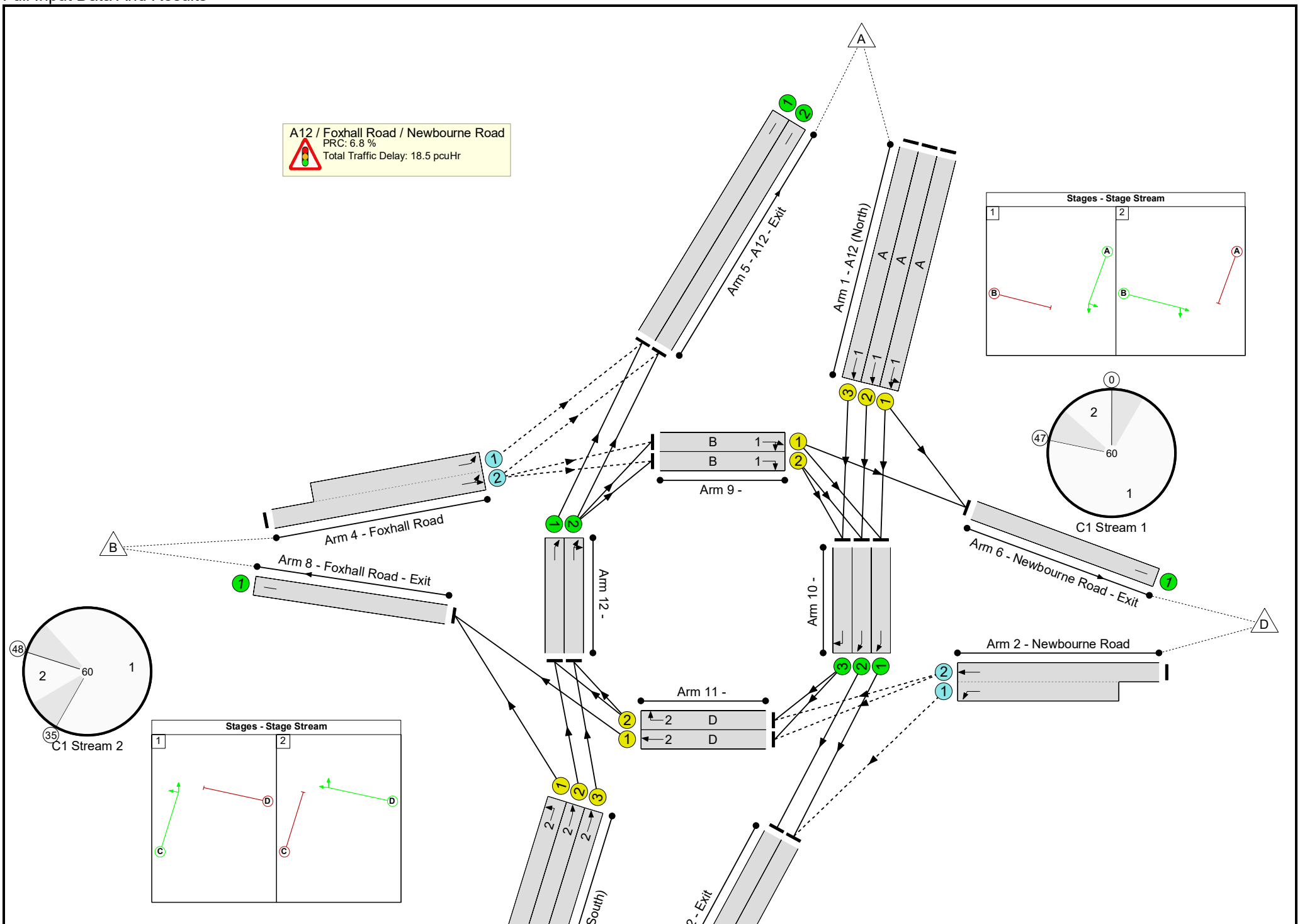
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.3%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.3%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	733	1856	1330	55.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	803	1976	1416	56.7%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	177	1845	1322	13.4%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	298	1840:1775	434+255	47.4 : 36.1%
3/1	A12 (South) Left	U	2	N/A	C		1	42	-	100	1828	1310	7.6%
3/2	A12 (South) Ahead	U	2	N/A	C		1	42	-	943	1958	1403	67.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	861	1828	1310	65.7%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	539	1828:1828	391+391	69.1 : 68.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1292	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	905	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	197	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	768	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	969	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	323	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	140	1791	269	52.1%
9/2	Right	U	1	N/A	B		1	8	-	166	1940	291	57.0%
10/1	Ahead	U	N/A	N/A	-		-	-	-	676	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	969	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	8	-	223	1764	265	84.3%
11/2	Right	U	2	N/A	D		1	8	-	160	1764	265	60.5%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1023	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	941	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1674**	**0**	**0**	**9.4**	**9.2**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1674**	**0**	**0**	**9.4**	**9.2**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
1/1	733	733	-	-	-	0.8	0.6	-	1.4	7.0	5.7	0.6	6.3
1/2	803	803	-	-	-	0.9	0.7	-	1.6	7.0	6.2	0.7	6.9
1/3	177	177	-	-	-	0.1	0.1	-	0.2	4.2	0.9	0.1	1.0
2/2+2/1	298	298	596	0	0	0.2	0.4	-	0.6	6.8	1.3	0.4	1.7
3/1	100	100	-	-	-	0.1	0.0	-	0.1	4.0	0.5	0.0	0.5
3/2	943	943	-	-	-	1.2	1.0	-	2.2	8.5	8.4	1.0	9.4
3/3	861	861	-	-	-	1.1	1.0	-	2.0	8.5	7.7	1.0	8.6
4/2+4/1	539	539	1078	0	0	1.0	1.1	-	2.1	13.7	3.2	1.1	4.3
5/1	1292	1292	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	197	197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	768	768	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	969	969	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	140	140	-	-	-	0.9	0.5	-	1.4	35.8	2.2	0.5	2.7
9/2	166	166	-	-	-	0.8	0.7	-	1.5	31.7	2.5	0.7	3.2
10/1	676	676	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	969	969	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	223	223	-	-	-	1.4	2.4	-	3.8	61.0	3.6	2.4	6.0
11/2	160	160	-	-	-	1.0	0.8	-	1.7	38.4	2.5	0.8	3.2
12/1	1023	1023	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	941	941	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

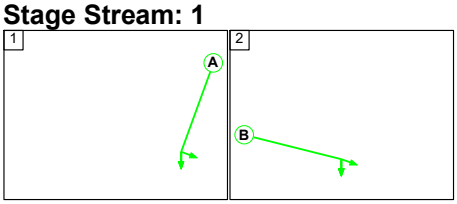
C1	Stream: 1	PRC for Signalled Lanes (%):	57.8	Total Delay for Signalled Lanes (pcuHr):	6.05	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	6.8	Total Delay for Signalled Lanes (pcuHr):	9.88	Cycle Time (s):	60
		PRC Over All Lanes (%):	6.8	Total Delay Over All Lanes(pcuHr):	18.54		

Full Input Data And Results

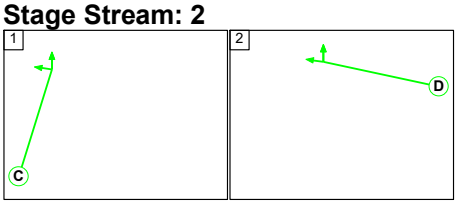
Scenario 8: '28PC 08:00-09:00' (FG8: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

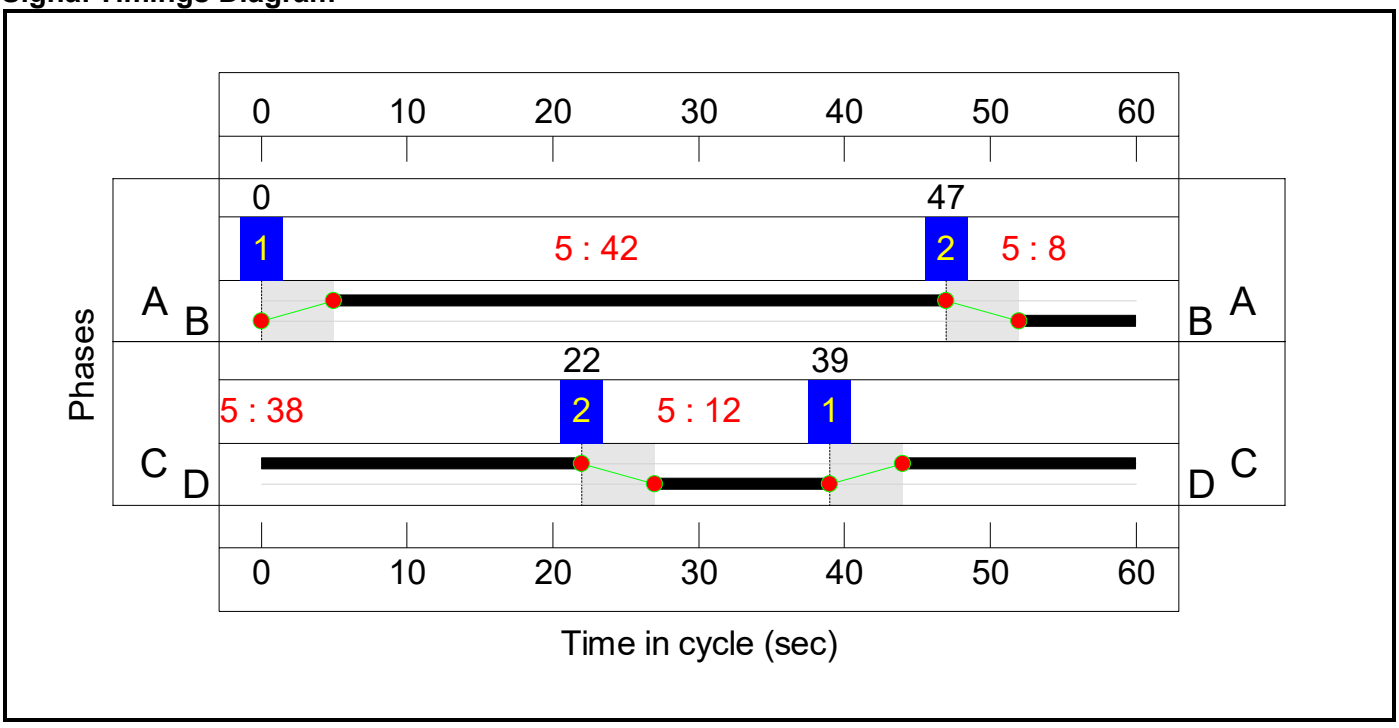
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	38	12
Change Point	39	22

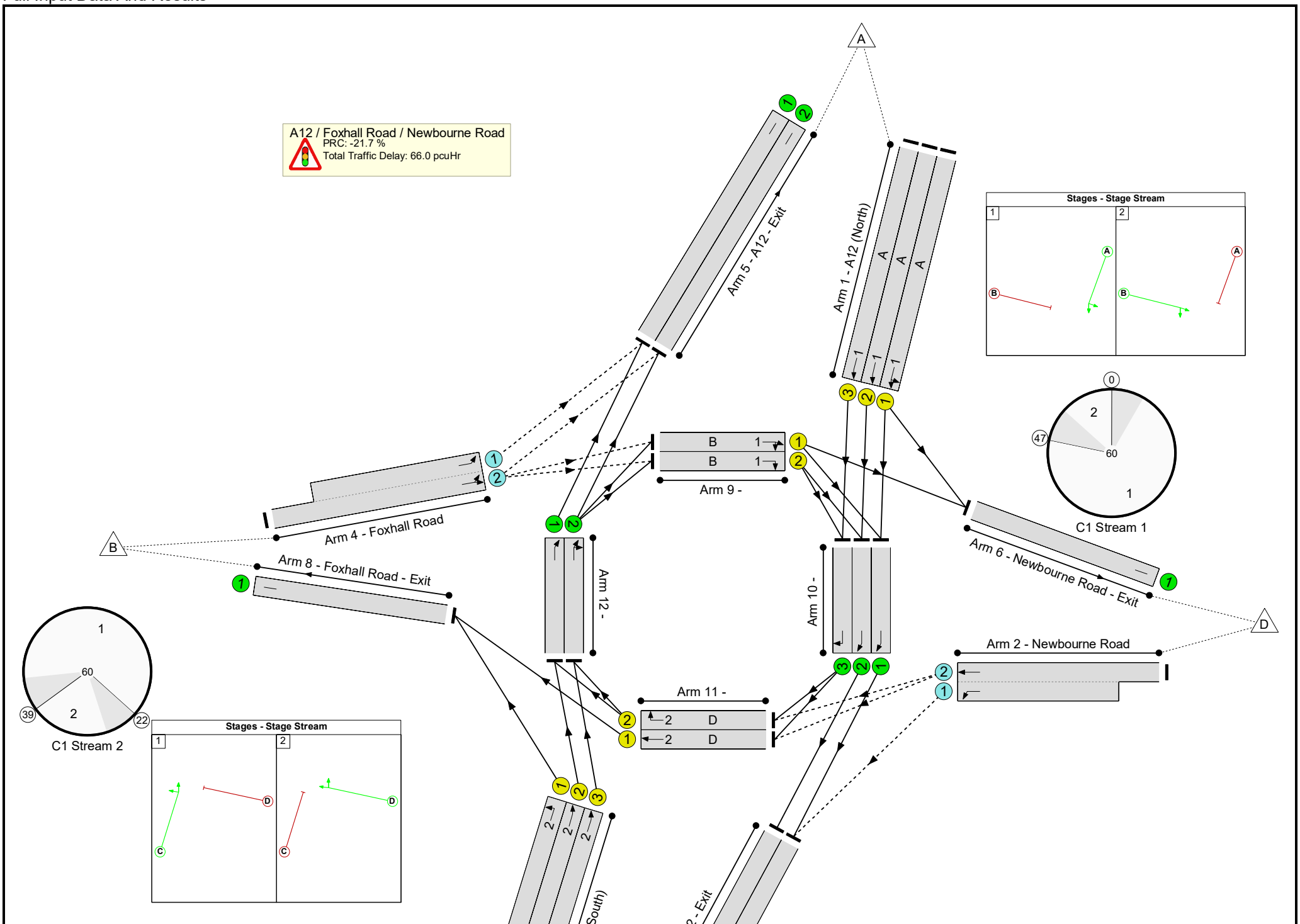
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.5%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.5%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	866	1865	1337	64.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	935	1976	1416	66.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	166	1845	1322	12.6%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	475	1840:1775	378+265	88.4 : 53.2%
3/1	A12 (South) Left	U	2	N/A	C		1	38	-	183	1828	1188	15.4%
3/2	A12 (South) Ahead	U	2	N/A	C		1	38	-	1170	1958	1273	91.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	38	-	1084	1828	1188	91.2%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	591	1828:1828	270+270	109.5 : 109.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1601	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1112	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	347	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	855	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1144	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	411	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	195	1791	269	70.3%
9/2	Right	U	1	N/A	B		1	8	-	209	1940	291	65.6%
10/1	Ahead	U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1144	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	12	-	228	1764	382	59.7%
11/2	Right	U	2	N/A	D		1	12	-	272	1764	382	71.2%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1306	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1220	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2031**	**0**	**0**	**18.5**	**47.5**	**0.0**	**66.0**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2031**	**0**	**0**	**18.5**	**47.5**	**0.0**	**66.0**	**-**	**-**	**-**	**-**
1/1	866	866	-	-	-	1.1	0.9	-	2.0	8.3	7.5	0.9	8.4
1/2	935	935	-	-	-	1.2	1.0	-	2.2	8.3	8.3	1.0	9.3
1/3	166	166	-	-	-	0.1	0.1	-	0.2	4.2	0.8	0.1	0.9
2/2+2/1	475	475	950	0	0	1.0	1.4	-	2.4	18.2	5.0	1.4	6.4
3/1	183	183	-	-	-	0.2	0.1	-	0.3	5.9	1.2	0.1	1.3
3/2	1170	1170	-	-	-	3.0	5.2	-	8.1	25.1	16.9	5.2	22.1
3/3	1084	1084	-	-	-	2.7	4.8	-	7.5	24.9	15.4	4.8	20.1
4/2+4/1	591	541	1081	0	0	4.0	30.1	-	34.0	207.2	10.2	30.1	40.3
5/1	1576	1576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1110	1110	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	411	411	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	189	189	-	-	-	1.3	1.2	-	2.5	47.3	2.9	1.2	4.0
9/2	191	191	-	-	-	0.5	0.9	-	1.4	26.5	2.5	0.9	3.4
10/1	714	714	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	228	228	-	-	-	1.3	0.7	-	2.1	32.5	3.4	0.7	4.2
11/2	272	272	-	-	-	2.1	1.2	-	3.3	44.0	4.2	1.2	5.4
12/1	1306	1306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1220	1220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

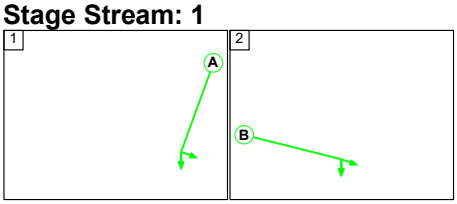
C1	Stream: 1	PRC for Signalled Lanes (%):	28.0	Total Delay for Signalled Lanes (pcuHr):	8.24	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-2.1	Total Delay for Signalled Lanes (pcuHr):	21.31	Cycle Time (s):	60
		PRC Over All Lanes (%):	-21.7	Total Delay Over All Lanes(pcuHr):	65.97		

Full Input Data And Results

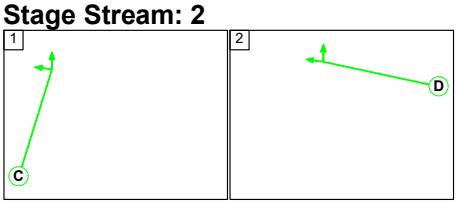
Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

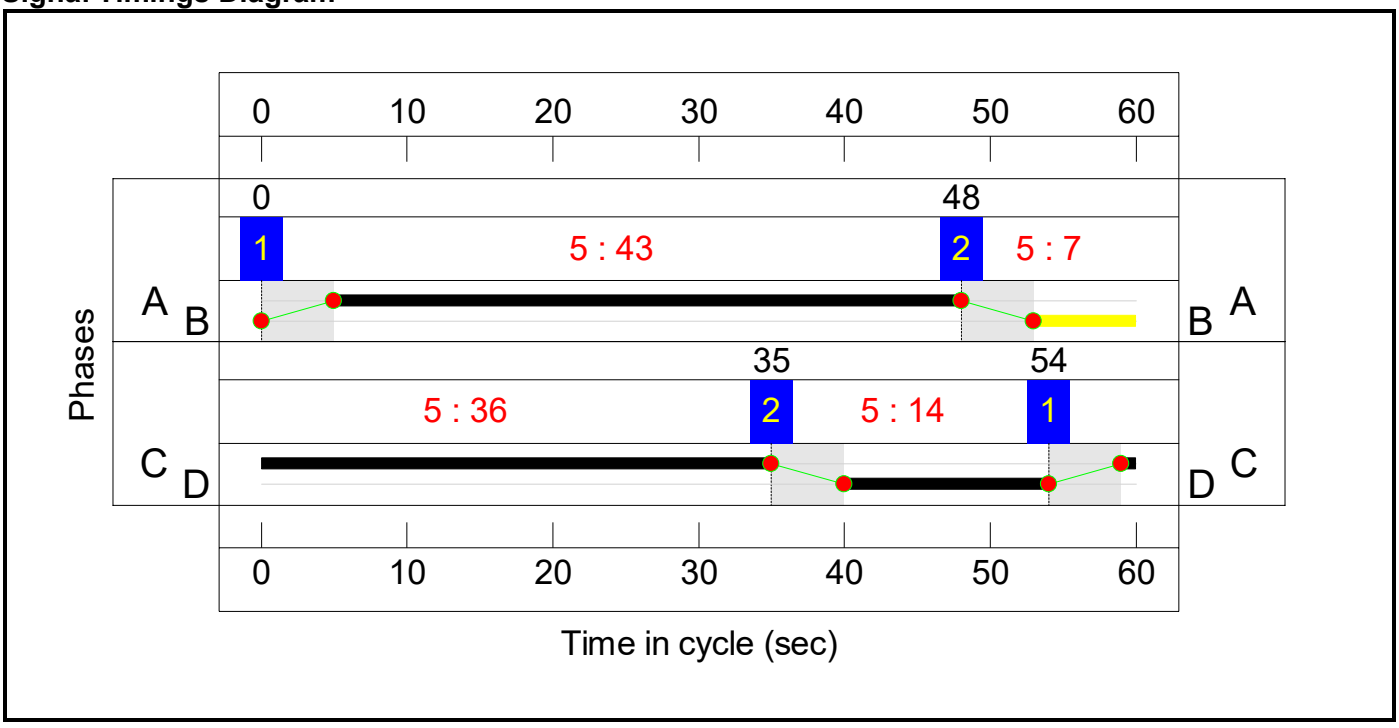
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	36	14
Change Point	54	35

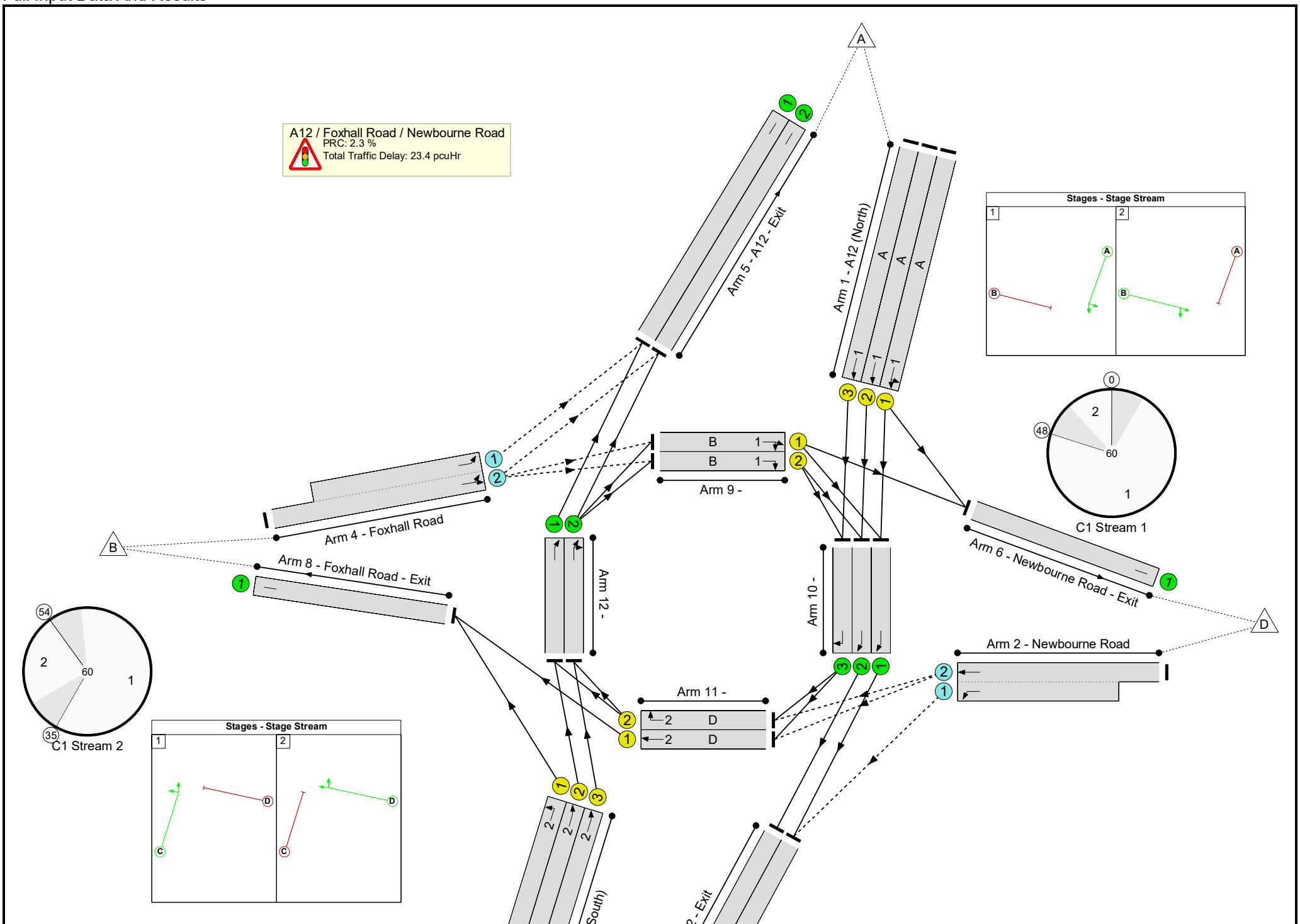
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.0%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.0%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	786	1870	1371	57.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	852	1976	1449	58.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	280	1845	1353	20.7%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	379	1840:1775	412+379	61.7 : 33.0%
3/1	A12 (South) Left	U	2	N/A	C		1	36	-	235	1828	1127	20.8%
3/2	A12 (South) Ahead	U	2	N/A	C		1	36	-	940	1958	1207	77.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	36	-	864	1828	1127	76.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	502	1828:1828	418+418	60.1 : 60.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1264	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	888	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1012	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	140	1791	239	58.6%
9/2	Right	U	1	N/A	B		1	7	-	160	1940	259	61.9%
10/1	Ahead	U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1012	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	280	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	14	-	388	1764	441	88.0%
11/2	Right	U	2	N/A	D		1	14	-	146	1764	441	33.1%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1013	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	937	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1762**	**0**	**0**	**12.2**	**11.2**	**0.0**	**23.4**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1762**	**0**	**0**	**12.2**	**11.2**	**0.0**	**23.4**	**-**	**-**	**-**	**-**
1/1	786	786	-	-	-	0.8	0.7	-	1.5	6.8	5.9	0.7	6.6
1/2	852	852	-	-	-	0.9	0.7	-	1.6	6.8	6.6	0.7	7.3
1/3	280	280	-	-	-	0.2	0.1	-	0.3	4.2	1.4	0.1	1.5
2/2+2/1	379	379	758	0	0	0.3	0.5	-	0.8	7.6	2.3	0.5	2.8
3/1	235	235	-	-	-	0.3	0.1	-	0.5	7.1	1.7	0.1	1.8
3/2	940	940	-	-	-	2.2	1.7	-	3.9	15.1	11.5	1.7	13.2
3/3	864	864	-	-	-	2.0	1.6	-	3.6	15.1	10.3	1.6	11.9
4/2+4/1	502	502	1004	0	0	1.2	0.7	-	1.9	13.9	2.9	0.7	3.7
5/1	1264	1264	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	888	888	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1012	1012	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	140	140	-	-	-	0.8	0.7	-	1.5	39.5	2.2	0.7	2.9
9/2	160	160	-	-	-	0.8	0.8	-	1.6	35.1	2.3	0.8	3.1
10/1	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1012	1012	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	388	388	-	-	-	2.0	3.3	-	5.3	49.1	6.1	3.3	9.4
11/2	146	146	-	-	-	0.6	0.2	-	0.9	21.5	1.7	0.2	1.9
12/1	1013	1013	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	937	937	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

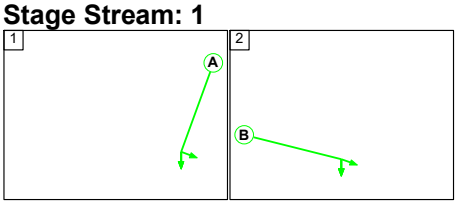
C1	Stream: 1	PRC for Signalled Lanes (%):	45.5	Total Delay for Signalled Lanes (pcuHr):	6.50	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	2.3	Total Delay for Signalled Lanes (pcuHr):	14.20	Cycle Time (s):	60
		PRC Over All Lanes (%):	2.3	Total Delay Over All Lanes(pcuHr):	23.43		

Full Input Data And Results

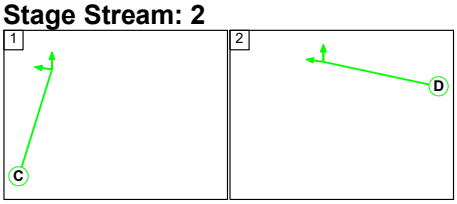
Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

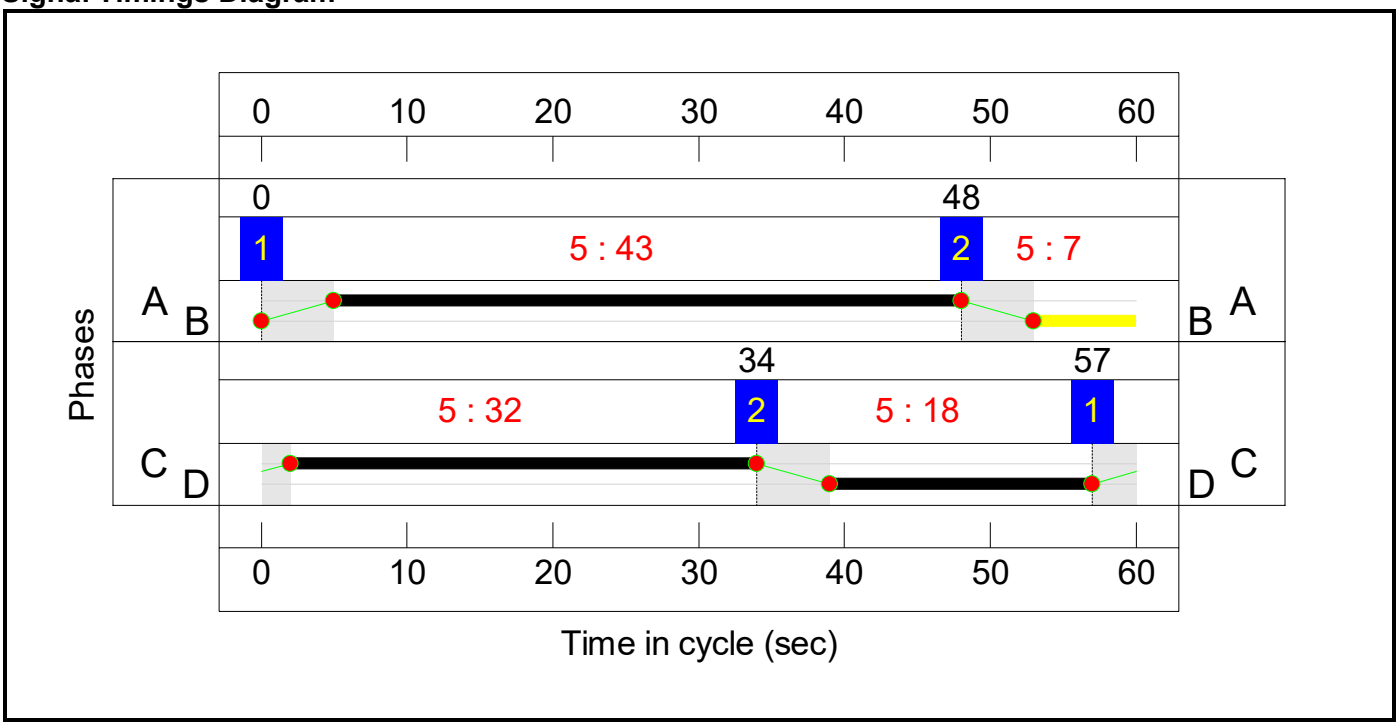
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	32	18
Change Point	57	34

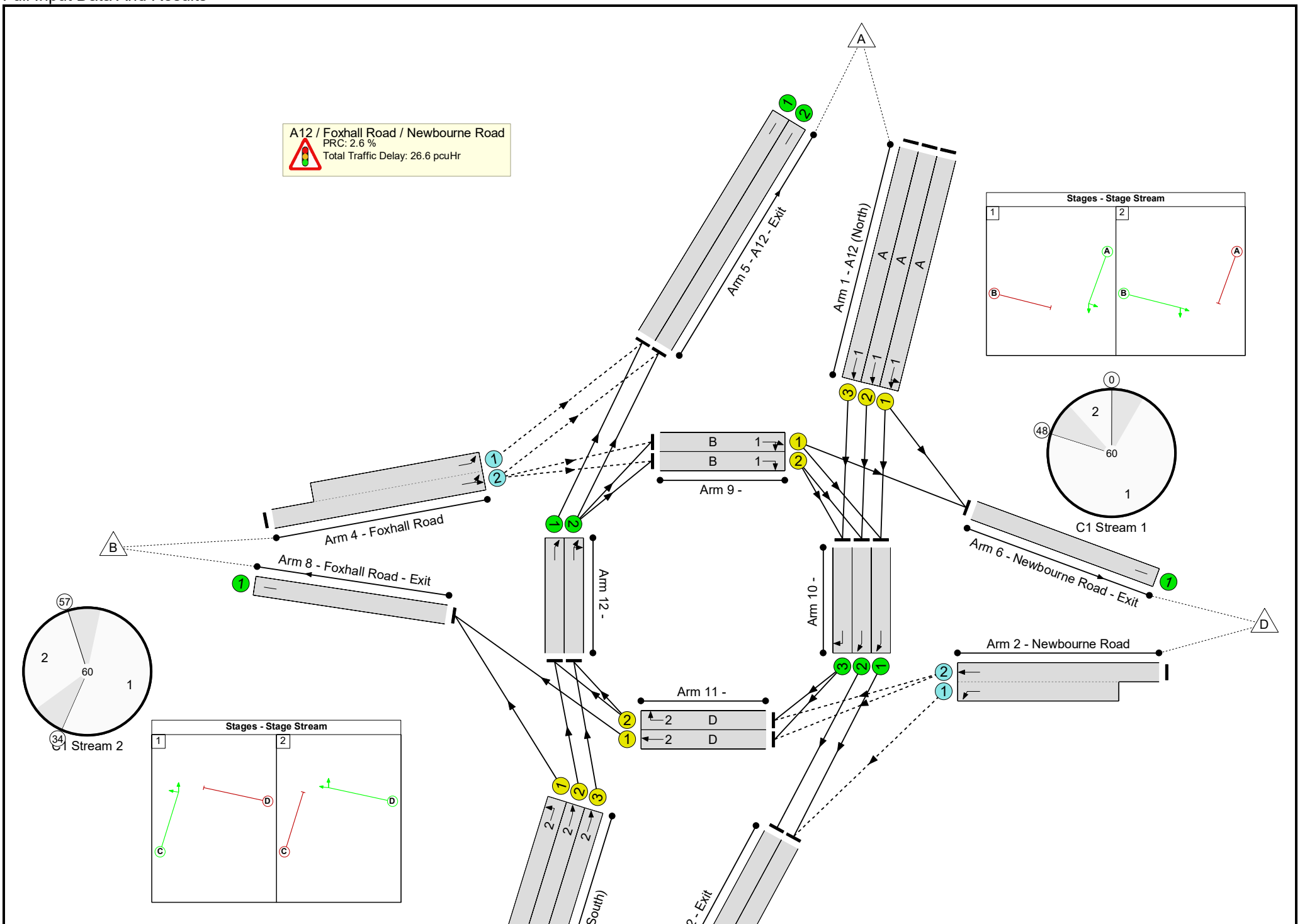
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.8%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.8%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	798	1868	1370	58.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	865	1976	1449	59.7%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	314	1845	1353	23.2%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	334	1840:1775	404+152	60.2 : 59.9%
3/1	A12 (South) Left	U	2	N/A	C		1	32	-	341	1828	1005	33.9%
3/2	A12 (South) Ahead	U	2	N/A	C		1	32	-	945	1958	1077	87.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	32	-	872	1828	1005	86.7%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	453	1828:1828	444+444	51.1 : 50.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1223	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	889	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	727	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	125	1791	239	52.3%
9/2	Right	U	1	N/A	B		1	7	-	137	1940	259	53.0%
10/1	Ahead	U	N/A	N/A	-		-	-	-	636	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	314	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	18	-	453	1764	559	81.1%
11/2	Right	U	2	N/A	D		1	18	-	104	1764	559	18.6%
12/1	Ahead	U	N/A	N/A	-		-	-	-	997	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	924	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1574**	**0**	**0**	**13.7**	**12.9**	**0.0**	**26.6**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1574**	**0**	**0**	**13.7**	**12.9**	**0.0**	**26.6**	**-**	**-**	**-**	**-**
1/1	798	798	-	-	-	0.8	0.7	-	1.5	6.9	6.0	0.7	6.7
1/2	865	865	-	-	-	0.9	0.7	-	1.7	6.9	6.7	0.7	7.5
1/3	314	314	-	-	-	0.2	0.2	-	0.4	4.3	1.7	0.2	1.8
2/2+2/1	334	334	668	0	0	0.3	0.7	-	1.1	11.6	2.4	0.7	3.1
3/1	341	341	-	-	-	0.7	0.3	-	1.0	10.2	3.1	0.3	3.4
3/2	945	945	-	-	-	3.1	3.4	-	6.5	24.7	13.6	3.4	17.1
3/3	872	872	-	-	-	2.8	3.1	-	5.9	24.5	12.4	3.1	15.5
4/2+4/1	453	453	906	0	0	1.1	0.5	-	1.7	13.2	2.5	0.5	3.0
5/1	1223	1223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	889	889	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	727	727	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	125	125	-	-	-	0.7	0.5	-	1.2	35.4	1.8	0.5	2.4
9/2	137	137	-	-	-	0.7	0.6	-	1.2	32.1	1.8	0.6	2.3
10/1	636	636	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	314	314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	453	453	-	-	-	2.0	2.1	-	4.1	32.3	6.9	2.1	8.9
11/2	104	104	-	-	-	0.3	0.1	-	0.5	16.0	1.0	0.1	1.1
12/1	997	997	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	924	924	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

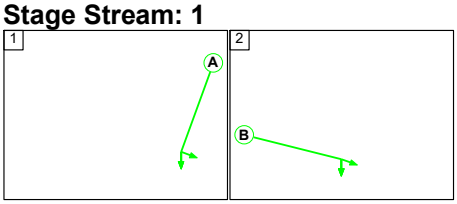
C1	Stream: 1	PRC for Signalled Lanes (%):	50.8	Total Delay for Signalled Lanes (pcuHr):	6.00	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	2.6	Total Delay for Signalled Lanes (pcuHr):	17.91	Cycle Time (s):	60
		PRC Over All Lanes (%):	2.6	Total Delay Over All Lanes(pcuHr):	26.64		

Full Input Data And Results

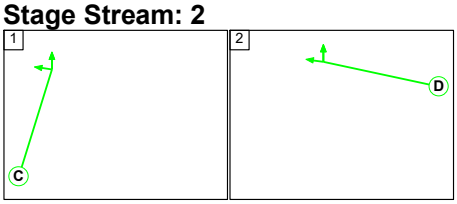
Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

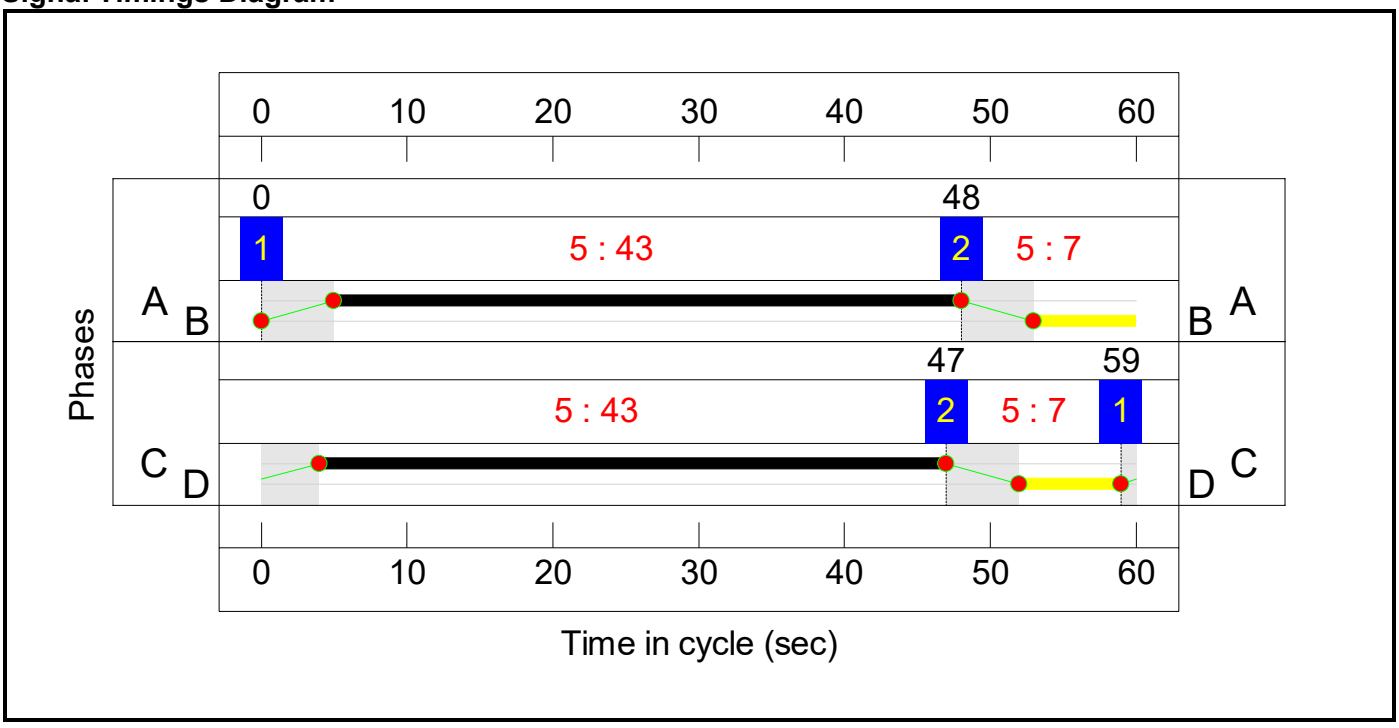
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	59	47

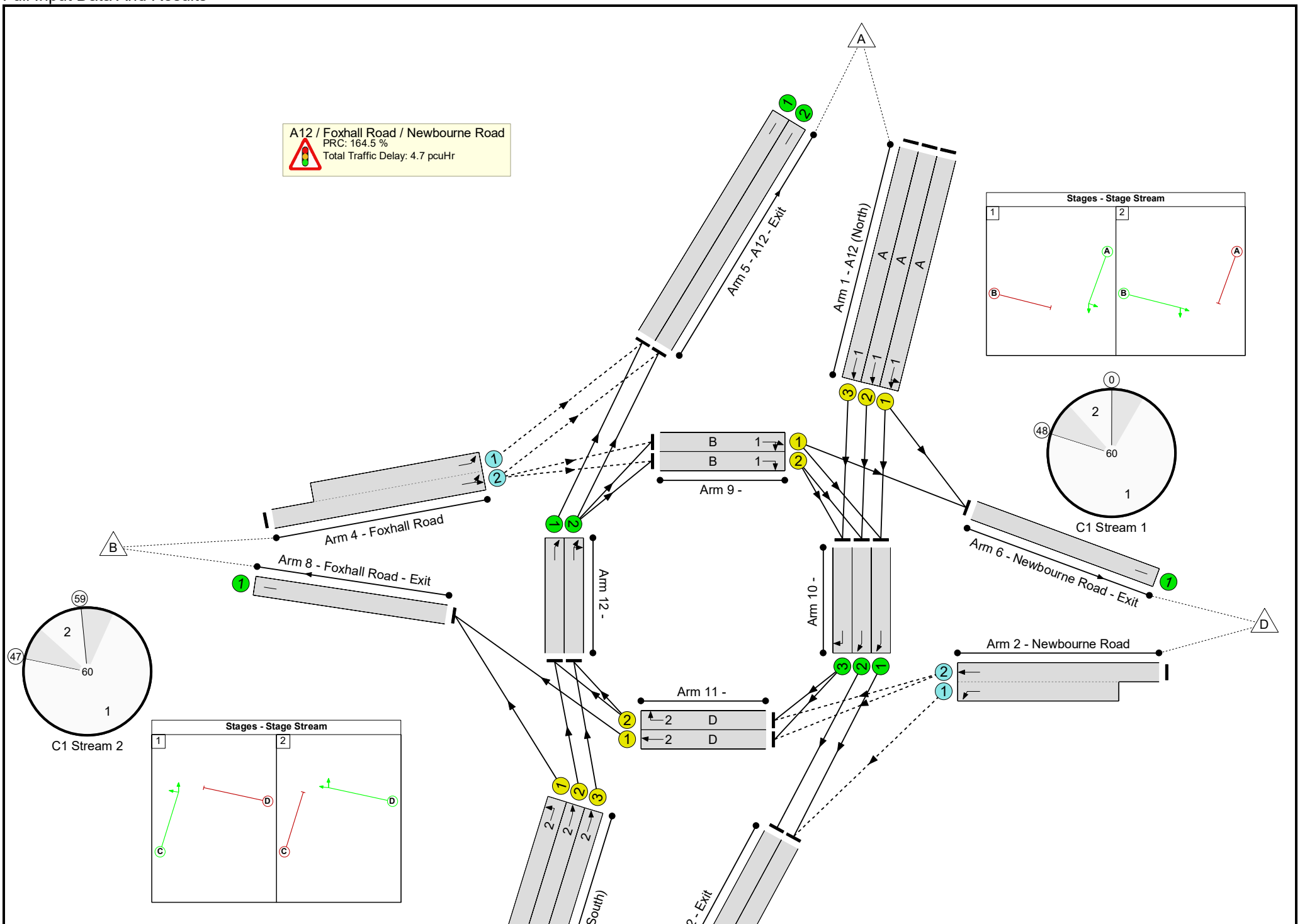
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.0%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.0%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	433	1854	1360	31.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	492	1976	1449	34.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	39	1845	1353	2.9%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	92	1840:1775	664+664	6.5 : 7.4%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	41	1828	1341	3.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	446	1958	1436	31.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	384	1828	1341	28.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	266	1828:1828	721+502	24.0 : 18.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	407	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	98	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	580	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	107	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	70	1791	239	29.3%
9/2	Right	U	1	N/A	B		1	7	-	88	1940	259	34.0%
10/1	Ahead	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	580	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	66	1764	235	28.1%
11/2	Right	U	2	N/A	D		1	7	-	16	1764	235	6.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**716**	**0**	**0**	**2.9**	**1.8**	**0.0**	**4.7**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**716**	**0**	**0**	**2.9**	**1.8**	**0.0**	**4.7**	**-**	**-**	**-**	**-**
1/1	433	433	-	-	-	0.3	0.2	-	0.6	4.7	2.4	0.2	2.6
1/2	492	492	-	-	-	0.4	0.3	-	0.6	4.7	2.9	0.3	3.1
1/3	39	39	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	92	92	184	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.1
3/1	41	41	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	446	446	-	-	-	0.3	0.2	-	0.6	4.6	2.5	0.2	2.7
3/3	384	384	-	-	-	0.3	0.2	-	0.5	4.6	2.1	0.2	2.3
4/2+4/1	266	266	532	0	0	0.0	0.1	-	0.1	1.9	0.2	0.1	0.3
5/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	407	407	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	98	98	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	580	580	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	70	70	-	-	-	0.4	0.2	-	0.6	32.7	1.1	0.2	1.3
9/2	88	88	-	-	-	0.6	0.3	-	0.8	34.1	1.3	0.3	1.6
10/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	580	580	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	66	66	-	-	-	0.4	0.2	-	0.6	32.7	1.0	0.2	1.2
11/2	16	16	-	-	-	0.1	0.0	-	0.1	31.1	0.2	0.0	0.3
12/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

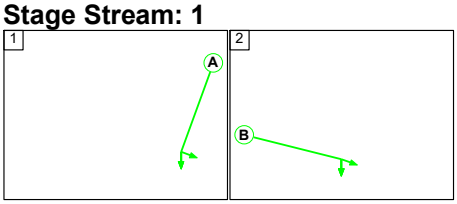
C1	Stream: 1	PRC for Signalled Lanes (%):	164.5	Total Delay for Signalled Lanes (pcuHr):	2.72	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	189.7	Total Delay for Signalled Lanes (pcuHr):	1.84	Cycle Time (s):	60
		PRC Over All Lanes (%):	164.5	Total Delay Over All Lanes(pcuHr):	4.74		

Full Input Data And Results

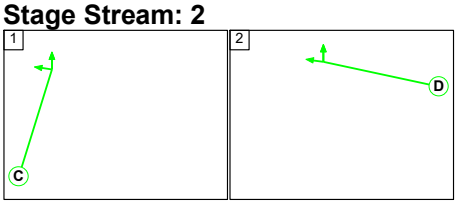
Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

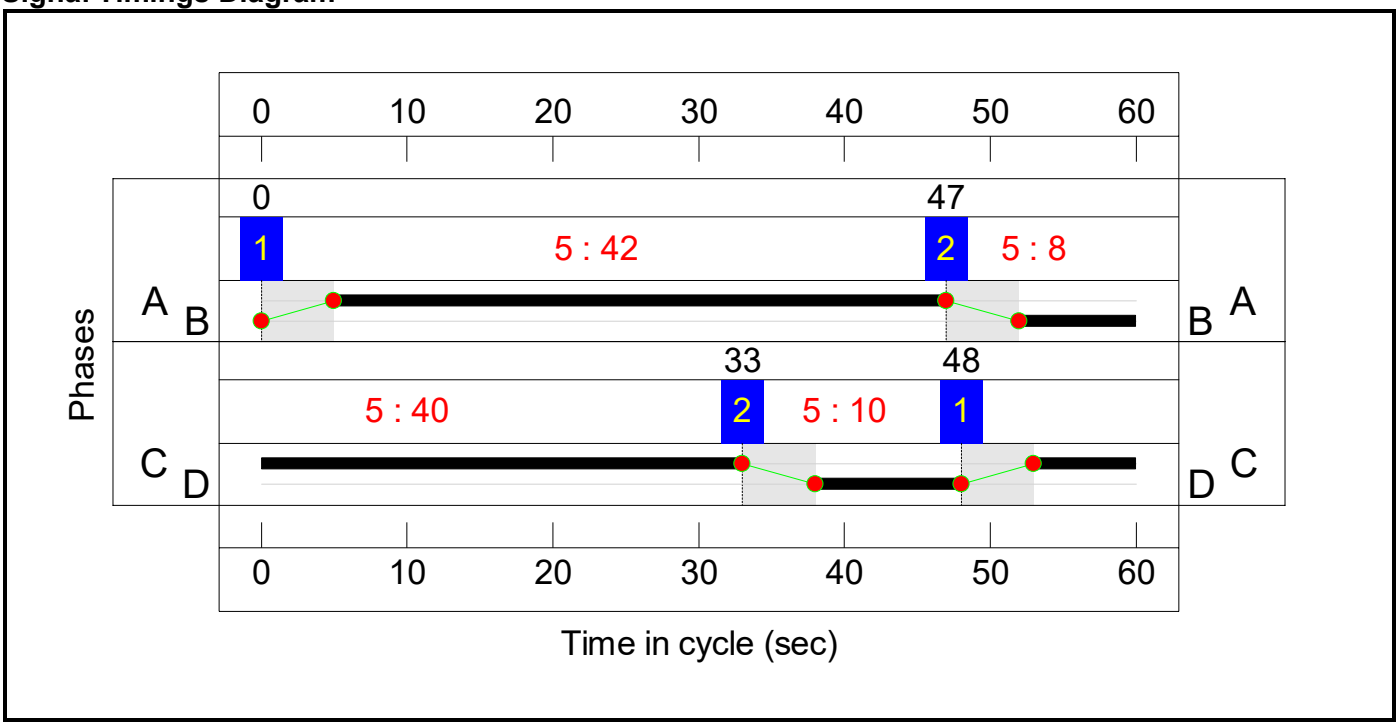
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	40	10
Change Point	48	33

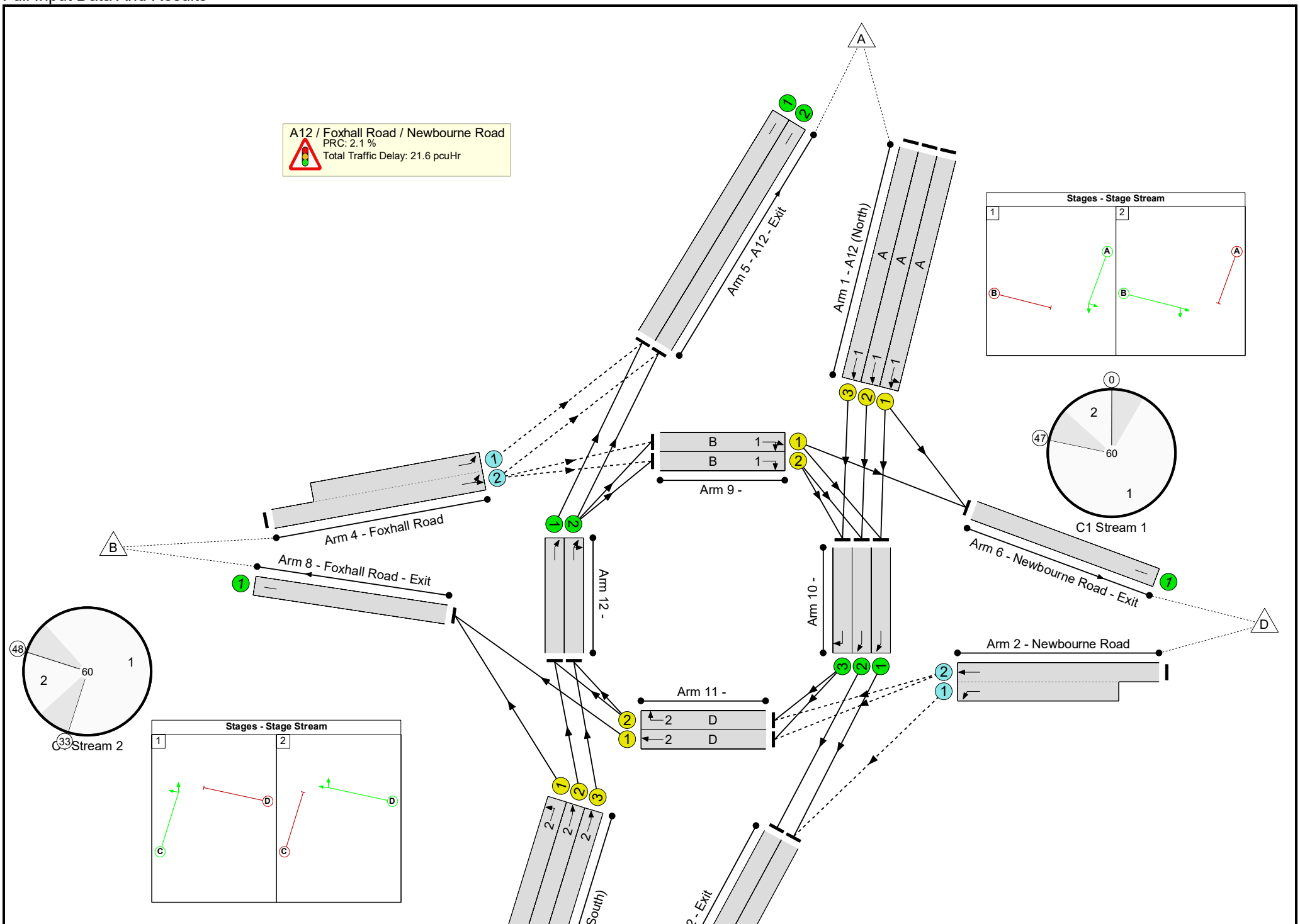
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.1%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.1%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	776	1856	1330	58.3%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	847	1976	1416	59.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	234	1845	1322	17.7%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	324	1840:1775	401+291	55.8 : 34.4%
3/1	A12 (South) Left	U	2	N/A	C		1	40	-	101	1828	1249	8.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	40	-	917	1958	1338	68.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	40	-	839	1828	1249	67.2%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	618	1828:1828	406+406	76.1 : 76.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1313	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	209	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1018	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	386	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	146	1791	269	54.3%
9/2	Right	U	1	N/A	B		1	8	-	171	1940	291	58.8%
10/1	Ahead	U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1018	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	234	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	10	-	285	1764	323	88.1%
11/2	Right	U	2	N/A	D		1	10	-	173	1764	323	53.5%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	925	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1884**	**0**	**0**	**10.9**	**10.7**	**0.0**	**21.6**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1884**	**0**	**0**	**10.9**	**10.7**	**0.0**	**21.6**	**-**	**-**	**-**	**-**
1/1	776	776	-	-	-	0.9	0.7	-	1.6	7.4	6.3	0.7	6.9
1/2	847	847	-	-	-	1.0	0.7	-	1.7	7.4	6.8	0.7	7.6
1/3	234	234	-	-	-	0.2	0.1	-	0.3	4.4	1.2	0.1	1.3
2/2+2/1	324	324	648	0	0	0.3	0.4	-	0.7	8.1	1.9	0.4	2.4
3/1	101	101	-	-	-	0.1	0.0	-	0.1	4.8	0.6	0.0	0.6
3/2	917	917	-	-	-	1.4	1.1	-	2.5	9.9	8.9	1.1	10.0
3/3	839	839	-	-	-	1.3	1.0	-	2.3	9.9	8.2	1.0	9.2
4/2+4/1	618	618	1236	0	0	1.3	1.6	-	2.9	16.9	3.9	1.6	5.5
5/1	1313	1313	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	209	209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1018	1018	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	146	146	-	-	-	0.9	0.6	-	1.5	36.3	2.3	0.6	2.9
9/2	171	171	-	-	-	0.8	0.7	-	1.5	31.2	2.5	0.7	3.2
10/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1018	1018	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	234	234	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	285	285	-	-	-	1.7	3.2	-	4.9	61.5	4.6	3.2	7.8
11/2	173	173	-	-	-	1.0	0.6	-	1.6	32.6	2.3	0.6	2.8
12/1	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

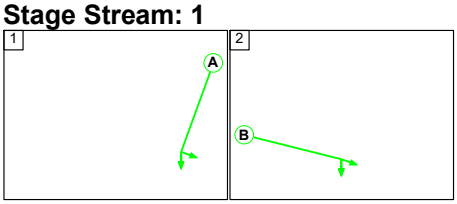
C1	Stream: 1	PRC for Signalled Lanes (%):	50.5	Total Delay for Signalled Lanes (pcuHr):	6.57	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	2.1	Total Delay for Signalled Lanes (pcuHr):	11.41	Cycle Time (s):	60
		PRC Over All Lanes (%):	2.1	Total Delay Over All Lanes(pcuHr):	21.60		

Full Input Data And Results

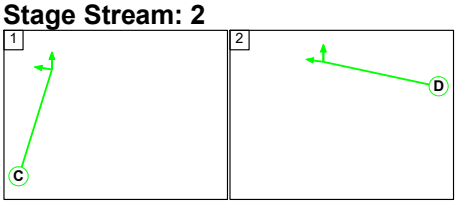
Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

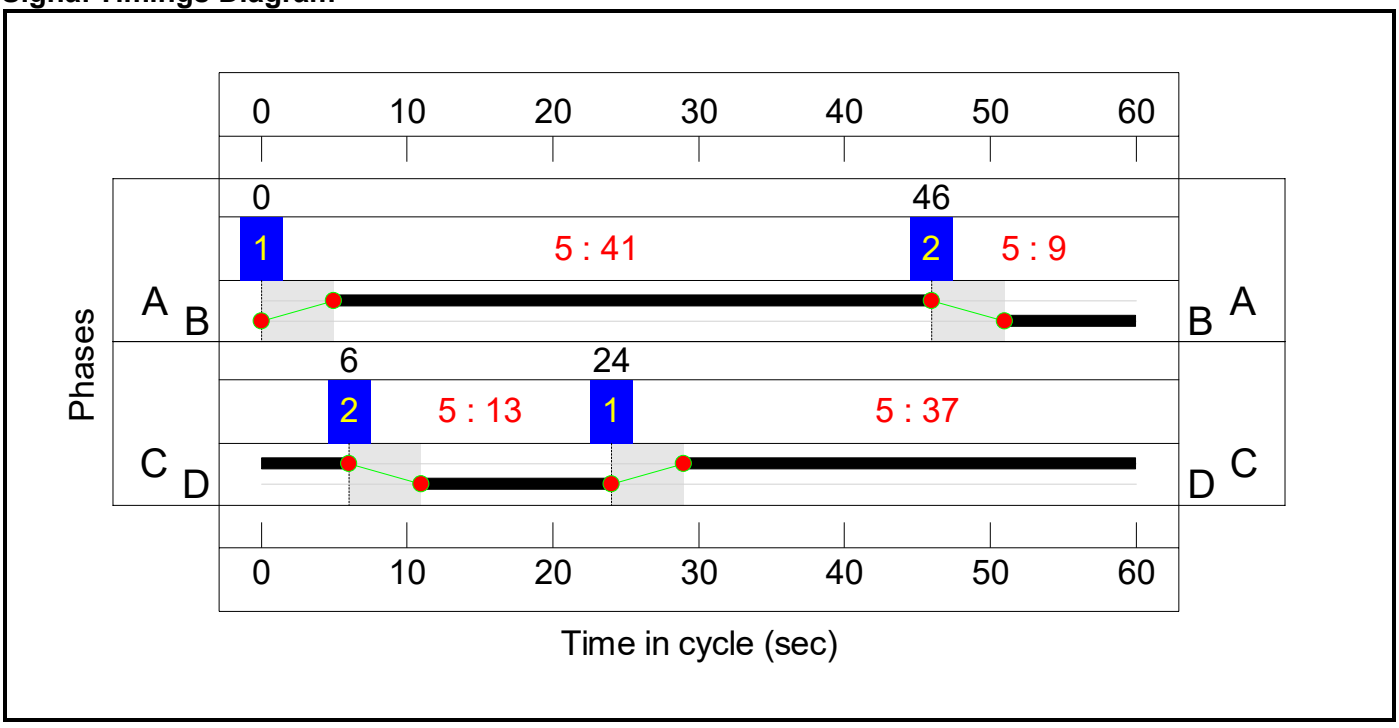
Stage Stream: 1

Stage	1	2
Duration	41	9
Change Point	0	46

Stage Stream: 2

Stage	1	2
Duration	37	13
Change Point	24	6

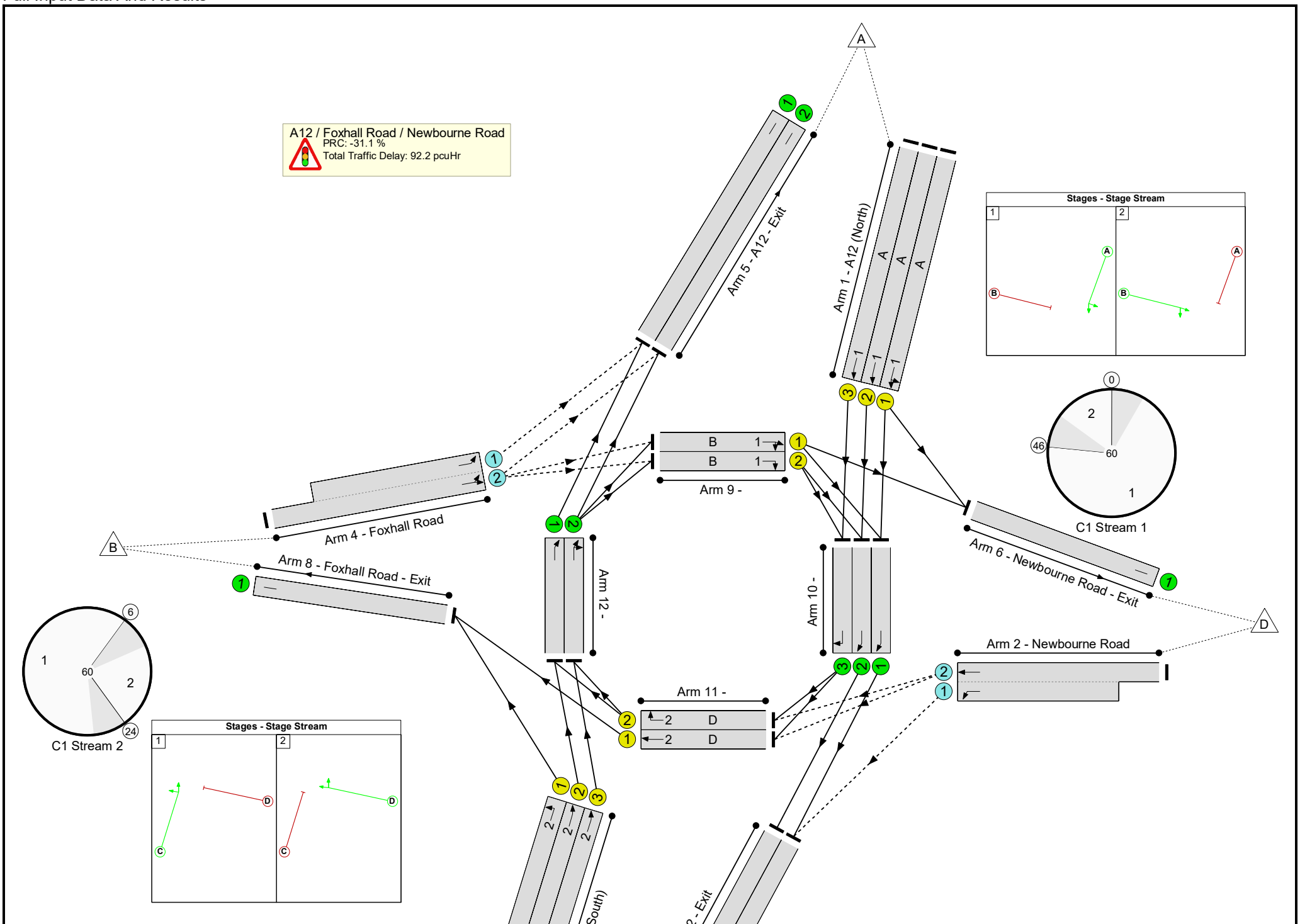
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.0%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**118.0%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	41	-	905	1864	1305	69.4%
1/2	A12 (North) Ahead	U	1	N/A	A		1	41	-	976	1976	1383	70.6%
1/3	A12 (North) Ahead	U	1	N/A	A		1	41	-	176	1845	1292	13.6%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	539	1840:1775	365+365	100.1 : 47.7%
3/1	A12 (South) Left	U	2	N/A	C		1	37	-	183	1828	1158	15.8%
3/2	A12 (South) Ahead	U	2	N/A	C		1	37	-	1163	1958	1240	93.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	37	-	1080	1828	1158	93.3%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	628	1828:1828	266+266	118.0 : 118.0%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1632	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1126	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	926	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	414	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	9	-	213	1791	299	67.2%
9/2	Right	U	1	N/A	B		1	9	-	210	1940	323	55.1%
10/1	Ahead	U	N/A	N/A	-		-	-	-	752	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	176	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	13	-	231	1764	412	56.1%
11/2	Right	U	2	N/A	D		1	13	-	310	1764	412	75.2%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1318	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1235	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2141**	**0**	**0**	**20.9**	**71.3**	**0.0**	**92.2**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2141**	**0**	**0**	**20.9**	**71.3**	**0.0**	**92.2**	**-**	**-**	**-**	**-**
1/1	905	905	-	-	-	1.3	1.1	-	2.4	9.7	8.5	1.1	9.7
1/2	976	976	-	-	-	1.4	1.2	-	2.6	9.7	9.5	1.2	10.7
1/3	176	176	-	-	-	0.1	0.1	-	0.2	4.6	0.9	0.1	1.0
2/2+2/1	539	539	1077	0	0	1.6	1.6	-	3.2	21.4	10.7	1.6	12.3
3/1	183	183	-	-	-	0.2	0.1	-	0.3	6.3	1.2	0.1	1.3
3/2	1163	1163	-	-	-	3.2	6.5	-	9.7	29.9	17.4	6.5	23.9
3/3	1080	1080	-	-	-	3.0	6.0	-	9.0	29.9	15.9	6.0	21.9
4/2+4/1	628	532	1064	0	0	5.5	51.0	-	56.5	324.1	12.2	51.0	63.2
5/1	1584	1584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1122	1122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	926	926	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	200	200	-	-	-	1.3	1.0	-	2.3	40.8	3.1	1.0	4.1
9/2	178	178	-	-	-	0.9	0.6	-	1.5	31.0	3.0	0.6	3.6
10/1	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	176	176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	231	231	-	-	-	1.1	0.6	-	1.7	27.1	2.6	0.6	3.3
11/2	310	310	-	-	-	1.2	1.5	-	2.6	30.7	5.1	1.5	6.6
12/1	1318	1318	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1235	1235	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

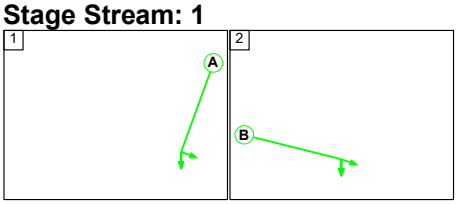
C1	Stream: 1	PRC for Signalled Lanes (%):	27.5	Total Delay for Signalled Lanes (pcuHr):	9.12	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-4.2	Total Delay for Signalled Lanes (pcuHr):	23.35	Cycle Time (s):	60
		PRC Over All Lanes (%):	-31.1	Total Delay Over All Lanes(pcuHr):	92.22		

Full Input Data And Results

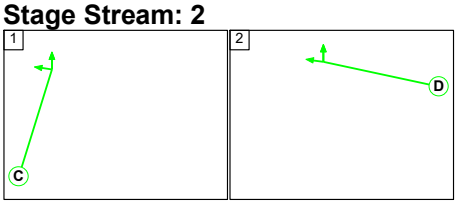
Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

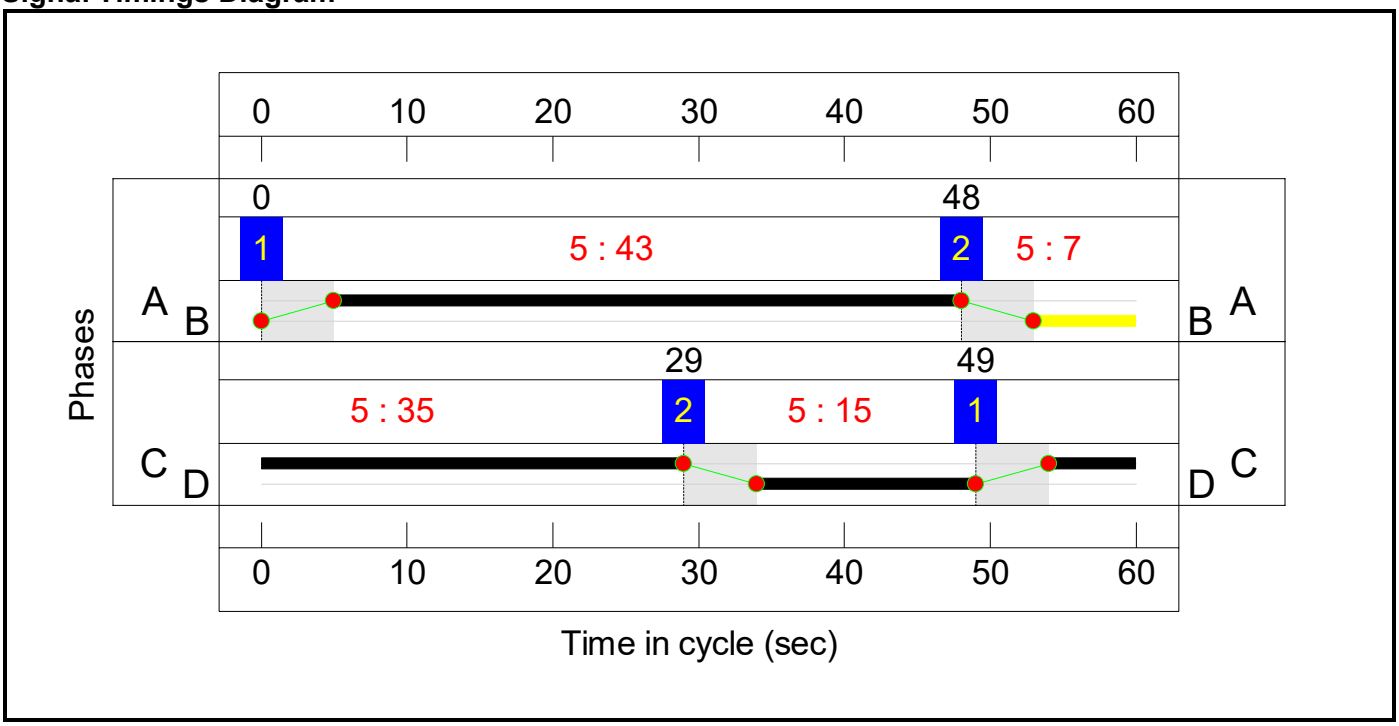
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	35	15
Change Point	49	29

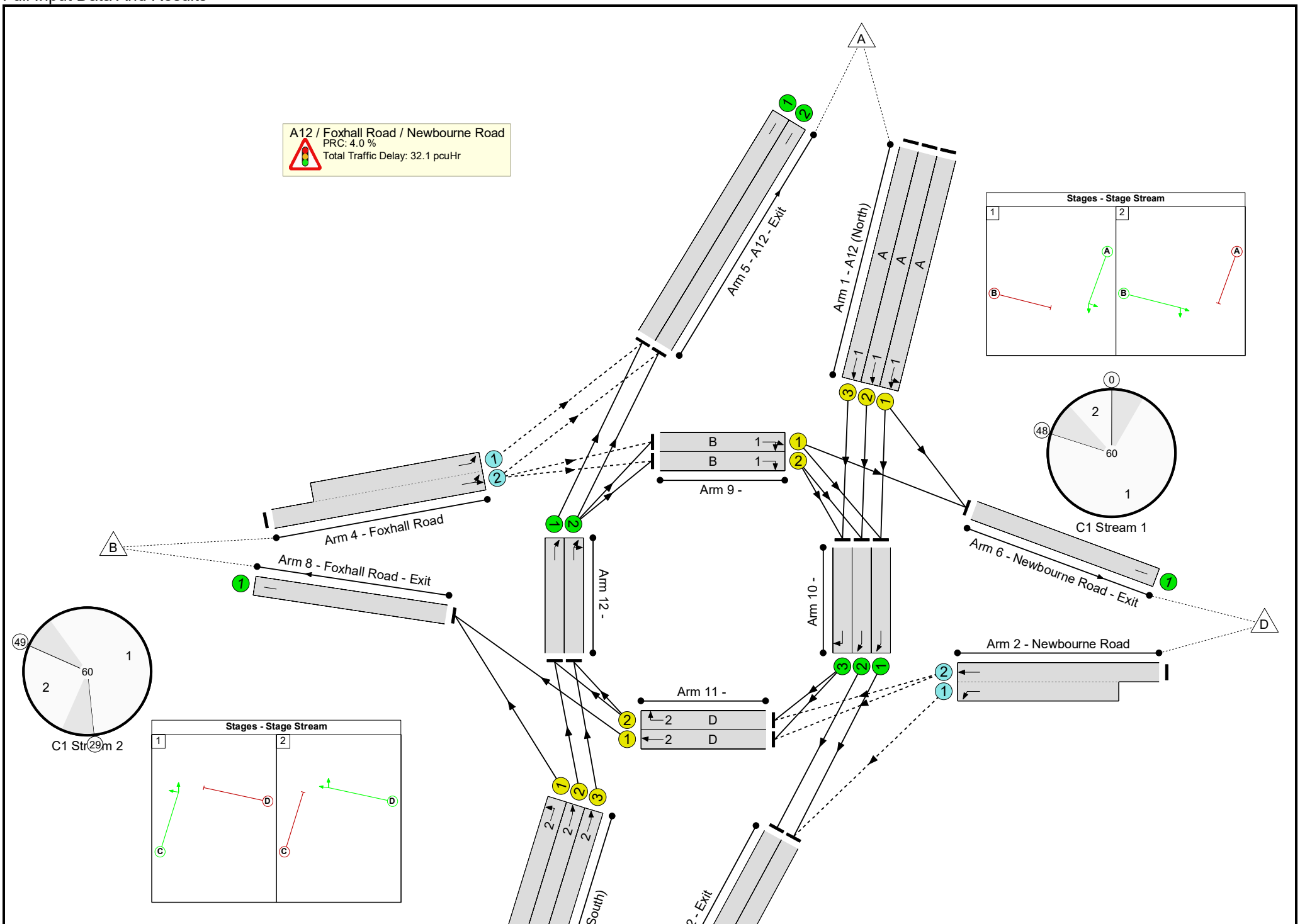
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.6%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.6%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	836	1873	1374	60.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	900	1976	1449	62.1%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	305	1845	1353	22.5%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	426	1840:1775	387+387	68.3 : 41.9%
3/1	A12 (South) Left	U	2	N/A	C		1	35	-	238	1828	1097	21.7%
3/2	A12 (South) Ahead	U	2	N/A	C		1	35	-	1017	1958	1175	86.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	35	-	939	1828	1097	85.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	656	1828:1828	380+380	86.3 : 86.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1429	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1030	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	364	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1061	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	160	1791	239	67.0%
9/2	Right	U	1	N/A	B		1	7	-	161	1940	259	62.2%
10/1	Ahead	U	N/A	N/A	-		-	-	-	632	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1061	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	305	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	15	-	401	1764	470	85.2%
11/2	Right	U	2	N/A	D		1	15	-	168	1764	470	35.7%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1101	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1023	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2164**	**0**	**0**	**16.0**	**16.2**	**0.0**	**32.1**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2164**	**0**	**0**	**16.0**	**16.2**	**0.0**	**32.1**	**-**	**-**	**-**	**-**
1/1	836	836	-	-	-	0.9	0.8	-	1.7	7.2	6.5	0.8	7.3
1/2	900	900	-	-	-	1.0	0.8	-	1.8	7.2	7.3	0.8	8.1
1/3	305	305	-	-	-	0.2	0.1	-	0.4	4.3	1.6	0.1	1.8
2/2+2/1	426	426	852	0	0	0.5	0.6	-	1.2	9.8	3.2	0.6	3.8
3/1	238	238	-	-	-	0.4	0.1	-	0.5	7.6	1.8	0.1	1.9
3/2	1017	1017	-	-	-	2.8	3.1	-	5.9	21.0	13.8	3.1	16.9
3/3	939	939	-	-	-	2.6	2.9	-	5.4	20.9	12.8	2.9	15.7
4/2+4/1	656	656	1312	0	0	2.5	3.0	-	5.5	30.0	4.9	3.0	7.9
5/1	1429	1429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1030	1030	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	364	364	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1061	1061	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	639	639	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	160	160	-	-	-	1.1	1.0	-	2.1	47.4	2.5	1.0	3.5
9/2	161	161	-	-	-	0.8	0.8	-	1.7	37.1	2.2	0.8	3.0
10/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1061	1061	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	401	401	-	-	-	2.2	2.7	-	4.8	43.5	6.2	2.7	8.9
11/2	168	168	-	-	-	0.9	0.3	-	1.2	26.1	2.0	0.3	2.3
12/1	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1023	1023	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

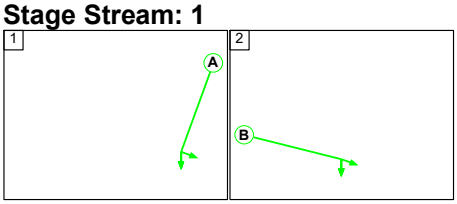
C1	Stream: 1	PRC for Signalled Lanes (%):	34.3	Total Delay for Signalled Lanes (pcuHr):	7.59	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	4.0	Total Delay for Signalled Lanes (pcuHr):	17.93	Cycle Time (s):	60
		PRC Over All Lanes (%):	4.0	Total Delay Over All Lanes(pcuHr):	32.15		

Full Input Data And Results

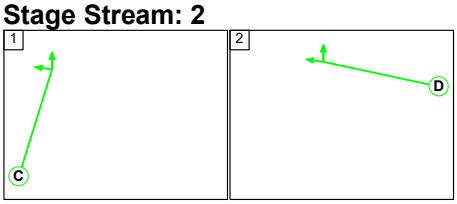
Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

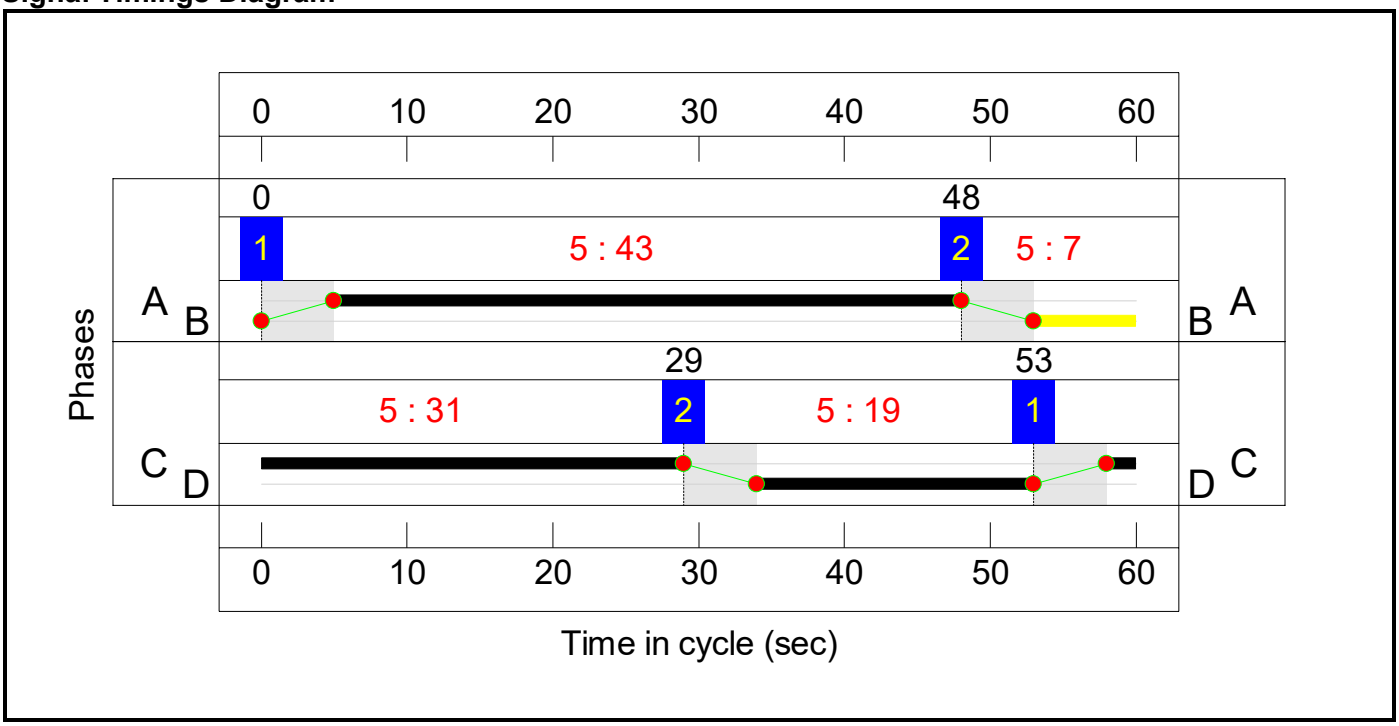
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	31	19
Change Point	53	29

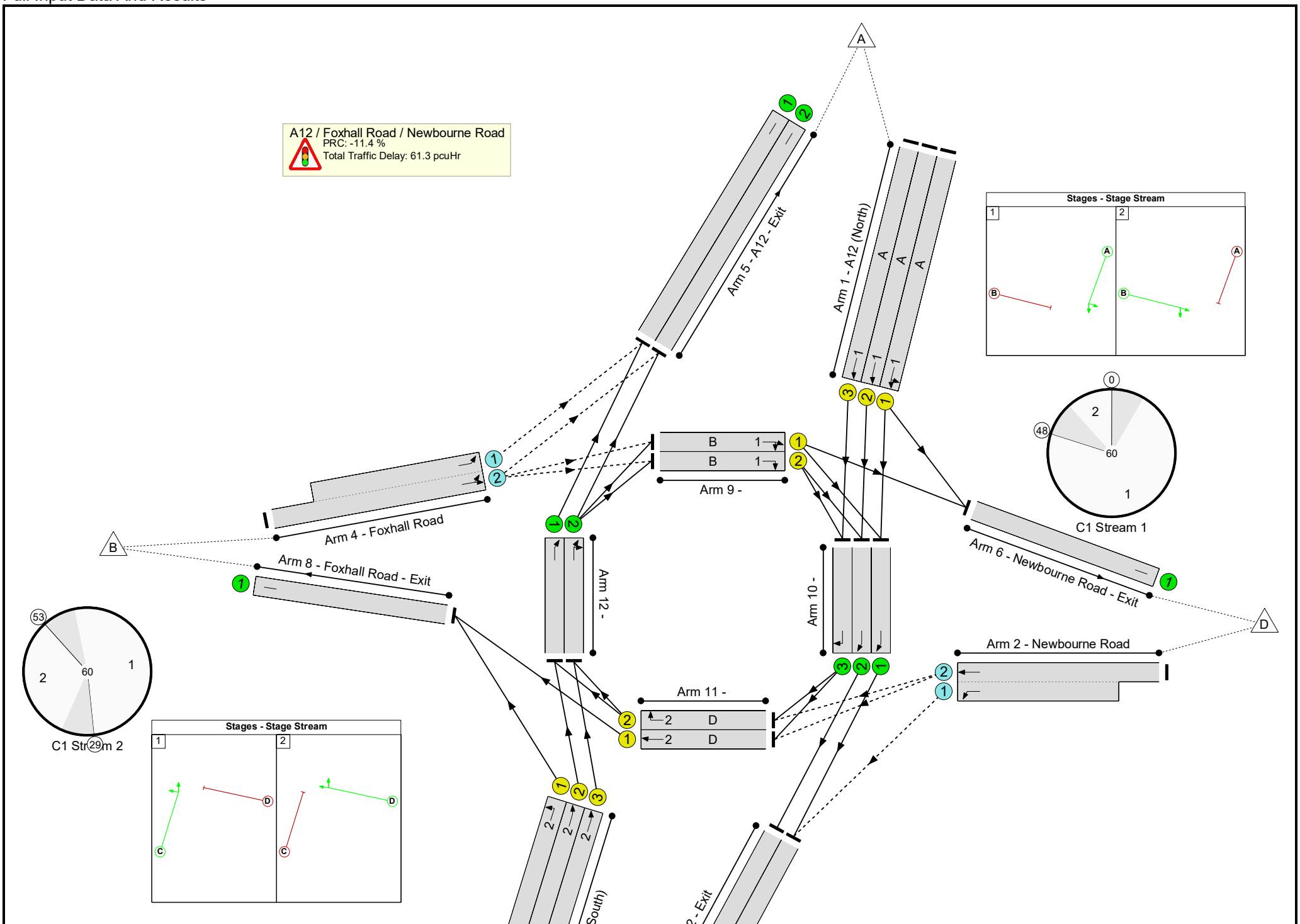
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.3%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.3%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	859	1869	1371	62.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	927	1976	1449	64.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	358	1845	1353	26.5%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	379	1840:1775	368+368	66.0 : 37.0%
3/1	A12 (South) Left	U	2	N/A	C		1	31	-	345	1828	975	35.4%
3/2	A12 (South) Ahead	U	2	N/A	C		1	31	-	1047	1958	1044	100.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	31	-	974	1828	975	99.9%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	584	1828:1828	402+402	72.6 : 72.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1398	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	398	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	828	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	216	1791	239	90.5%
9/2	Right	U	1	N/A	B		1	7	-	138	1940	259	53.4%
10/1	Ahead	U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	19	-	483	1764	588	82.1%
11/2	Right	U	2	N/A	D		1	19	-	118	1764	588	20.1%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1106	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1033	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1926**	**0**	**0**	**18.6**	**42.8**	**0.0**	**61.3**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1926**	**0**	**0**	**18.6**	**42.8**	**0.0**	**61.3**	**-**	**-**	**-**	**-**
1/1	859	859	-	-	-	0.9	0.8	-	1.8	7.5	6.9	0.8	7.8
1/2	927	927	-	-	-	1.0	0.9	-	1.9	7.5	7.7	0.9	8.6
1/3	358	358	-	-	-	0.3	0.2	-	0.4	4.5	1.9	0.2	2.1
2/2+2/1	379	379	758	0	0	0.6	0.5	-	1.1	10.4	3.0	0.5	3.6
3/1	345	345	-	-	-	0.8	0.3	-	1.0	10.9	3.3	0.3	3.5
3/2	1047	1044	-	-	-	4.2	16.9	-	21.0	72.3	17.5	16.9	34.4
3/3	974	974	-	-	-	3.8	15.4	-	19.2	70.8	16.0	15.4	31.3
4/2+4/1	584	584	1168	0	0	2.1	1.3	-	3.4	20.9	3.9	1.3	5.2
5/1	1395	1395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	971	971	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	398	398	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1065	1065	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	828	828	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	216	216	-	-	-	1.4	3.6	-	5.0	83.9	3.5	3.6	7.1
9/2	138	138	-	-	-	0.8	0.6	-	1.3	34.5	1.7	0.6	2.3
10/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1065	1065	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	483	483	-	-	-	2.2	2.2	-	4.5	33.2	7.2	2.2	9.4
11/2	118	118	-	-	-	0.5	0.1	-	0.7	20.2	1.2	0.1	1.3
12/1	1103	1103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1033	1033	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

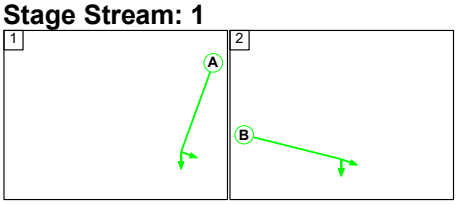
C1	Stream: 1	PRC for Signalled Lanes (%):	-0.5	Total Delay for Signalled Lanes (pcuHr):	10.50	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-11.4	Total Delay for Signalled Lanes (pcuHr):	46.34	Cycle Time (s):	60
		PRC Over All Lanes (%):	-11.4	Total Delay Over All Lanes(pcuHr):	61.34		

Full Input Data And Results

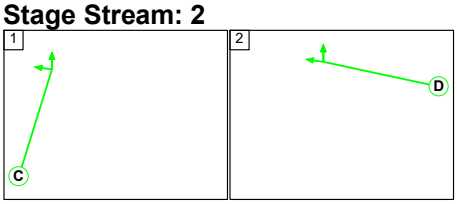
Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

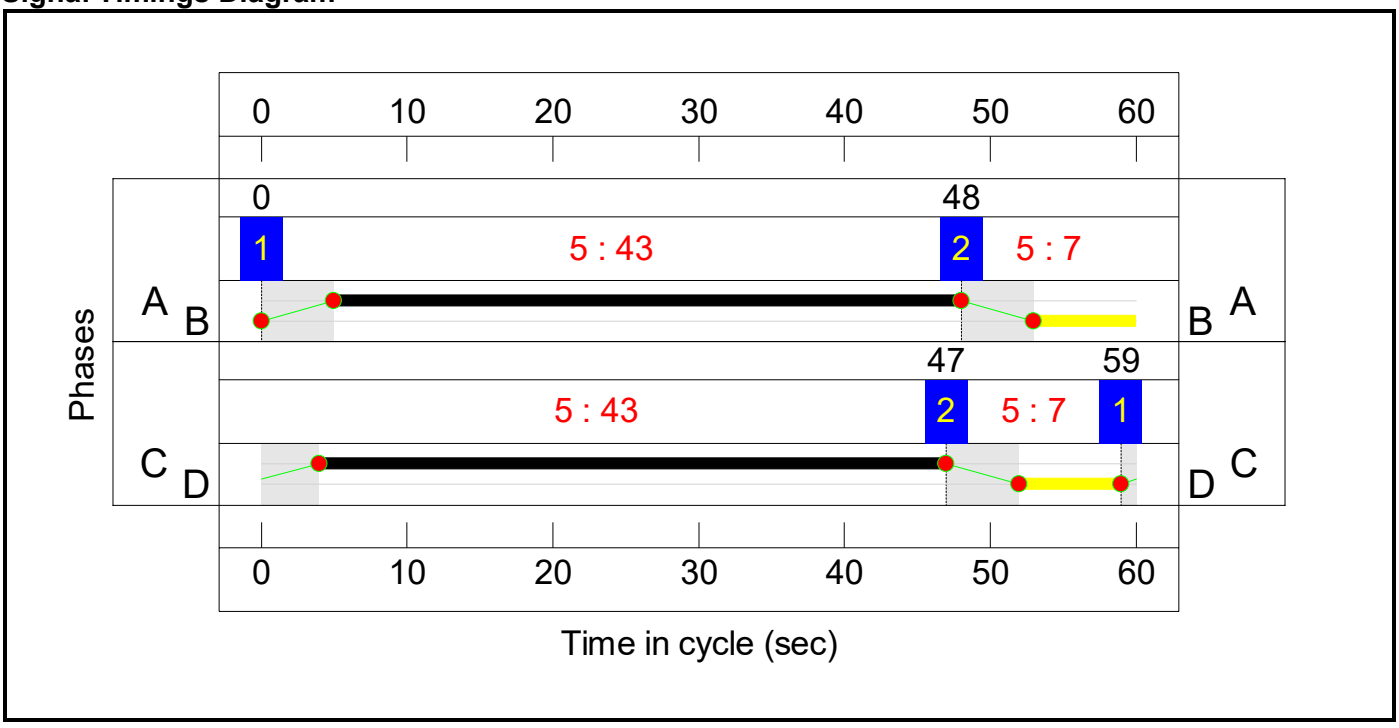
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	59	47

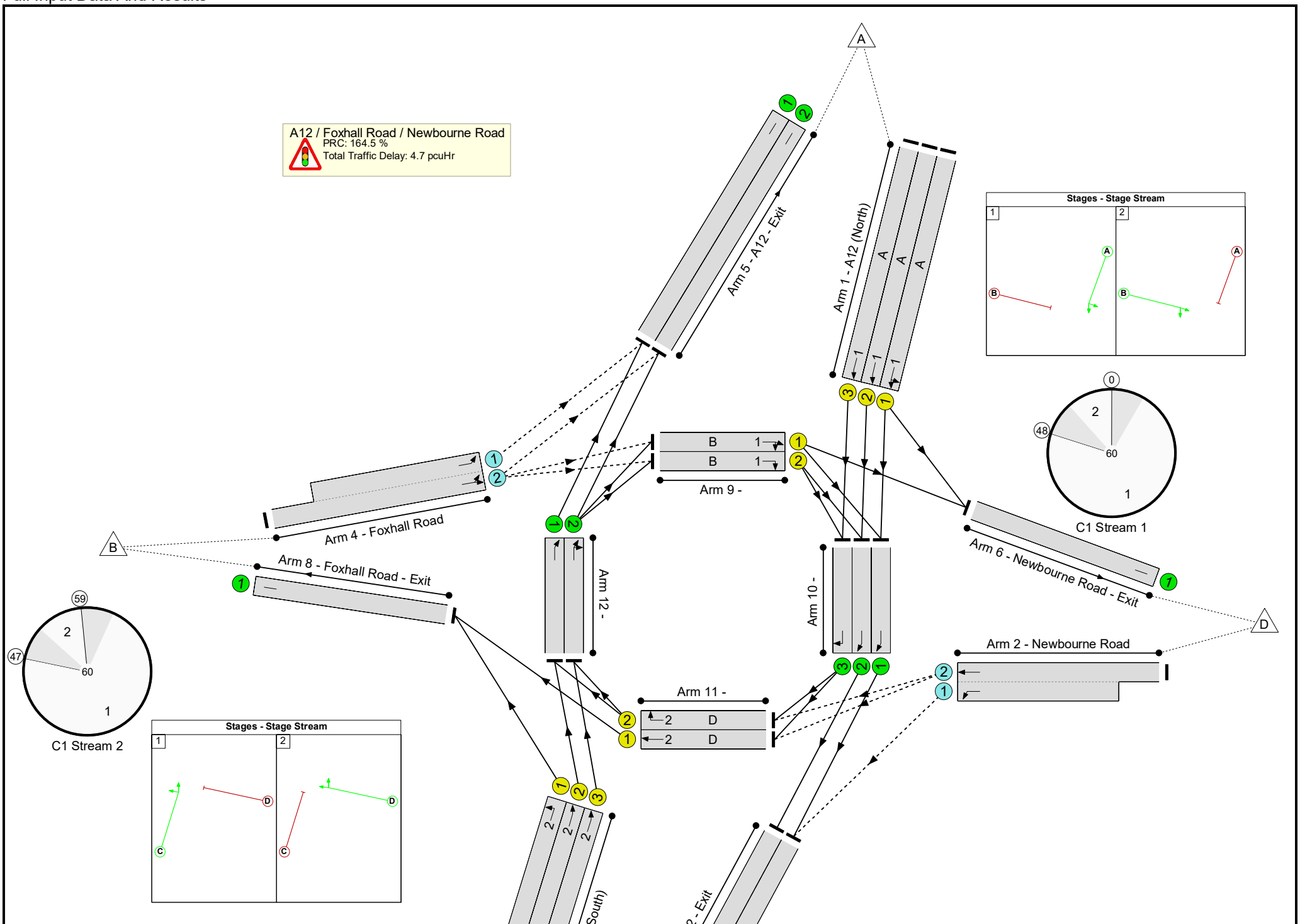
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.0%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**34.0%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	433	1854	1360	31.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	493	1976	1449	34.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	39	1845	1353	2.9%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	92	1840:1775	664+664	6.5 : 7.4%
3/1	A12 (South) Left	U	2	N/A	C		1	43	-	41	1828	1341	3.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	43	-	447	1958	1436	31.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	384	1828	1341	28.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	266	1828:1828	720+487	24.2 : 18.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	98	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	107	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	70	1791	239	29.3%
9/2	Right	U	1	N/A	B		1	7	-	88	1940	259	34.0%
10/1	Ahead	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	7	-	66	1764	235	28.1%
11/2	Right	U	2	N/A	D		1	7	-	16	1764	235	6.8%
12/1	Ahead	U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**716**	**0**	**0**	**2.9**	**1.8**	**0.0**	**4.7**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**716**	**0**	**0**	**2.9**	**1.8**	**0.0**	**4.7**	**-**	**-**	**-**	**-**
1/1	433	433	-	-	-	0.3	0.2	-	0.6	4.7	2.4	0.2	2.6
1/2	493	493	-	-	-	0.4	0.3	-	0.6	4.7	2.9	0.3	3.1
1/3	39	39	-	-	-	0.0	0.0	-	0.0	3.6	0.2	0.0	0.2
2/2+2/1	92	92	184	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.1
3/1	41	41	-	-	-	0.0	0.0	-	0.0	3.7	0.2	0.0	0.2
3/2	447	447	-	-	-	0.3	0.2	-	0.6	4.6	2.5	0.2	2.7
3/3	384	384	-	-	-	0.3	0.2	-	0.5	4.6	2.1	0.2	2.3
4/2+4/1	266	266	532	0	0	0.0	0.1	-	0.1	2.0	0.2	0.1	0.3
5/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	98	98	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	70	70	-	-	-	0.4	0.2	-	0.6	32.7	1.1	0.2	1.3
9/2	88	88	-	-	-	0.6	0.3	-	0.8	34.1	1.3	0.3	1.6
10/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	66	66	-	-	-	0.4	0.2	-	0.6	32.7	1.0	0.2	1.2
11/2	16	16	-	-	-	0.1	0.0	-	0.1	31.1	0.2	0.0	0.3
12/1	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

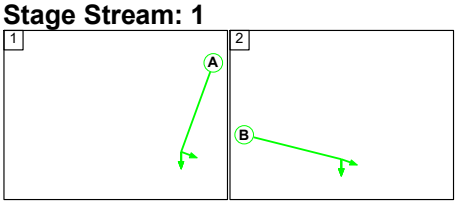
C1	Stream: 1	PRC for Signalled Lanes (%):	164.5	Total Delay for Signalled Lanes (pcuHr):	2.73	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	189.1	Total Delay for Signalled Lanes (pcuHr):	1.84	Cycle Time (s):	60
		PRC Over All Lanes (%):	164.5	Total Delay Over All Lanes(pcuHr):	4.75		

Full Input Data And Results

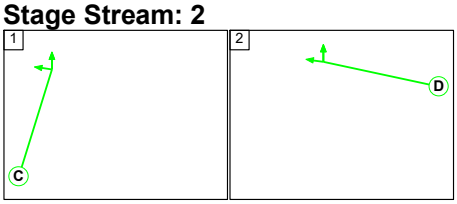
Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

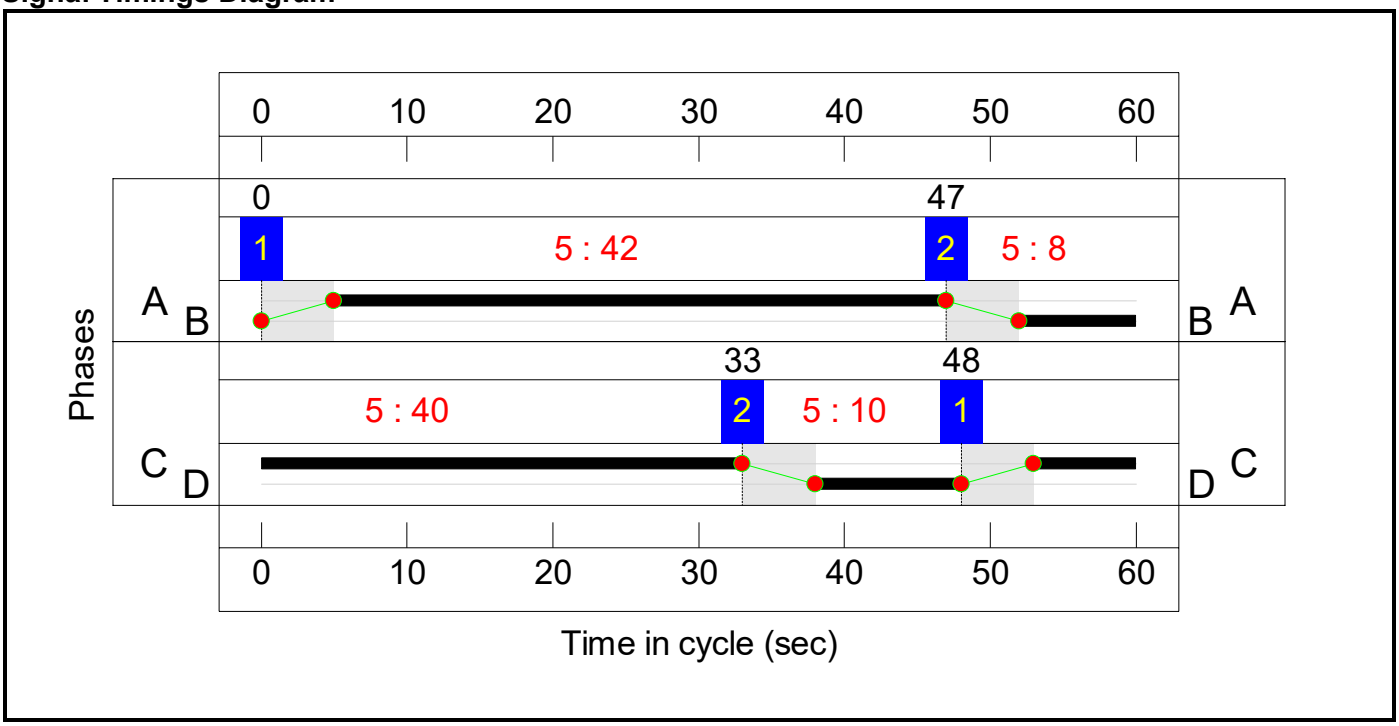
Stage Stream: 1

Stage	1	2
Duration	42	8
Change Point	0	47

Stage Stream: 2

Stage	1	2
Duration	40	10
Change Point	48	33

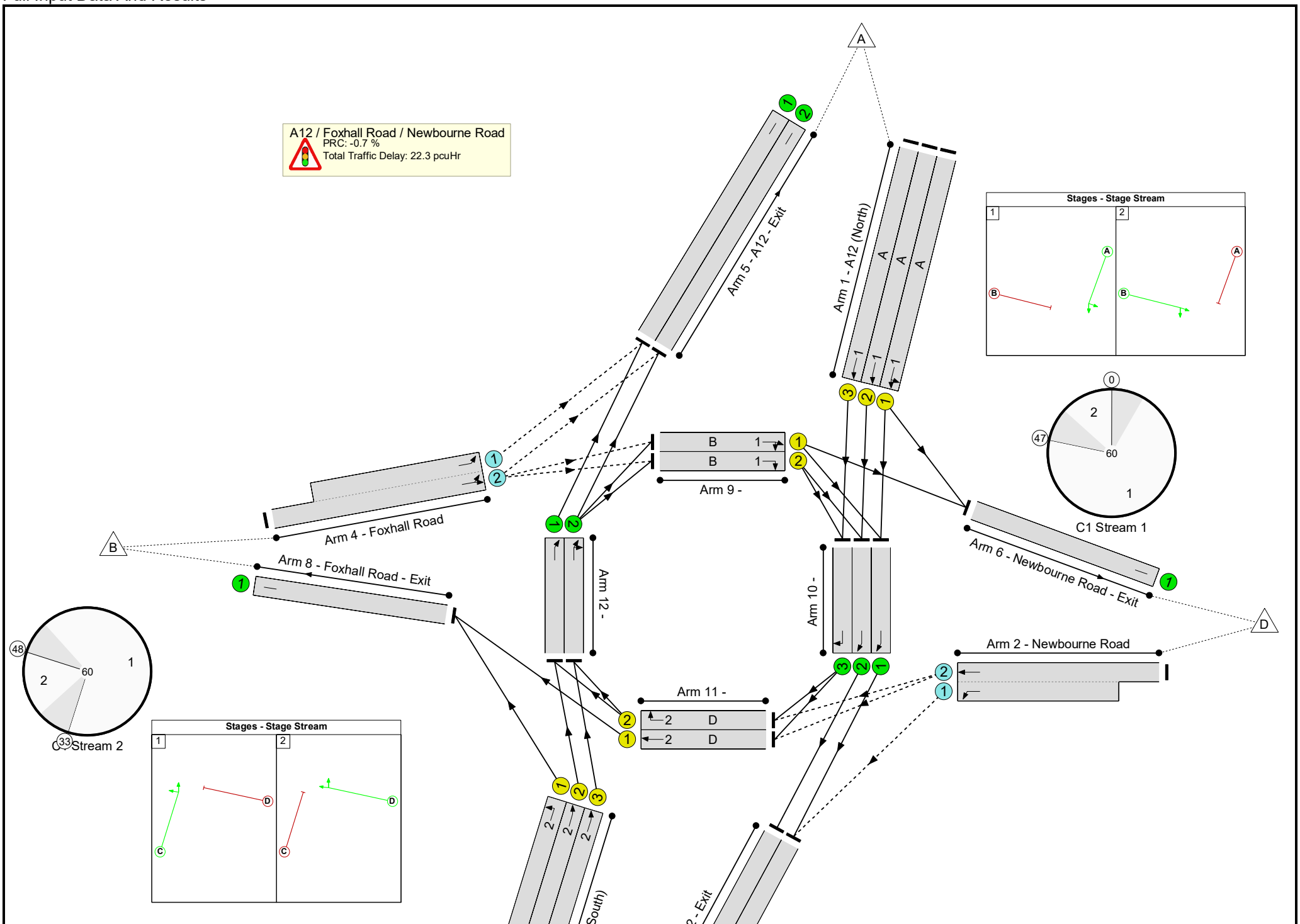
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.6%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.6%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	42	-	782	1856	1330	58.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	42	-	854	1976	1416	60.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	42	-	242	1845	1322	18.3%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	324	1840:1775	397+296	56.5 : 33.8%
3/1	A12 (South) Left	U	2	N/A	C		1	40	-	101	1828	1249	8.1%
3/2	A12 (South) Ahead	U	2	N/A	C		1	40	-	918	1958	1338	68.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	40	-	839	1828	1249	67.2%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	605	1828:1828	406+406	74.4 : 74.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1308	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	911	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	209	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1025	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	8	-	145	1791	269	54.0%
9/2	Right	U	1	N/A	B		1	8	-	171	1940	291	58.8%
10/1	Ahead	U	N/A	N/A	-		-	-	-	718	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1025	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	242	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	10	-	293	1764	323	90.6%
11/2	Right	U	2	N/A	D		1	10	-	173	1764	323	53.5%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1005	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	925	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1858**	**0**	**0**	**10.9**	**11.3**	**0.0**	**22.3**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1858**	**0**	**0**	**10.9**	**11.3**	**0.0**	**22.3**	**-**	**-**	**-**	**-**
1/1	782	782	-	-	-	0.9	0.7	-	1.6	7.4	6.3	0.7	7.0
1/2	854	854	-	-	-	1.0	0.8	-	1.8	7.4	6.9	0.8	7.6
1/3	242	242	-	-	-	0.2	0.1	-	0.3	4.5	1.3	0.1	1.4
2/2+2/1	324	324	648	0	0	0.3	0.4	-	0.7	8.3	2.0	0.4	2.4
3/1	101	101	-	-	-	0.1	0.0	-	0.1	4.8	0.6	0.0	0.6
3/2	918	918	-	-	-	1.4	1.1	-	2.5	9.9	8.9	1.1	10.0
3/3	839	839	-	-	-	1.3	1.0	-	2.3	9.9	8.2	1.0	9.2
4/2+4/1	605	605	1210	0	0	1.3	1.4	-	2.7	16.1	3.8	1.4	5.2
5/1	1308	1308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	911	911	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	209	209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1025	1025	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	145	145	-	-	-	0.9	0.6	-	1.5	36.2	2.3	0.6	2.9
9/2	171	171	-	-	-	0.8	0.7	-	1.5	31.3	2.6	0.7	3.3
10/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1025	1025	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	242	242	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	293	293	-	-	-	1.8	3.8	-	5.6	68.8	4.7	3.8	8.5
11/2	173	173	-	-	-	1.0	0.6	-	1.6	33.2	2.3	0.6	2.9
12/1	1005	1005	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

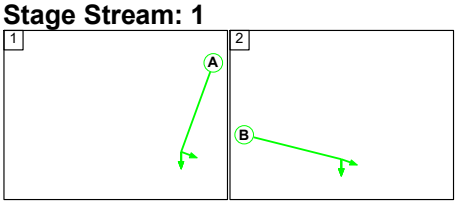
C1	Stream: 1	PRC for Signalled Lanes (%):	49.2	Total Delay for Signalled Lanes (pcuHr):	6.62	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-0.7	Total Delay for Signalled Lanes (pcuHr):	12.17	Cycle Time (s):	60
		PRC Over All Lanes (%):	-0.7	Total Delay Over All Lanes(pcuHr):	22.25		

Full Input Data And Results

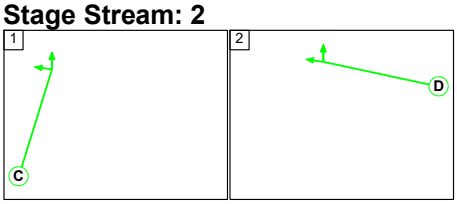
Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

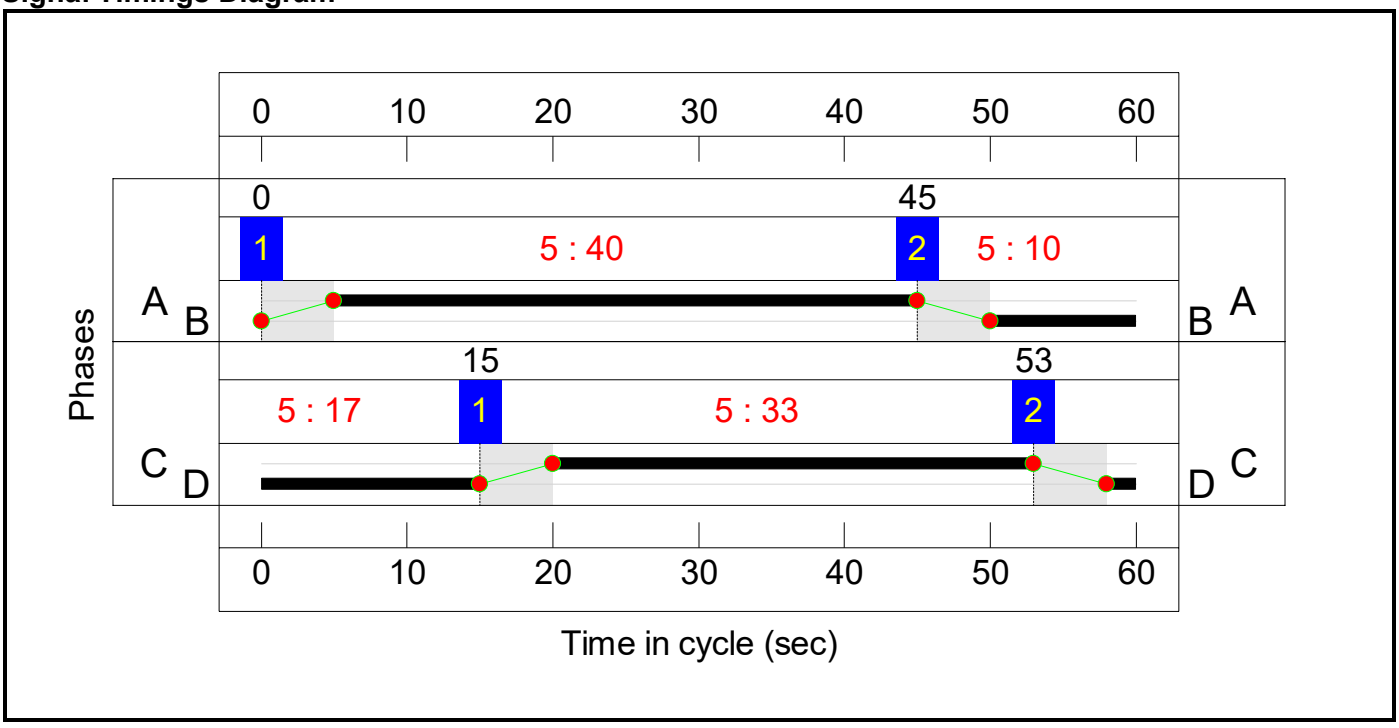
Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	0	45

Stage Stream: 2

Stage	1	2
Duration	33	17
Change Point	15	53

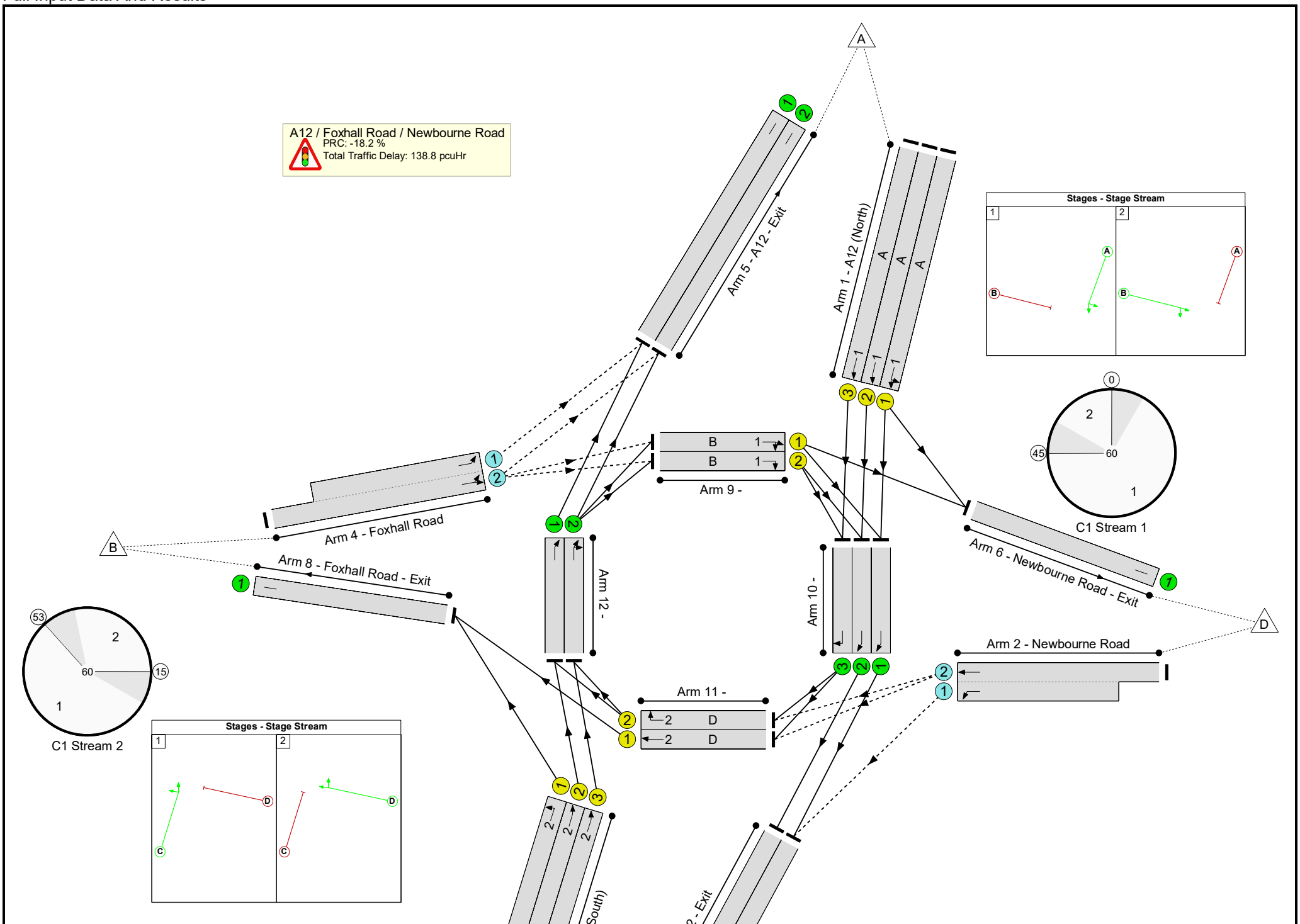
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.4%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.4%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	40	-	918	1864	1274	72.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	40	-	974	1976	1350	72.1%
1/3	A12 (North) Ahead	U	1	N/A	A		1	40	-	181	1845	1261	14.4%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	539	1840:1775	360+360	97.1 : 52.8%
3/1	A12 (South) Left	U	2	N/A	C		1	33	-	183	1828	1036	17.7%
3/2	A12 (South) Ahead	U	2	N/A	C		1	33	-	1179	1958	1110	106.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	33	-	1100	1828	1036	106.2%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	649	1828:1828	305+305	106.1 : 106.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1659	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1156	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	368	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	990	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1147	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	10	-	250	1791	328	71.7%
9/2	Right	U	1	N/A	B		1	10	-	173	1940	356	45.9%
10/1	Ahead	U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1147	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	181	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	17	-	220	1764	529	41.6%
11/2	Right	U	2	N/A	D		1	17	-	310	1764	529	58.6%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1334	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1255	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2300**	**0**	**0**	**25.6**	**113.3**	**0.0**	**138.8**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2300**	**0**	**0**	**25.6**	**113.3**	**0.0**	**138.8**	**-**	**-**	**-**	**-**
1/1	918	918	-	-	-	1.5	1.3	-	2.8	11.0	9.4	1.3	10.7
1/2	974	974	-	-	-	1.6	1.3	-	2.9	10.7	10.0	1.3	11.3
1/3	181	181	-	-	-	0.2	0.1	-	0.3	5.0	1.1	0.1	1.1
2/2+2/1	539	539	1078	0	0	1.7	1.5	-	3.1	20.9	5.6	1.5	7.1
3/1	183	183	-	-	-	0.3	0.1	-	0.4	8.4	1.4	0.1	1.5
3/2	1179	1110	-	-	-	5.8	41.8	-	47.6	145.4	20.8	41.8	62.6
3/3	1100	1036	-	-	-	5.4	39.1	-	44.5	145.7	19.4	39.1	58.5
4/2+4/1	649	611	1222	0	0	4.1	25.4	-	29.6	164.0	13.5	25.4	38.9
5/1	1570	1570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1098	1098	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1137	1137	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	236	236	-	-	-	1.5	1.2	-	2.7	41.5	3.7	1.2	4.9
9/2	163	163	-	-	-	1.2	0.4	-	1.6	36.4	2.7	0.4	3.1
10/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1137	1137	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	220	220	-	-	-	1.5	0.4	-	1.8	30.1	3.3	0.4	3.7
11/2	310	310	-	-	-	0.8	0.7	-	1.5	16.9	3.1	0.7	3.8
12/1	1265	1265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1191	1191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

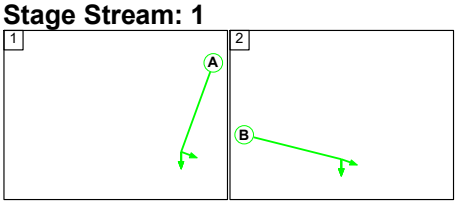
C1	Stream: 1	PRC for Signalled Lanes (%):	24.8	Total Delay for Signalled Lanes (pcuHr):	10.30	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-18.1	Total Delay for Signalled Lanes (pcuHr):	95.86	Cycle Time (s):	60
		PRC Over All Lanes (%):	-18.2	Total Delay Over All Lanes(pcuHr):	138.84		

Full Input Data And Results

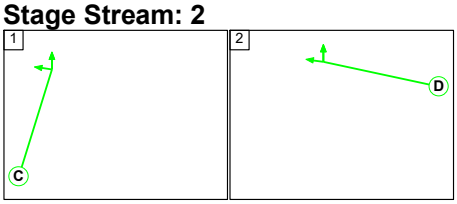
Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

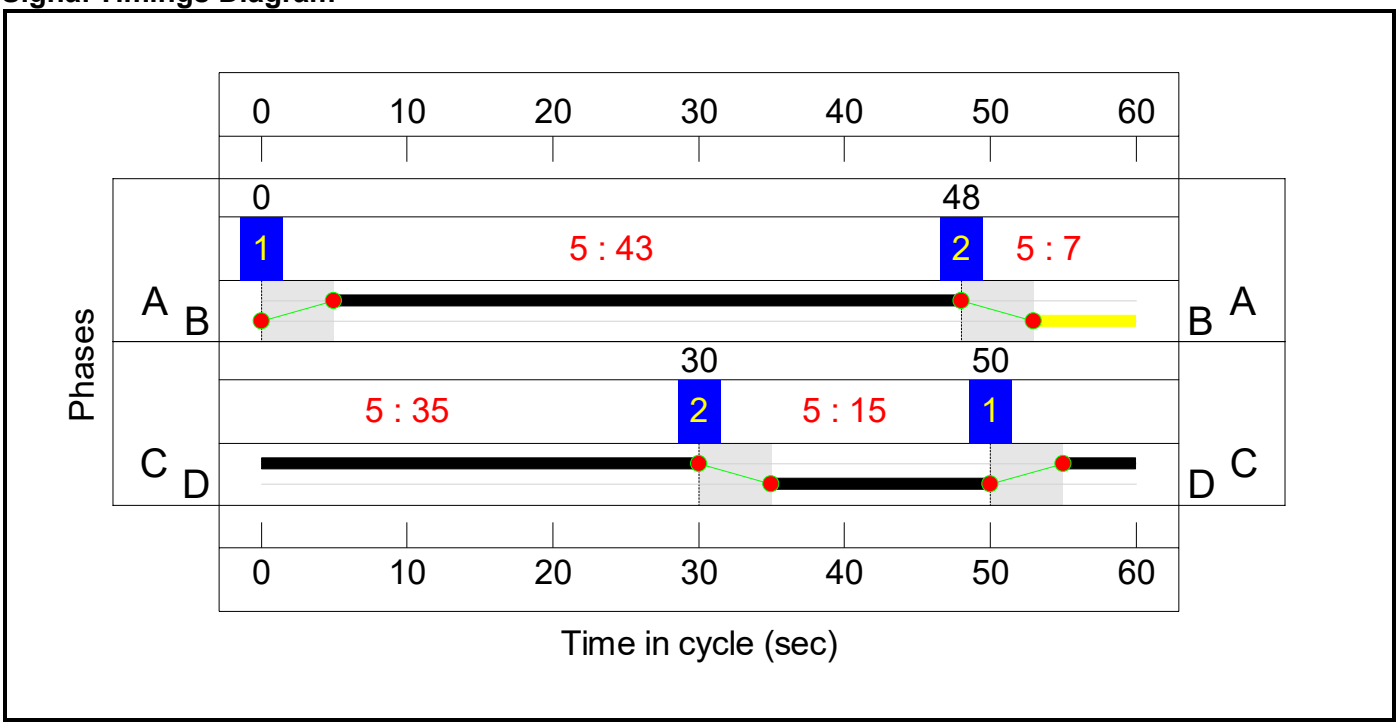
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	35	15
Change Point	50	30

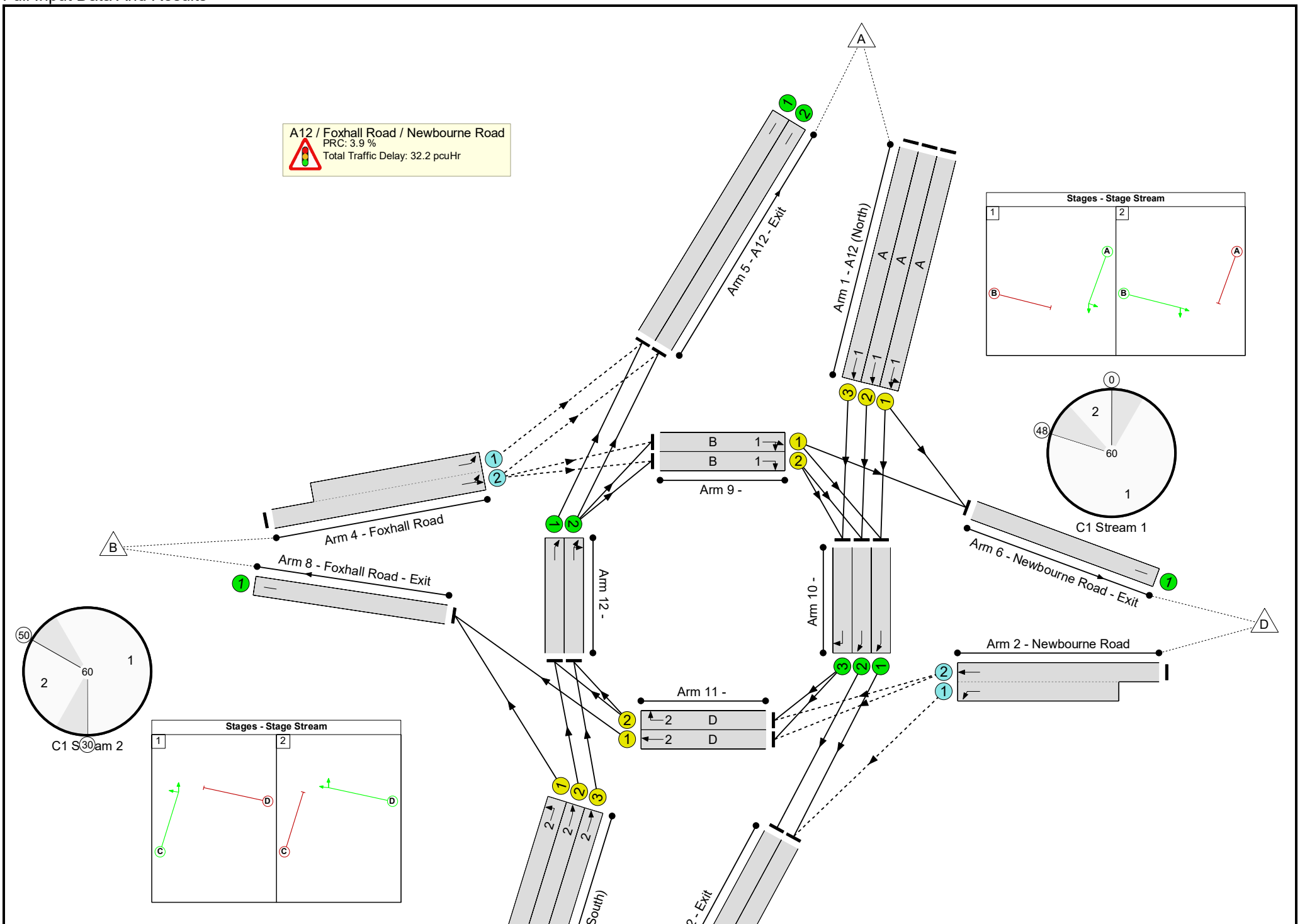
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.7%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.7%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	834	1873	1374	60.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	898	1976	1449	62.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	302	1845	1353	22.3%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	426	1840:1775	388+388	68.7 : 40.9%
3/1	A12 (South) Left	U	2	N/A	C		1	35	-	238	1828	1097	21.7%
3/2	A12 (South) Ahead	U	2	N/A	C		1	35	-	1018	1958	1175	86.7%
3/3	A12 (South) Ahead	U	2	N/A	C		1	35	-	939	1828	1097	85.6%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	656	1828:1828	380+380	86.3 : 86.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1430	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1030	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	788	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1059	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	160	1791	239	67.0%
9/2	Right	U	1	N/A	B		1	7	-	161	1940	259	62.2%
10/1	Ahead	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1059	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	302	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	15	-	401	1764	470	85.2%
11/2	Right	U	2	N/A	D		1	15	-	168	1764	470	35.7%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1023	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2164**	**0**	**0**	**16.0**	**16.2**	**0.0**	**32.2**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**2164**	**0**	**0**	**16.0**	**16.2**	**0.0**	**32.2**	**-**	**-**	**-**	**-**
1/1	834	834	-	-	-	0.9	0.8	-	1.7	7.2	6.5	0.8	7.3
1/2	898	898	-	-	-	1.0	0.8	-	1.8	7.2	7.2	0.8	8.0
1/3	302	302	-	-	-	0.2	0.1	-	0.4	4.3	1.6	0.1	1.7
2/2+2/1	426	426	852	0	0	0.5	0.6	-	1.2	9.7	3.2	0.6	3.8
3/1	238	238	-	-	-	0.4	0.1	-	0.5	7.6	1.8	0.1	1.9
3/2	1018	1018	-	-	-	2.8	3.1	-	5.9	21.0	13.9	3.1	17.0
3/3	939	939	-	-	-	2.6	2.9	-	5.4	20.9	12.8	2.9	15.7
4/2+4/1	656	656	1312	0	0	2.5	3.0	-	5.5	30.0	4.9	3.0	7.9
5/1	1430	1430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1030	1030	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	788	788	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1059	1059	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	639	639	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	160	160	-	-	-	1.1	1.0	-	2.1	47.5	2.5	1.0	3.5
9/2	161	161	-	-	-	0.9	0.8	-	1.7	38.7	2.2	0.8	3.0
10/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1059	1059	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	401	401	-	-	-	2.2	2.7	-	4.8	43.4	6.2	2.7	8.9
11/2	168	168	-	-	-	0.9	0.3	-	1.2	25.6	2.0	0.3	2.3
12/1	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1023	1023	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

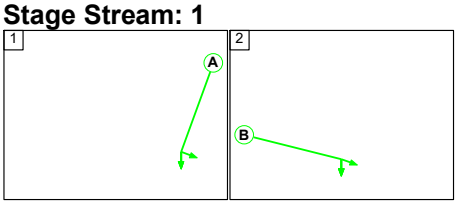
C1	Stream: 1	PRC for Signalled Lanes (%):	34.3	Total Delay for Signalled Lanes (pcuHr):	7.65	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	3.9	Total Delay for Signalled Lanes (pcuHr):	17.93	Cycle Time (s):	60
		PRC Over All Lanes (%):	3.9	Total Delay Over All Lanes(pcuHr):	32.21		

Full Input Data And Results

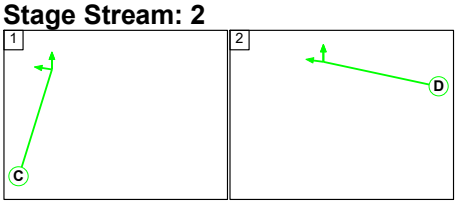
Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

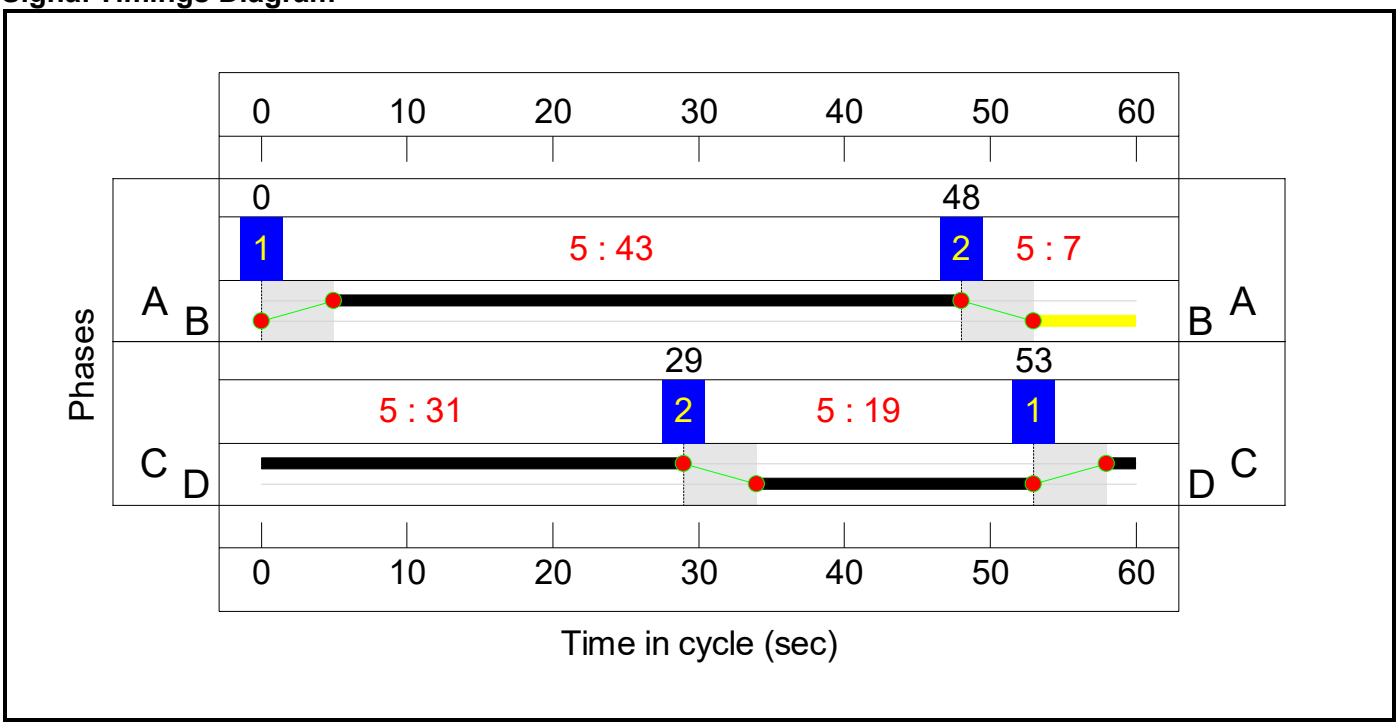
Stage Stream: 1

Stage	1	2
Duration	43	7
Change Point	0	48

Stage Stream: 2

Stage	1	2
Duration	31	19
Change Point	53	29

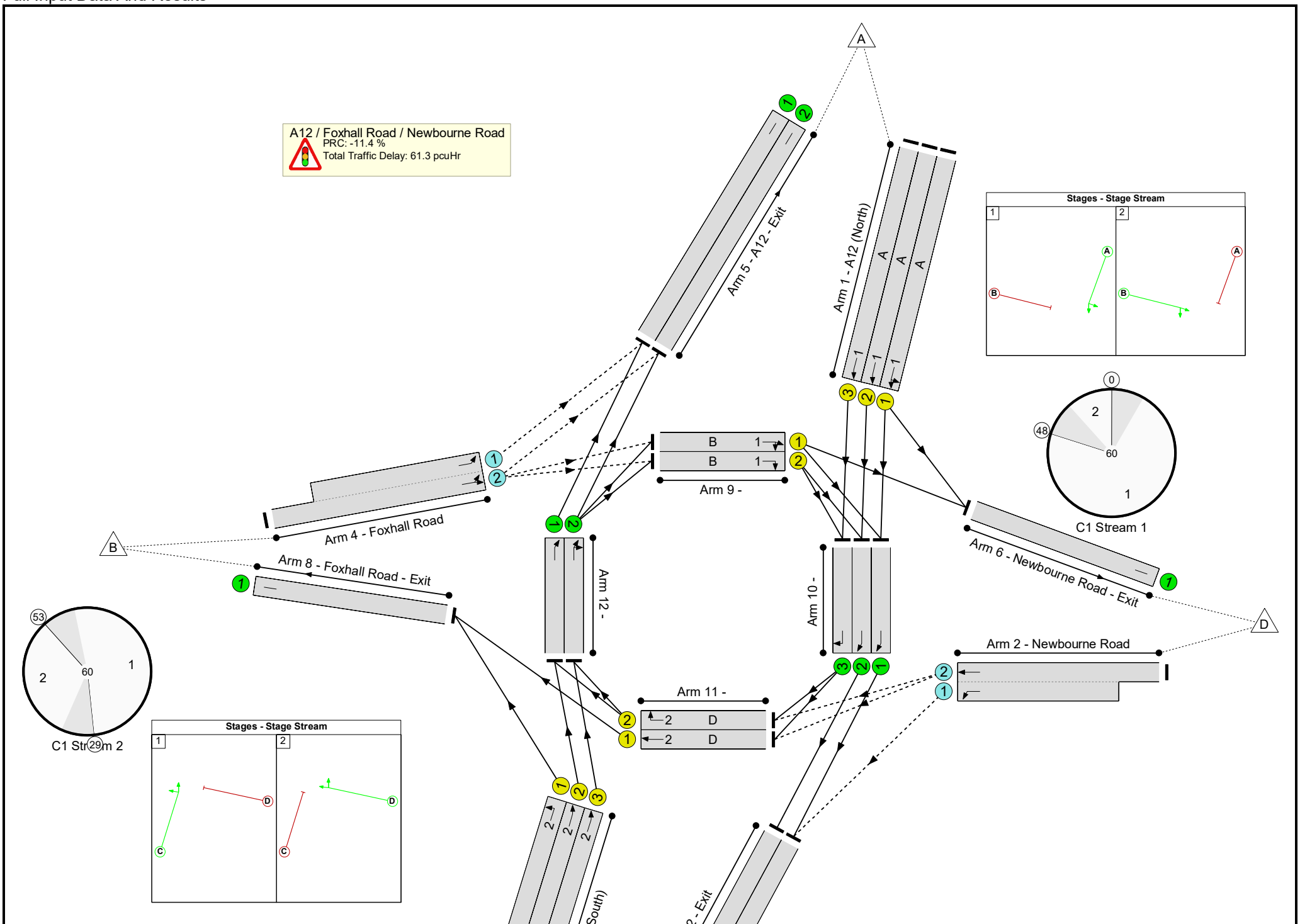
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.3%**
A12 / Foxhall Road / Newbourne Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.3%**
1/1	A12 (North) Left Ahead	U	1	N/A	A		1	43	-	862	1869	1371	62.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	43	-	930	1976	1449	64.2%
1/3	A12 (North) Ahead	U	1	N/A	A		1	43	-	352	1845	1353	26.0%
2/2+2/1	Newbourne Road Left Ahead	O	N/A	N/A	-		-	-	-	379	1840:1775	367+367	67.5 : 35.6%
3/1	A12 (South) Left	U	2	N/A	C		1	31	-	345	1828	975	35.4%
3/2	A12 (South) Ahead	U	2	N/A	C		1	31	-	1047	1958	1044	100.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	31	-	976	1828	975	100.1%
4/2+4/1	Foxhall Road Left Ahead	O	N/A	N/A	-		-	-	-	547	1828:1828	402+402	68.2 : 67.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1379	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	955	Inf	Inf	0.0%
6/1	Newbourne Road - Exit	U	N/A	N/A	-		-	-	-	398	Inf	Inf	0.0%
7/1	A12 - Exit	U	N/A	N/A	-		-	-	-	811	Inf	Inf	0.0%
7/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1068	Inf	Inf	0.0%
8/1	Foxhall Road - Exit	U	N/A	N/A	-		-	-	-	827	Inf	Inf	0.0%
9/1	Ahead Right	U	1	N/A	B		1	7	-	216	1791	239	90.4%
9/2	Right	U	1	N/A	B		1	7	-	138	1940	259	53.4%
10/1	Ahead	U	N/A	N/A	-		-	-	-	680	Inf	Inf	0.0%

Full Input Data And Results

10/2	Ahead	U	N/A	N/A	-		-	-	-	1068	Inf	Inf	0.0%
10/3	Right	U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
11/1	Ahead	U	2	N/A	D		1	19	-	482	1764	588	82.0%
11/2	Right	U	2	N/A	D		1	19	-	118	1764	588	20.1%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1106	Inf	Inf	0.0%
12/2	Ahead Right	U	N/A	N/A	-		-	-	-	1035	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1852**	**0**	**0**	**18.3**	**43.0**	**0.0**	**61.3**	**-**	**-**	**-**	**-**
A12 / Foxhall Road / Newbourne Road	**-**	**-**	**1852**	**0**	**0**	**18.3**	**43.0**	**0.0**	**61.3**	**-**	**-**	**-**	**-**
1/1	862	862	-	-	-	0.9	0.8	-	1.8	7.5	6.9	0.8	7.8
1/2	930	930	-	-	-	1.0	0.9	-	1.9	7.5	7.7	0.9	8.6
1/3	352	352	-	-	-	0.3	0.2	-	0.4	4.4	1.9	0.2	2.0
2/2+2/1	379	379	758	0	0	0.6	0.5	-	1.1	10.6	3.1	0.5	3.6
3/1	345	345	-	-	-	0.8	0.3	-	1.0	10.9	3.3	0.3	3.5
3/2	1047	1044	-	-	-	4.2	16.9	-	21.0	72.3	17.5	16.9	34.4
3/3	976	975	-	-	-	3.8	15.9	-	19.7	72.7	16.3	15.9	32.2
4/2+4/1	547	547	1094	0	0	1.9	1.1	-	2.9	19.4	3.6	1.1	4.6
5/1	1376	1376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	954	954	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	398	398	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	811	811	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1068	1068	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	827	827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	216	216	-	-	-	1.4	3.6	-	5.0	82.8	3.5	3.6	7.1
9/2	138	138	-	-	-	0.7	0.6	-	1.3	32.6	1.7	0.6	2.2
10/1	680	680	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	1068	1068	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	482	482	-	-	-	2.3	2.2	-	4.4	33.2	7.1	2.2	9.3
11/2	118	118	-	-	-	0.5	0.1	-	0.7	20.5	1.2	0.1	1.3
12/1	1103	1103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1034	1034	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1	Stream: 1	PRC for Signalled Lanes (%):	-0.4	Total Delay for Signalled Lanes (pcuHr):	10.38	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-11.4	Total Delay for Signalled Lanes (pcuHr):	46.90	Cycle Time (s):	60
		PRC Over All Lanes (%):	-11.4	Total Delay Over All Lanes(pcuHr):	61.35		

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: J22_Model_CV_v16 fixed drawing geometry + cap adj_SENS.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16a No FI Sensitivity\J22_sens\Model
Report generation date: 17/12/2020 17:47:25

»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM
»2023 Reference Case [Adjusted flows], 6-7 AM
»2023 Reference Case [Adjusted flows], 7-8 AM
»2023 Reference Case [Adjusted flows], 8-9 AM
»2023 Reference Case [Adjusted flows], 3-4 PM
»2023 Reference Case [Adjusted flows], 5-6 PM
»2023 Early Years [Adjusted flows], 6-7 AM
»2023 Early Years [Adjusted flows], 7-8 AM
»2023 Early Years [Adjusted flows], 8-9 AM
»2023 Early Years [Adjusted flows], 3-4 PM
»2023 Early Years [Adjusted flows], 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	2019 Base Year																								
A - A12 North	0.5	2.4	2.11	0.34	A	1.8	3.6	4.06	0.65	A	3.3	7.5	6.25	0.77	A	3.0	6.7	5.68	0.75	A	3.2	7.4	5.83	0.77	A
B - Foxhall Rd West	0.2	0.5	3.65	0.17	A	2.2	8.8	16.80	0.69	C	84.0	121.6	512.73	1.43	F	2.2	8.7	16.64	0.69	C	1.3	4.7	11.52	0.57	B
C - A12 South	0.4	1.2	1.93	0.29	A	1.9	3.8	4.16	0.66	A	10.2	52.9	17.22	0.92	C	3.0	6.4	5.85	0.75	A	4.2	14.2	7.59	0.81	A
D - Newbourne Rd East	0.1	0.5	4.17	0.08	A	0.7	3.1	10.57	0.40	B	2.6	13.1	26.50	0.73	D	1.5	6.5	16.79	0.60	C	1.2	5.3	14.64	0.54	B
	2023 Reference Case																								
A - A12 North	0.6	2.6	2.15	0.36	A	2.0	3.9	4.28	0.66	A	3.1	7.2	6.01	0.76	A	3.0	6.7	5.74	0.75	A	3.3	7.5	6.01	0.77	A
B - Foxhall Rd West	0.2	0.5	3.79	0.19	A	3.5	17.9	25.92	0.79	D	122.1	162.5	762.96	1.69	F	2.4	10.5	19.33	0.71	C	1.5	5.2	12.43	0.60	B
C - A12 South	0.4	1.5	1.94	0.30	A	2.2	4.6	4.55	0.69	A	14.9	81.7	24.49	0.95	C	3.7	9.7	6.89	0.79	A	4.3	14.6	7.67	0.81	A
D - Newbourne Rd East	0.1	0.5	4.25	0.08	A	0.7	3.5	11.21	0.42	B	2.5	12.5	24.59	0.72	C	1.7	7.3	17.96	0.63	C	1.3	5.9	15.87	0.57	C
	2023 Early Years																								
A - A12 North	0.6	2.7	2.16	0.36	A	2.2	4.6	4.64	0.69	A	3.0	7.1	5.86	0.75	A	3.0	6.7	5.83	0.75	A	3.2	7.2	5.93	0.76	A
B - Foxhall Rd West	0.2	0.9	4.02	0.20	A	11.6	48.4	79.99	0.96	F	146.6	194.5	1020.06	1.95	F	2.7	13.0	22.19	0.74	C	1.6	5.6	13.17	0.61	B
C - A12 South	0.5	2.2	2.08	0.33	A	3.0	6.5	5.87	0.75	A	24.4	110.3	38.53	0.98	E	4.0	12.8	7.49	0.80	A	4.3	15.0	7.70	0.82	A
D - Newbourne Rd East	0.1	0.5	4.28	0.08	A	0.8	3.8	12.26	0.44	B	2.3	11.5	23.03	0.71	C	1.7	7.4	18.13	0.63	C	1.3	5.7	15.25	0.56	C
	2028 Reference Case																								
A - A12 North	0.6	2.7	2.17	0.37	A	2.2	4.7	4.65	0.69	A	3.4	8.0	6.40	0.78	A	3.4	7.5	6.27	0.77	A	4.1	12.1	7.03	0.81	A
B - Foxhall Rd West	0.2	0.7	3.85	0.19	A	7.0	36.8	48.13	0.90	E	173.5	200.0	1442.91	2.03	F	7.2	37.4	50.75	0.90	F	2.7	13.0	21.34	0.74	C
C - A12 South	0.4	1.6	1.96	0.31	A	2.4	5.3	5.00	0.71	A	19.6	99.5	31.21	0.97	D	4.3	15.5	7.90	0.82	A	6.6	32.8	11.22	0.87	B
D - Newbourne Rd East	0.1	0.5	4.29	0.09	A	0.8	3.9	12.51	0.45	B	3.0	15.4	29.42	0.76	D	2.1	10.1	22.41	0.69	C	1.8	8.7	21.21	0.65	C
	2028 Peak Construction																								
A - A12 North	0.6	2.7	2.18	0.37	A	2.1	4.4	4.48	0.68	A	3.4	8.1	6.45	0.78	A	3.3	7.3	6.25	0.77	A	3.6	8.5	6.51	0.79	A
B - Foxhall Rd West	0.3	1.2	4.28	0.22	A	23.5	62.5	142.69	1.05	F	179.9	179.9	1554.23	2.11	F	6.5	34.0	48.90	0.89	E	2.9	13.7	22.31	0.75	C
C - A12 South	0.6	2.7	2.17	0.37	A	3.4	7.8	6.61	0.78	A	35.9	127.5	52.74	1.00	F	5.1	22.0	9.22	0.84	A	6.8	34.2	11.54	0.88	B
D - Newbourne Rd East	0.1	0.5	4.29	0.09	A	0.8	3.8	11.97	0.44	B	3.1	15.6	29.63	0.77	D	2.1	9.8	21.86	0.69	C	1.6	7.4	18.53	0.62	C
	2034 Reference Case																								
A - A12 North	0.6	2.8	2.22	0.38	A	2.5	5.7	5.08	0.72	A	3.8	10.3	6.87	0.79	A	3.4	7.8	6.25	0.78	A	4.6	16.5	7.82	0.82	A

B - Foxhall Rd West	0.3	1.3	4.11	0.24	A	31.5	73.5	161.96	1.07	F	171.6	200.0	1413.72	2.01	F	64.4	105.8	314.31	1.22	F	20.9	61.9	118.69	1.03	F
C - A12 South	0.5	1.9	2.00	0.32	A	2.8	6.2	5.57	0.74	A	19.1	98.1	30.40	0.97	D	6.1	29.6	10.62	0.87	B	10.5	54.7	17.17	0.92	C
D - Newbourne Rd East	0.1	0.5	4.36	0.09	A	1.0	4.6	14.30	0.49	B	4.6	24.7	42.58	0.84	E	2.7	13.7	26.53	0.74	D	2.5	12.5	26.60	0.72	D
2034 Operational Led																									
A - A12 North	0.6	2.8	2.22	0.38	A	2.7	5.9	5.25	0.73	A	3.9	11.4	7.03	0.80	A	3.4	7.7	6.19	0.77	A	4.6	16.9	7.90	0.83	A
B - Foxhall Rd West	0.3	1.3	4.12	0.24	A	26.8	68.5	143.46	1.05	F	206.7	206.9	1711.60	2.19	F	64.6	106.0	315.63	1.22	F	11.5	48.8	75.59	0.96	F
C - A12 South	0.5	1.9	2.00	0.32	A	2.9	6.3	5.65	0.74	A	23.9	110.7	36.76	0.98	E	6.2	29.8	10.66	0.87	B	10.5	55.3	17.27	0.92	C
D - Newbourne Rd East	0.1	0.5	4.37	0.09	A	1.0	4.8	14.95	0.50	B	4.8	25.8	44.64	0.85	E	2.7	13.3	25.87	0.74	D	2.5	12.8	27.05	0.73	D
2023 Reference Case [Adjusted flows]																									
A - A12 North	0.6	2.6	2.15	0.36	A	2.0	3.9	4.28	0.66	A	3.1	7.2	6.01	0.76	A	3.0	6.7	5.74	0.75	A	3.3	7.5	6.01	0.77	A
B - Foxhall Rd West	0.2	0.5	3.79	0.19	A	3.5	17.9	25.92	0.79	D	122.1	162.5	762.96	1.69	F	2.4	10.5	19.33	0.71	C	1.5	5.2	12.43	0.60	B
C - A12 South	0.4	1.5	1.94	0.30	A	2.2	4.6	4.55	0.69	A	14.9	81.7	24.49	0.95	C	3.7	9.7	6.89	0.79	A	4.3	14.6	7.67	0.81	A
D - Newbourne Rd East	0.1	0.5	4.25	0.08	A	0.7	3.5	11.21	0.42	B	2.5	12.5	24.59	0.72	C	1.7	7.3	17.96	0.63	C	1.3	5.9	15.87	0.57	C
2023 Early Years [Adjusted flows]																									
A - A12 North	0.6	2.7	2.16	0.36	A	2.2	4.6	4.64	0.69	A	3.0	7.1	5.86	0.75	A	3.0	6.7	5.83	0.75	A	3.2	7.2	5.93	0.76	A
B - Foxhall Rd West	0.2	0.9	4.02	0.20	A	11.6	48.4	79.99	0.96	F	146.6	194.5	1020.06	1.95	F	2.7	13.0	22.19	0.74	C	1.6	5.6	13.17	0.61	B
C - A12 South	0.5	2.2	2.08	0.33	A	3.0	6.5	5.87	0.75	A	24.4	110.3	38.53	0.98	E	4.0	12.8	7.49	0.80	A	4.3	15.0	7.70	0.82	A
D - Newbourne Rd East	0.1	0.5	4.28	0.08	A	0.8	3.8	12.26	0.44	B	2.3	11.5	23.03	0.71	C	1.7	7.4	18.13	0.63	C	1.3	5.7	15.25	0.56	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Foxhall Road / Newbourne Road
Location	52° 2'52.64"N, 1°16'28.90"E
Site number	22
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Foxhall Rd West	
C	A12 South	
D	Newbourne Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	6.10	7.80	17.1	28.8	73.5	8.0	
B - Foxhall Rd West	3.40	8.20	15.8	26.5	73.5	25.0	
C - A12 South	7.60	7.60	0.0	23.9	73.5	14.0	
D - Newbourne Rd East	3.30	7.70	13.8	27.0	73.5	25.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Queue calibration	425
B - Foxhall Rd West	Direct	Queue calibration	-150
C - A12 South	Direct	Queue calibration	500
D - Newbourne Rd East	Direct	Queue calibration	-125

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.626	2868
B - Foxhall Rd West	0.517	1670
C - A12 South	0.621	2949
D - Newbourne Rd East	0.500	1585

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	813	100.000
B - Foxhall Rd West		ONE HOUR	✓	182	100.000
C - A12 South		ONE HOUR	✓	687	100.000
D - Newbourne Rd East		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	744	29
	B - Foxhall Rd West	82	0	81	19
	C - A12 South	621	37	0	29
	D - Newbourne Rd East	14	19	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	7	7
	B - Foxhall Rd West	1	0	10	5
	C - A12 South	11	5	0	10
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	2.11	0.5	2.4	A	746	1119
B - Foxhall Rd West	0.17	3.65	0.2	0.5	A	167	251
C - A12 South	0.29	1.93	0.4	1.2	A	630	946
D - Newbourne Rd East	0.08	4.17	0.1	0.5	A	61	91

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	612	153	97	2634	0.232	611	539	0.0	0.3	1.780	A
B - Foxhall Rd West	137	34	499	1313	0.104	137	72	0.0	0.1	3.058	A
C - A12 South	517	129	55	2641	0.196	516	645	0.0	0.2	1.694	A
D - Newbourne Rd East	50	12	650	1075	0.046	49	58	0.0	0.0	3.509	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	731	183	116	2621	0.279	731	644	0.3	0.4	1.903	A
B - Foxhall Rd West	164	41	597	1260	0.130	163	86	0.1	0.1	3.282	A
C - A12 South	618	154	66	2634	0.234	617	771	0.2	0.3	1.784	A
D - Newbourne Rd East	59	15	777	1016	0.058	59	69	0.0	0.1	3.761	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	895	224	142	2605	0.344	895	789	0.4	0.5	2.105	A
B - Foxhall Rd West	200	50	731	1188	0.169	200	106	0.1	0.2	3.645	A
C - A12 South	756	189	80	2626	0.288	756	944	0.3	0.4	1.925	A
D - Newbourne Rd East	73	18	952	935	0.078	73	85	0.1	0.1	4.173	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	895	224	142	2604	0.344	895	789	0.5	0.5	2.105	A
B - Foxhall Rd West	200	50	731	1187	0.169	200	106	0.2	0.2	3.646	A
C - A12 South	756	189	80	2626	0.288	756	945	0.4	0.4	1.925	A
D - Newbourne Rd East	73	18	952	935	0.078	73	85	0.1	0.1	4.174	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	731	183	116	2621	0.279	731	645	0.5	0.4	1.904	A
B - Foxhall Rd West	164	41	597	1260	0.130	164	86	0.2	0.1	3.287	A
C - A12 South	618	154	66	2634	0.234	618	772	0.4	0.3	1.787	A
D - Newbourne Rd East	59	15	778	1016	0.058	59	69	0.1	0.1	3.767	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	612	153	97	2633	0.232	612	540	0.4	0.3	1.780	A
B - Foxhall Rd West	137	34	500	1312	0.104	137	72	0.1	0.1	3.063	A
C - A12 South	517	129	55	2641	0.196	517	646	0.3	0.2	1.694	A
D - Newbourne Rd East	50	12	652	1074	0.046	50	58	0.1	0.0	3.513	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Foxhall Rd West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.31	0.00	0.00	0.31	0.31			N/A	N/A
D - Newbourne Rd East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.25	0.52	0.52			N/A	N/A
B - Foxhall Rd West	0.20	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.40	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.03	0.31	1.44	2.39			N/A	N/A
B - Foxhall Rd West	0.20	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.40	0.03	0.33	1.23	1.23			N/A	N/A
D - Newbourne Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.31	0.00	0.00	0.31	0.31			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Foxhall Rd West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	5.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1487	100.000
B - Foxhall Rd West		ONE HOUR	✓	430	100.000
C - A12 South		ONE HOUR	✓	1509	100.000
D - Newbourne Rd East		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	144	1285	58
	B - Foxhall Rd West	219	0	163	48
	C - A12 South	1375	92	0	42
	D - Newbourne Rd East	117	28	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	12
	B - Foxhall Rd West	2	0	8	8
	C - A12 South	8	5	0	19
	D - Newbourne Rd East	12	21	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	4.06	1.8	3.6	A	1365	2047
B - Foxhall Rd West	0.69	16.80	2.2	8.8	C	395	592
C - A12 South	0.66	4.16	1.9	3.8	A	1385	2077
D - Newbourne Rd East	0.40	10.57	0.7	3.1	B	189	284

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1119	280	189	2582	0.434	1116	1284	0.0	0.8	2.452	A
B - Foxhall Rd West	324	81	1151	975	0.332	322	198	0.0	0.5	5.496	A
C - A12 South	1136	284	217	2589	0.439	1133	1132	0.0	0.8	2.468	A
D - Newbourne Rd East	155	39	1195	823	0.188	154	111	0.0	0.2	5.373	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1337	334	227	2557	0.523	1335	1536	0.8	1.1	2.944	A
B - Foxhall Rd West	387	97	1378	854	0.453	385	237	0.5	0.8	7.665	A
C - A12 South	1357	339	259	2562	0.529	1355	1355	0.8	1.1	2.980	A
D - Newbourne Rd East	185	46	1429	716	0.259	185	133	0.2	0.3	6.774	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1637	409	276	2525	0.648	1634	1878	1.1	1.8	4.027	A
B - Foxhall Rd West	473	118	1685	689	0.687	468	290	0.8	2.1	15.988	C
C - A12 South	1661	415	317	2527	0.657	1658	1657	1.1	1.9	4.129	A
D - Newbourne Rd East	227	57	1748	570	0.398	226	162	0.3	0.6	10.429	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1637	409	278	2524	0.649	1637	1884	1.8	1.8	4.059	A
B - Foxhall Rd West	473	118	1689	687	0.689	473	291	2.1	2.2	16.800	C
C - A12 South	1661	415	318	2526	0.658	1661	1661	1.9	1.9	4.162	A
D - Newbourne Rd East	227	57	1753	567	0.400	227	163	0.6	0.7	10.566	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1337	334	230	2555	0.523	1340	1544	1.8	1.1	2.968	A
B - Foxhall Rd West	387	97	1383	851	0.454	392	238	2.2	0.8	7.929	A
C - A12 South	1357	339	261	2561	0.530	1360	1361	1.9	1.1	3.002	A
D - Newbourne Rd East	185	46	1436	713	0.260	186	134	0.7	0.4	6.857	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1119	280	191	2580	0.434	1121	1290	1.1	0.8	2.470	A
B - Foxhall Rd West	324	81	1156	972	0.333	325	199	0.8	0.5	5.575	A
C - A12 South	1136	284	218	2588	0.439	1137	1138	1.1	0.8	2.486	A
D - Newbourne Rd East	155	39	1200	821	0.189	156	112	0.4	0.2	5.414	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C - A12 South	0.78	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.05	0.57	2.44	3.57			N/A	N/A
B - Foxhall Rd West	0.82	0.07	0.74	1.30	1.76			N/A	N/A
C - A12 South	1.12	0.05	0.53	2.57	3.78			N/A	N/A
D - Newbourne Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.03	0.26	1.82	1.82			N/A	N/A
B - Foxhall Rd West	2.08	0.03	0.29	2.08	8.78			N/A	N/A
C - A12 South	1.89	0.03	0.26	1.89	1.89			N/A	N/A
D - Newbourne Rd East	0.65	0.03	0.26	0.65	0.65			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.03	0.26	1.83	1.83			N/A	N/A
B - Foxhall Rd West	2.15	0.03	0.29	2.15	8.27			N/A	N/A
C - A12 South	1.91	0.03	0.26	1.91	1.91			N/A	N/A
D - Newbourne Rd East	0.66	0.03	0.31	1.15	3.13			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.36	1.08	1.49	1.77			N/A	N/A
B - Foxhall Rd West	0.85	0.05	0.60	1.63	2.19			N/A	N/A
C - A12 South	1.13	0.30	1.10	1.59	1.84			N/A	N/A
D - Newbourne Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.08	0.81	1.27	1.27			N/A	N/A
B - Foxhall Rd West	0.50	0.04	0.35	1.46	1.70			N/A	N/A
C - A12 South	0.79	0.08	0.80	1.46	1.46			N/A	N/A
D - Newbourne Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	66.10	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1742	100.000
B - Foxhall Rd West		ONE HOUR	✓	507	100.000
C - A12 South		ONE HOUR	✓	2041	100.000
D - Newbourne Rd East		ONE HOUR	✓	335	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	174	1446	122
	B - Foxhall Rd West	262	0	193	52
	C - A12 South	1778	166	1	96
	D - Newbourne Rd East	187	72	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	3	0	5	2
	C - A12 South	8	8	0	10
	D - Newbourne Rd East	9	3	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.25	3.3	7.5	A	1598	2398
B - Foxhall Rd West	1.43	512.73	84.0	121.6	F	465	698
C - A12 South	0.92	17.22	10.2	52.9	C	1873	2809
D - Newbourne Rd East	0.73	26.50	2.6	13.1	D	307	461

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1311	328	255	2520	0.521	1307	1668	0.0	1.1	2.958	A
B - Foxhall Rd West	382	95	1546	781	0.489	378	309	0.0	0.9	8.854	A
C - A12 South	1537	384	324	2536	0.606	1530	1286	0.0	1.5	3.557	A
D - Newbourne Rd East	252	63	1360	781	0.323	250	202	0.0	0.5	6.765	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	392	304	2489	0.629	1564	1994	1.1	1.7	3.878	A
B - Foxhall Rd West	456	114	1849	617	0.738	449	369	0.9	2.6	20.628	C
C - A12 South	1835	459	388	2498	0.734	1830	1538	1.5	2.7	5.349	A
D - Newbourne Rd East	301	75	1626	652	0.462	300	242	0.5	0.8	10.170	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1918	479	299	2492	0.770	1912	2343	1.7	3.2	6.137	A
B - Foxhall Rd West	558	140	2242	405	1.379	400	449	2.6	42.3	222.566	F
C - A12 South	2247	562	471	2448	0.918	2221	1822	2.7	9.3	14.406	B
D - Newbourne Rd East	369	92	1931	504	0.732	362	279	0.8	2.5	24.345	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1918	479	296	2494	0.769	1918	2362	3.2	3.3	6.246	A
B - Foxhall Rd West	558	140	2267	392	1.425	391	453	42.3	84.0	512.730	F
C - A12 South	2247	562	476	2445	0.919	2244	1826	9.3	10.2	17.221	C
D - Newbourne Rd East	369	92	1934	503	0.733	368	280	2.5	2.6	26.500	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	392	374	2447	0.640	1572	2101	3.3	1.8	4.144	A
B - Foxhall Rd West	456	114	1884	598	0.762	591	375	84.0	50.1	395.436	F
C - A12 South	1835	459	395	2494	0.736	1864	1601	10.2	2.8	5.974	A
D - Newbourne Rd East	301	75	1688	623	0.484	308	258	2.6	1.0	11.654	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1311	328	353	2460	0.533	1314	1784	1.8	1.1	3.149	A
B - Foxhall Rd West	382	95	1558	774	0.493	578	311	50.1	1.0	50.800	F
C - A12 South	1537	384	328	2534	0.606	1542	1369	2.8	1.6	3.647	A
D - Newbourne Rd East	252	63	1443	741	0.340	254	224	1.0	0.5	7.413	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.94	0.04	0.38	2.30	3.90			N/A	N/A
C - A12 South	1.52	0.54	1.40	1.98	2.55			N/A	N/A
D - Newbourne Rd East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.04	0.43	4.48	7.54			N/A	N/A
B - Foxhall Rd West	2.59	0.04	0.41	7.03	13.04			N/A	N/A
C - A12 South	2.71	0.04	0.40	7.34	13.69			N/A	N/A
D - Newbourne Rd East	0.84	0.06	0.74	1.43	1.85			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.25	0.03	0.28	3.25	6.44			N/A	N/A
B - Foxhall Rd West	42.26	20.92	40.10	61.27	68.37			N/A	N/A
C - A12 South	9.31	0.04	0.43	25.12	50.68			N/A	N/A
D - Newbourne Rd East	2.48	0.03	0.33	4.80	13.11			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.29	0.03	0.26	3.29	3.29			N/A	N/A
B - Foxhall Rd West	83.98	51.60	81.67	111.88	121.62			N/A	N/A
C - A12 South	10.17	0.03	0.34	16.77	52.89			N/A	N/A
D - Newbourne Rd East	2.61	0.03	0.31	3.55	12.77			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.09	1.24	3.84	5.22			N/A	N/A
B - Foxhall Rd West	50.14	28.25	48.23	69.05	75.88			N/A	N/A
C - A12 South	2.85	0.05	0.46	7.92	13.61			N/A	N/A
D - Newbourne Rd East	0.96	0.05	0.49	2.04	3.03			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.05	0.48	2.73	4.09			N/A	N/A
B - Foxhall Rd West	1.01	0.03	0.26	1.01	1.01			N/A	N/A
C - A12 South	1.56	0.03	0.32	3.02	8.09			N/A	N/A
D - Newbourne Rd East	0.52	0.03	0.33	1.04	2.07			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1748	100.000
B - Foxhall Rd West		ONE HOUR	✓	437	100.000
C - A12 South		ONE HOUR	✓	1676	100.000
D - Newbourne Rd East		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	294	1317	135
	B - Foxhall Rd West	246	0	146	45
	C - A12 South	1407	216	1	52
	D - Newbourne Rd East	109	104	77	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	5
	B - Foxhall Rd West	4	0	6	2
	C - A12 South	5	5	0	8
	D - Newbourne Rd East	4	6	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.68	3.0	6.7	A	1604	2406
B - Foxhall Rd West	0.69	16.64	2.2	8.7	C	401	601
C - A12 South	0.75	5.85	3.0	6.4	A	1538	2307
D - Newbourne Rd East	0.60	16.79	1.5	6.5	C	267	401

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1316	329	183	2612	0.504	1312	1323	0.0	1.0	2.761	A
B - Foxhall Rd West	329	82	1180	983	0.335	327	461	0.0	0.5	5.471	A
C - A12 South	1262	315	382	2568	0.491	1258	1156	0.0	1.0	2.740	A
D - Newbourne Rd East	219	55	1321	841	0.261	218	175	0.0	0.3	5.765	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1571	393	220	2589	0.607	1569	1583	1.0	1.5	3.521	A
B - Foxhall Rd West	393	98	1411	863	0.455	392	551	0.5	0.8	7.620	A
C - A12 South	1507	377	457	2522	0.597	1505	1383	1.0	1.5	3.529	A
D - Newbourne Rd East	262	65	1580	712	0.367	261	209	0.3	0.6	7.962	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1925	481	267	2559	0.752	1919	1933	1.5	3.0	5.570	A
B - Foxhall Rd West	481	120	1724	700	0.688	476	673	0.8	2.1	15.762	C
C - A12 South	1845	461	558	2462	0.750	1840	1690	1.5	2.9	5.733	A
D - Newbourne Rd East	320	80	1931	537	0.596	317	255	0.6	1.4	16.092	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1925	481	270	2558	0.752	1924	1942	3.0	3.0	5.678	A
B - Foxhall Rd West	481	120	1731	696	0.691	481	676	2.1	2.2	16.637	C
C - A12 South	1845	461	561	2460	0.750	1845	1696	2.9	3.0	5.855	A
D - Newbourne Rd East	320	80	1938	534	0.600	320	256	1.4	1.5	16.795	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1571	393	223	2588	0.607	1577	1595	3.0	1.6	3.584	A
B - Foxhall Rd West	393	98	1420	858	0.458	398	555	2.2	0.9	7.909	A
C - A12 South	1507	377	462	2520	0.598	1513	1392	3.0	1.5	3.594	A
D - Newbourne Rd East	262	65	1589	707	0.370	265	211	1.5	0.6	8.203	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1316	329	185	2611	0.504	1318	1331	1.6	1.0	2.788	A
B - Foxhall Rd West	329	82	1186	980	0.336	330	463	0.9	0.5	5.556	A
C - A12 South	1262	315	385	2566	0.492	1264	1162	1.5	1.0	2.768	A
D - Newbourne Rd East	219	55	1327	837	0.262	220	176	0.6	0.4	5.839	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C - A12 South	0.96	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.43	3.99	6.72			N/A	N/A
B - Foxhall Rd West	0.82	0.07	0.75	1.34	1.79			N/A	N/A
C - A12 South	1.47	0.04	0.43	3.84	6.38			N/A	N/A
D - Newbourne Rd East	0.57	0.06	0.66	1.33	1.42			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.96	0.03	0.27	2.96	3.93			N/A	N/A
B - Foxhall Rd West	2.09	0.03	0.29	2.09	8.73			N/A	N/A
C - A12 South	2.92	0.03	0.27	2.92	4.10			N/A	N/A
D - Newbourne Rd East	1.41	0.03	0.28	1.41	3.66			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	2.16	0.03	0.29	2.16	8.23			N/A	N/A
C - A12 South	2.96	0.03	0.26	2.96	2.96			N/A	N/A
D - Newbourne Rd East	1.46	0.03	0.29	1.46	6.47			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.10	1.18	3.05	4.10			N/A	N/A
B - Foxhall Rd West	0.86	0.05	0.62	1.65	2.23			N/A	N/A
C - A12 South	1.50	0.10	1.16	2.91	3.89			N/A	N/A
D - Newbourne Rd East	0.60	0.05	0.53	1.36	1.46			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.05	0.51	2.25	3.32			N/A	N/A
B - Foxhall Rd West	0.51	0.04	0.36	1.46	1.72			N/A	N/A
C - A12 South	0.97	0.05	0.49	2.09	3.11			N/A	N/A
D - Newbourne Rd East	0.36	0.03	0.33	1.13	1.35			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1844	100.000
B - Foxhall Rd West		ONE HOUR	✓	380	100.000
C - A12 South		ONE HOUR	✓	1850	100.000
D - Newbourne Rd East		ONE HOUR	✓	263	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	336	1379	128
	B - Foxhall Rd West	188	0	137	55
	C - A12 South	1488	331	1	30
	D - Newbourne Rd East	70	121	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	1	0	0	4
	C - A12 South	3	2	0	7
	D - Newbourne Rd East	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	5.83	3.2	7.4	A	1692	2538
B - Foxhall Rd West	0.57	11.52	1.3	4.7	B	349	523
C - A12 South	0.81	7.59	4.2	14.2	A	1698	2546
D - Newbourne Rd East	0.54	14.64	1.2	5.3	B	241	362

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1388	347	167	2696	0.515	1384	1311	0.0	1.1	2.735	A
B - Foxhall Rd West	286	72	1193	1025	0.279	285	591	0.0	0.4	4.850	A
C - A12 South	1393	348	396	2623	0.531	1388	1192	0.0	1.1	2.905	A
D - Newbourne Rd East	198	49	1391	863	0.229	197	160	0.0	0.3	5.392	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1658	414	200	2675	0.620	1655	1568	1.1	1.6	3.522	A
B - Foxhall Rd West	342	85	1427	902	0.379	341	707	0.4	0.6	6.407	A
C - A12 South	1663	416	474	2575	0.646	1660	1426	1.1	1.8	3.922	A
D - Newbourne Rd East	236	59	1664	725	0.326	236	191	0.3	0.5	7.340	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2030	508	244	2648	0.767	2024	1914	1.6	3.2	5.710	A
B - Foxhall Rd West	418	105	1742	735	0.569	416	864	0.6	1.3	11.185	B
C - A12 South	2037	509	578	2511	0.811	2028	1743	1.8	4.1	7.305	A
D - Newbourne Rd East	290	72	2034	538	0.538	287	234	0.5	1.1	14.177	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2030	508	245	2647	0.767	2030	1923	3.2	3.2	5.830	A
B - Foxhall Rd West	418	105	1750	731	0.573	418	867	1.3	1.3	11.516	B
C - A12 South	2037	509	581	2510	0.812	2037	1749	4.1	4.2	7.595	A
D - Newbourne Rd East	290	72	2041	535	0.541	289	234	1.1	1.2	14.644	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1658	414	202	2674	0.620	1664	1580	3.2	1.6	3.585	A
B - Foxhall Rd West	342	85	1438	896	0.381	344	712	1.3	0.6	6.561	A
C - A12 South	1663	416	478	2573	0.646	1673	1435	4.2	1.9	4.039	A
D - Newbourne Rd East	236	59	1674	721	0.328	239	192	1.2	0.5	7.513	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1388	347	168	2695	0.515	1391	1318	1.6	1.1	2.766	A
B - Foxhall Rd West	286	72	1200	1022	0.280	287	595	0.6	0.4	4.904	A
C - A12 South	1393	348	398	2621	0.531	1396	1199	1.9	1.1	2.945	A
D - Newbourne Rd East	198	49	1398	860	0.230	199	161	0.5	0.3	5.452	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.12	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.04	0.42	4.29	7.37			N/A	N/A
B - Foxhall Rd West	0.60	0.07	0.72	1.35	1.42			N/A	N/A
C - A12 South	1.80	0.04	0.40	4.82	8.63			N/A	N/A
D - Newbourne Rd East	0.48	0.04	0.41	1.24	1.37			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.20	0.03	0.27	3.20	5.28			N/A	N/A
B - Foxhall Rd West	1.29	0.03	0.27	1.29	1.50			N/A	N/A
C - A12 South	4.12	0.03	0.29	4.12	14.17			N/A	N/A
D - Newbourne Rd East	1.13	0.03	0.27	1.13	1.43			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.25	0.03	0.26	3.25	3.25			N/A	N/A
B - Foxhall Rd West	1.32	0.03	0.28	1.32	4.72			N/A	N/A
C - A12 South	4.21	0.03	0.27	4.21	4.21			N/A	N/A
D - Newbourne Rd East	1.16	0.03	0.30	1.27	5.33			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.65	0.09	1.18	3.45	4.66			N/A	N/A
B - Foxhall Rd West	0.62	0.07	0.69	1.35	1.43			N/A	N/A
C - A12 South	1.85	0.07	0.98	4.48	6.47			N/A	N/A
D - Newbourne Rd East	0.49	0.04	0.44	1.27	1.39			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.05	0.48	2.49	3.73			N/A	N/A
B - Foxhall Rd West	0.39	0.03	0.35	1.15	1.33			N/A	N/A
C - A12 South	1.14	0.04	0.40	2.88	4.89			N/A	N/A
D - Newbourne Rd East	0.30	0.03	0.29	0.80	1.15			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	854	100.000
B - Foxhall Rd West		ONE HOUR	✓	201	100.000
C - A12 South		ONE HOUR	✓	714	100.000
D - Newbourne Rd East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	785	30
	B - Foxhall Rd West	98	0	81	22
	C - A12 South	648	38	0	29
	D - Newbourne Rd East	15	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.15	0.6	2.6	A	784	1176
B - Foxhall Rd West	0.19	3.79	0.2	0.5	A	185	277
C - A12 South	0.30	1.94	0.4	1.5	A	655	983
D - Newbourne Rd East	0.08	4.25	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	643	161	99	2646	0.243	642	571	0.0	0.3	1.796	A
B - Foxhall Rd West	151	38	519	1301	0.116	151	73	0.0	0.1	3.129	A
C - A12 South	538	134	56	2660	0.202	537	676	0.0	0.3	1.695	A
D - Newbourne Rd East	52	13	681	1069	0.049	52	61	0.0	0.1	3.537	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	768	192	119	2633	0.292	768	683	0.3	0.4	1.929	A
B - Foxhall Rd West	181	45	621	1246	0.145	181	88	0.1	0.2	3.377	A
C - A12 South	642	161	67	2654	0.242	642	809	0.3	0.3	1.788	A
D - Newbourne Rd East	62	16	814	1007	0.062	62	72	0.1	0.1	3.807	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	940	235	145	2616	0.360	940	836	0.4	0.6	2.148	A
B - Foxhall Rd West	222	55	761	1172	0.189	221	107	0.2	0.2	3.787	A
C - A12 South	786	197	82	2645	0.297	786	991	0.3	0.4	1.936	A
D - Newbourne Rd East	76	19	997	923	0.082	76	89	0.1	0.1	4.251	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	940	235	146	2616	0.360	940	837	0.6	0.6	2.148	A
B - Foxhall Rd West	222	55	761	1172	0.189	222	108	0.2	0.2	3.788	A
C - A12 South	786	197	82	2645	0.297	786	991	0.4	0.4	1.936	A
D - Newbourne Rd East	76	19	997	922	0.082	76	89	0.1	0.1	4.253	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	768	192	119	2633	0.292	768	684	0.6	0.4	1.932	A
B - Foxhall Rd West	181	45	622	1246	0.145	181	88	0.2	0.2	3.383	A
C - A12 South	642	161	67	2654	0.242	642	810	0.4	0.3	1.789	A
D - Newbourne Rd East	62	16	815	1007	0.062	62	73	0.1	0.1	3.812	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	643	161	100	2646	0.243	643	573	0.4	0.3	1.800	A
B - Foxhall Rd West	151	38	521	1300	0.117	152	74	0.2	0.1	3.136	A
C - A12 South	538	134	56	2660	0.202	538	678	0.3	0.3	1.695	A
D - Newbourne Rd East	52	13	682	1068	0.049	52	61	0.1	0.1	3.543	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.25	0.56	0.56			N/A	N/A
B - Foxhall Rd West	0.23	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.30	1.38	2.63			N/A	N/A
B - Foxhall Rd West	0.23	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	0.42	0.03	0.33	1.34	1.47			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1509	100.000
B - Foxhall Rd West		ONE HOUR	✓	468	100.000
C - A12 South		ONE HOUR	✓	1566	100.000
D - Newbourne Rd East		ONE HOUR	✓	210	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	149	1303	57
	B - Foxhall Rd West	253	0	164	51
	C - A12 South	1425	93	0	48
	D - Newbourne Rd East	117	30	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	2	0	8	11
	C - A12 South	9	5	0	12
	D - Newbourne Rd East	12	20	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.66	4.28	2.0	3.9	A	1385	2077
B - Foxhall Rd West	0.79	25.92	3.5	17.9	D	429	644
C - A12 South	0.69	4.55	2.2	4.6	A	1437	2155
D - Newbourne Rd East	0.42	11.21	0.7	3.5	B	192	288

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1136	284	196	2561	0.444	1133	1347	0.0	0.8	2.516	A
B - Foxhall Rd West	352	88	1193	951	0.371	350	204	0.0	0.6	5.970	A
C - A12 South	1179	295	221	2578	0.457	1176	1148	0.0	0.8	2.559	A
D - Newbourne Rd East	158	39	1212	813	0.194	157	117	0.0	0.2	5.475	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	339	235	2536	0.535	1355	1612	0.8	1.1	3.044	A
B - Foxhall Rd West	421	105	1428	825	0.510	419	243	0.6	1.0	8.831	A
C - A12 South	1408	352	265	2552	0.552	1406	1374	0.8	1.2	3.139	A
D - Newbourne Rd East	188	47	1450	703	0.268	188	140	0.2	0.4	6.979	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1661	415	284	2504	0.663	1658	1968	1.1	1.9	4.239	A
B - Foxhall Rd West	515	129	1746	653	0.788	506	298	1.0	3.3	23.129	C
C - A12 South	1724	431	324	2516	0.685	1720	1678	1.2	2.1	4.507	A
D - Newbourne Rd East	231	58	1772	554	0.416	229	170	0.4	0.7	11.032	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1661	415	288	2502	0.664	1661	1976	1.9	2.0	4.284	A
B - Foxhall Rd West	515	129	1750	651	0.791	514	299	3.3	3.5	25.921	D
C - A12 South	1724	431	325	2515	0.686	1724	1684	2.1	2.2	4.552	A
D - Newbourne Rd East	231	58	1778	552	0.418	231	171	0.7	0.7	11.214	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	339	240	2532	0.536	1360	1624	2.0	1.2	3.077	A
B - Foxhall Rd West	421	105	1434	822	0.512	431	245	3.5	1.1	9.430	A
C - A12 South	1408	352	267	2551	0.552	1411	1382	2.2	1.2	3.172	A
D - Newbourne Rd East	188	47	1459	699	0.269	190	141	0.7	0.4	7.084	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1136	284	198	2559	0.444	1138	1355	1.2	0.8	2.535	A
B - Foxhall Rd West	352	88	1199	948	0.372	354	204	1.1	0.6	6.083	A
C - A12 South	1179	295	223	2577	0.457	1180	1154	1.2	0.8	2.581	A
D - Newbourne Rd East	158	39	1218	811	0.195	158	118	0.4	0.2	5.522	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.58	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	0.84	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.05	0.51	2.66	3.92			N/A	N/A
B - Foxhall Rd West	1.02	0.05	0.64	2.10	2.99			N/A	N/A
C - A12 South	1.22	0.05	0.48	2.93	4.55			N/A	N/A
D - Newbourne Rd East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.94	0.03	0.26	1.94	1.94			N/A	N/A
B - Foxhall Rd West	3.32	0.04	0.35	7.61	17.90			N/A	N/A
C - A12 South	2.14	0.03	0.26	2.14	2.14			N/A	N/A
D - Newbourne Rd East	0.70	0.03	0.26	0.70	0.70			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.03	0.26	1.96	1.96			N/A	N/A
B - Foxhall Rd West	3.54	0.03	0.32	5.14	17.70			N/A	N/A
C - A12 South	2.16	0.03	0.26	2.16	2.16			N/A	N/A
D - Newbourne Rd East	0.71	0.03	0.30	1.18	3.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.27	1.11	1.66	1.89			N/A	N/A
B - Foxhall Rd West	1.07	0.04	0.43	2.63	4.14			N/A	N/A
C - A12 South	1.24	0.19	1.15	1.85	2.26			N/A	N/A
D - Newbourne Rd East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.08	0.80	1.03	1.57			N/A	N/A
B - Foxhall Rd West	0.60	0.03	0.32	1.20	2.76			N/A	N/A
C - A12 South	0.85	0.07	0.77	1.40	1.83			N/A	N/A
D - Newbourne Rd East	0.24	0.03	0.25	0.45	0.48			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	98.95	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1712	100.000
B - Foxhall Rd West		ONE HOUR	✓	539	100.000
C - A12 South		ONE HOUR	✓	2112	100.000
D - Newbourne Rd East		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	160	1430	122
	B - Foxhall Rd West	288	0	194	58
	C - A12 South	1840	167	1	105
	D - Newbourne Rd East	187	74	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	9	3	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.01	3.1	7.2	A	1571	2356
B - Foxhall Rd West	1.69	762.96	122.1	162.5	F	495	742
C - A12 South	0.95	24.49	14.9	81.7	C	1938	2907
D - Newbourne Rd East	0.72	24.59	2.5	12.5	C	315	473

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1289	322	267	2491	0.517	1284	1733	0.0	1.1	2.973	A
B - Foxhall Rd West	406	102	1599	752	0.540	401	300	0.0	1.1	10.154	B
C - A12 South	1590	398	315	2539	0.626	1584	1280	0.0	1.7	3.743	A
D - Newbourne Rd East	259	65	1338	788	0.328	257	213	0.0	0.5	6.750	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	385	315	2462	0.625	1536	2069	1.1	1.6	3.880	A
B - Foxhall Rd West	485	121	1911	583	0.832	473	359	1.1	4.1	30.127	D
C - A12 South	1899	475	377	2502	0.759	1893	1528	1.7	3.1	5.862	A
D - Newbourne Rd East	309	77	1598	661	0.467	307	254	0.5	0.9	10.136	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1885	471	285	2480	0.760	1879	2389	1.6	3.1	5.935	A
B - Foxhall Rd West	594	148	2309	368	1.615	365	436	4.1	61.2	346.382	F
C - A12 South	2326	581	458	2453	0.948	2287	1791	3.1	12.8	18.441	C
D - Newbourne Rd East	378	95	1877	523	0.723	372	287	0.9	2.4	22.958	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1885	471	280	2483	0.759	1885	2411	3.1	3.1	6.011	A
B - Foxhall Rd West	594	148	2341	350	1.694	350	440	61.2	122.1	762.959	F
C - A12 South	2326	581	463	2450	0.949	2318	1792	12.8	14.9	24.493	C
D - Newbourne Rd East	378	95	1877	523	0.723	378	287	2.4	2.5	24.586	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	385	354	2438	0.631	1544	2159	3.1	1.7	4.050	A
B - Foxhall Rd West	485	121	1963	554	0.875	550	365	122.1	105.9	669.937	F
C - A12 South	1899	475	383	2498	0.760	1945	1564	14.9	3.3	7.045	A
D - Newbourne Rd East	309	77	1632	644	0.480	315	266	2.5	0.9	11.132	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1289	322	424	2397	0.538	1291	1926	1.7	1.2	3.264	A
B - Foxhall Rd West	406	102	1612	744	0.546	737	302	105.9	23.1	319.287	F
C - A12 South	1590	398	318	2537	0.627	1597	1406	3.3	1.7	3.853	A
D - Newbourne Rd East	259	65	1464	728	0.355	260	250	0.9	0.6	7.724	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.15	0.03	0.31	1.82	5.72			N/A	N/A
C - A12 South	1.66	0.40	1.48	2.58	2.99			N/A	N/A
D - Newbourne Rd East	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.65	0.04	0.44	4.38	7.25			N/A	N/A
B - Foxhall Rd West	4.12	0.05	0.45	11.63	20.77			N/A	N/A
C - A12 South	3.07	0.04	0.41	8.40	15.60			N/A	N/A
D - Newbourne Rd East	0.86	0.07	0.77	1.45	1.86			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.08	0.03	0.27	3.08	5.21			N/A	N/A
B - Foxhall Rd West	61.24	35.52	59.16	83.51	91.45			N/A	N/A
C - A12 South	12.83	0.06	1.04	37.73	63.24			N/A	N/A
D - Newbourne Rd East	2.39	0.03	0.32	4.25	12.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.11	0.03	0.26	3.11	3.11			N/A	N/A
B - Foxhall Rd West	122.10	85.88	120.13	152.39	162.49			N/A	N/A
C - A12 South	14.86	0.04	0.44	39.80	81.72			N/A	N/A
D - Newbourne Rd East	2.49	0.03	0.30	2.85	11.70			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.09	1.22	3.65	4.90			N/A	N/A
B - Foxhall Rd West	105.86	69.05	103.54	137.25	147.99			N/A	N/A
C - A12 South	3.26	0.04	0.43	9.09	16.33			N/A	N/A
D - Newbourne Rd East	0.94	0.05	0.48	2.00	2.99			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.05	0.58	2.70	3.93			N/A	N/A
B - Foxhall Rd West	23.07	1.85	17.33	48.56	61.31			N/A	N/A
C - A12 South	1.70	0.03	0.31	2.69	8.59			N/A	N/A
D - Newbourne Rd East	0.56	0.03	0.34	1.19	2.17			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	8.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1733	100.000
B - Foxhall Rd West		ONE HOUR	✓	411	100.000
C - A12 South		ONE HOUR	✓	1773	100.000
D - Newbourne Rd East		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	273	1322	136
	B - Foxhall Rd West	216	0	147	48
	C - A12 South	1496	218	1	59
	D - Newbourne Rd East	110	105	93	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	5
	B - Foxhall Rd West	5	0	6	6
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	4	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.74	3.0	6.7	A	1590	2386
B - Foxhall Rd West	0.71	19.33	2.4	10.5	C	377	565
C - A12 South	0.79	6.89	3.7	9.7	A	1627	2441
D - Newbourne Rd East	0.63	17.96	1.7	7.3	C	284	425

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1305	326	191	2591	0.504	1301	1368	0.0	1.0	2.783	A
B - Foxhall Rd West	309	77	1252	939	0.329	307	447	0.0	0.5	5.684	A
C - A12 South	1335	334	368	2578	0.518	1331	1172	0.0	1.1	2.876	A
D - Newbourne Rd East	233	58	1309	848	0.274	231	183	0.0	0.4	5.824	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1558	390	229	2567	0.607	1556	1637	1.0	1.5	3.551	A
B - Foxhall Rd West	369	92	1498	812	0.455	368	534	0.5	0.8	8.081	A
C - A12 South	1594	399	440	2535	0.629	1592	1402	1.1	1.7	3.810	A
D - Newbourne Rd East	278	69	1566	718	0.387	277	219	0.4	0.6	8.135	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1908	477	279	2537	0.752	1902	1997	1.5	3.0	5.626	A
B - Foxhall Rd West	452	113	1829	641	0.706	447	653	0.8	2.2	18.008	C
C - A12 South	1953	488	537	2476	0.789	1945	1713	1.7	3.6	6.683	A
D - Newbourne Rd East	340	85	1914	543	0.626	336	268	0.6	1.6	17.079	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1908	477	281	2535	0.753	1908	2008	3.0	3.0	5.738	A
B - Foxhall Rd West	452	113	1837	637	0.710	452	656	2.2	2.4	19.333	C
C - A12 South	1953	488	540	2474	0.789	1952	1720	3.6	3.7	6.891	A
D - Newbourne Rd East	340	85	1921	540	0.630	340	269	1.6	1.7	17.964	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1558	390	233	2565	0.607	1564	1651	3.0	1.6	3.615	A
B - Foxhall Rd West	369	92	1509	807	0.458	375	539	2.4	0.9	8.460	A
C - A12 South	1594	399	445	2532	0.630	1602	1412	3.7	1.7	3.906	A
D - Newbourne Rd East	278	69	1576	713	0.389	282	221	1.7	0.6	8.417	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1305	326	193	2590	0.504	1307	1377	1.6	1.0	2.810	A
B - Foxhall Rd West	309	77	1259	935	0.331	311	449	0.9	0.5	5.776	A
C - A12 South	1335	334	371	2577	0.518	1338	1179	1.7	1.1	2.910	A
D - Newbourne Rd East	233	58	1316	844	0.276	234	184	0.6	0.4	5.905	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C - A12 South	1.07	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.43	3.99	6.71			N/A	N/A
B - Foxhall Rd West	0.82	0.06	0.72	1.38	1.82			N/A	N/A
C - A12 South	1.68	0.04	0.41	4.48	7.77			N/A	N/A
D - Newbourne Rd East	0.62	0.06	0.69	1.35	1.43			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.96	0.03	0.27	2.96	4.05			N/A	N/A
B - Foxhall Rd West	2.24	0.03	0.30	2.55	10.50			N/A	N/A
C - A12 South	3.61	0.03	0.28	3.61	9.66			N/A	N/A
D - Newbourne Rd East	1.59	0.03	0.28	1.59	5.44			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	2.35	0.03	0.29	2.35	10.07			N/A	N/A
C - A12 South	3.68	0.03	0.27	3.68	3.68			N/A	N/A
D - Newbourne Rd East	1.65	0.03	0.29	1.65	7.30			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.10	1.18	3.07	4.12			N/A	N/A
B - Foxhall Rd West	0.86	0.05	0.52	1.74	2.48			N/A	N/A
C - A12 South	1.72	0.07	1.07	3.88	5.48			N/A	N/A
D - Newbourne Rd East	0.65	0.05	0.54	1.30	1.30			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.05	0.50	2.26	3.34			N/A	N/A
B - Foxhall Rd West	0.50	0.03	0.34	1.47	1.80			N/A	N/A
C - A12 South	1.08	0.04	0.43	2.68	4.27			N/A	N/A
D - Newbourne Rd East	0.38	0.03	0.34	1.21	1.43			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1842	100.000
B - Foxhall Rd West		ONE HOUR	✓	391	100.000
C - A12 South		ONE HOUR	✓	1857	100.000
D - Newbourne Rd East		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	302	1410	129
	B - Foxhall Rd West	198	0	137	56
	C - A12 South	1493	332	1	32
	D - Newbourne Rd East	70	125	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	1	0	0	4
	C - A12 South	4	2	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.01	3.3	7.5	A	1691	2536
B - Foxhall Rd West	0.60	12.43	1.5	5.2	B	359	538
C - A12 South	0.81	7.67	4.3	14.6	A	1704	2556
D - Newbourne Rd East	0.57	15.87	1.3	5.9	C	253	379

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1387	347	169	2676	0.518	1383	1321	0.0	1.1	2.775	A
B - Foxhall Rd West	294	74	1198	1018	0.289	293	569	0.0	0.4	4.954	A
C - A12 South	1398	349	374	2619	0.534	1393	1222	0.0	1.1	2.927	A
D - Newbourne Rd East	207	52	1390	860	0.241	206	162	0.0	0.3	5.491	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1656	414	202	2655	0.624	1654	1581	1.1	1.6	3.589	A
B - Foxhall Rd West	351	88	1432	892	0.394	350	681	0.4	0.6	6.628	A
C - A12 South	1669	417	447	2574	0.648	1666	1462	1.1	1.8	3.954	A
D - Newbourne Rd East	247	62	1662	721	0.343	247	194	0.3	0.5	7.572	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2029	507	247	2628	0.772	2022	1929	1.6	3.3	5.878	A
B - Foxhall Rd West	430	108	1749	724	0.594	427	831	0.6	1.4	12.010	B
C - A12 South	2044	511	545	2514	0.813	2035	1786	1.8	4.2	7.369	A
D - Newbourne Rd East	303	76	2032	533	0.569	300	237	0.5	1.3	15.261	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2029	507	248	2627	0.772	2028	1939	3.3	3.3	6.010	A
B - Foxhall Rd West	430	108	1757	719	0.598	430	835	1.4	1.5	12.425	B
C - A12 South	2044	511	548	2512	0.814	2044	1793	4.2	4.3	7.668	A
D - Newbourne Rd East	303	76	2039	530	0.572	303	238	1.3	1.3	15.866	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1656	414	204	2654	0.624	1663	1594	3.3	1.7	3.656	A
B - Foxhall Rd West	351	88	1444	887	0.396	354	686	1.5	0.7	6.804	A
C - A12 South	1669	417	451	2572	0.649	1679	1472	4.3	1.9	4.075	A
D - Newbourne Rd East	247	62	1672	716	0.345	251	195	1.3	0.5	7.779	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1387	347	170	2675	0.519	1389	1329	1.7	1.1	2.805	A
B - Foxhall Rd West	294	74	1204	1014	0.290	295	573	0.7	0.4	5.014	A
C - A12 South	1398	349	376	2617	0.534	1401	1229	1.9	1.2	2.967	A
D - Newbourne Rd East	207	52	1397	857	0.242	208	163	0.5	0.3	5.556	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A12 South	1.14	0.55	1.02	1.44	1.49			N/A	N/A
D - Newbourne Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.04	0.41	4.38	7.54			N/A	N/A
B - Foxhall Rd West	0.64	0.07	0.73	1.36	1.44			N/A	N/A
C - A12 South	1.82	0.04	0.40	4.87	8.74			N/A	N/A
D - Newbourne Rd East	0.52	0.05	0.51	1.30	1.40			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.29	0.03	0.28	3.29	6.09			N/A	N/A
B - Foxhall Rd West	1.42	0.03	0.27	1.42	2.14			N/A	N/A
C - A12 South	4.17	0.03	0.29	4.17	14.63			N/A	N/A
D - Newbourne Rd East	1.27	0.03	0.27	1.27	2.18			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.34	0.03	0.26	3.34	3.34			N/A	N/A
B - Foxhall Rd West	1.46	0.03	0.28	1.46	5.15			N/A	N/A
C - A12 South	4.27	0.03	0.27	4.27	4.27			N/A	N/A
D - Newbourne Rd East	1.31	0.03	0.29	1.35	5.94			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.09	1.16	3.59	4.86			N/A	N/A
B - Foxhall Rd West	0.66	0.06	0.69	1.38	1.47			N/A	N/A
C - A12 South	1.87	0.06	0.98	4.56	6.61			N/A	N/A
D - Newbourne Rd East	0.53	0.05	0.48	1.30	1.41			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.05	0.47	2.57	3.88			N/A	N/A
B - Foxhall Rd West	0.41	0.04	0.36	1.20	1.38			N/A	N/A
C - A12 South	1.15	0.04	0.40	2.91	4.97			N/A	N/A
D - Newbourne Rd East	0.32	0.03	0.31	1.00	1.26			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	866	100.000
B - Foxhall Rd West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	788	100.000
D - Newbourne Rd East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	797	30
	B - Foxhall Rd West	99	0	81	22
	C - A12 South	722	38	0	29
	D - Newbourne Rd East	16	20	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	12	5	0	5
	D - Newbourne Rd East	0	15	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.16	0.6	2.7	A	795	1192
B - Foxhall Rd West	0.20	4.02	0.2	0.9	A	186	278
C - A12 South	0.33	2.08	0.5	2.2	A	723	1085
D - Newbourne Rd East	0.08	4.28	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	99	2648	0.246	651	628	0.0	0.3	1.802	A
B - Foxhall Rd West	152	38	576	1265	0.120	152	73	0.0	0.1	3.231	A
C - A12 South	593	148	57	2611	0.227	592	685	0.0	0.3	1.783	A
D - Newbourne Rd East	52	13	690	1066	0.049	52	61	0.0	0.1	3.548	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	779	195	119	2635	0.295	778	751	0.3	0.4	1.938	A
B - Foxhall Rd West	182	45	688	1204	0.151	182	88	0.1	0.2	3.522	A
C - A12 South	709	177	68	2605	0.272	708	819	0.3	0.4	1.897	A
D - Newbourne Rd East	62	16	825	1003	0.062	62	72	0.1	0.1	3.823	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	954	238	145	2618	0.364	953	920	0.4	0.6	2.162	A
B - Foxhall Rd West	223	56	843	1119	0.199	222	107	0.2	0.2	4.012	A
C - A12 South	868	217	83	2596	0.334	867	1003	0.4	0.5	2.082	A
D - Newbourne Rd East	76	19	1010	918	0.083	76	89	0.1	0.1	4.277	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	954	238	146	2618	0.364	954	921	0.6	0.6	2.162	A
B - Foxhall Rd West	223	56	844	1119	0.199	223	108	0.2	0.2	4.015	A
C - A12 South	868	217	83	2596	0.334	868	1003	0.5	0.5	2.082	A
D - Newbourne Rd East	76	19	1011	917	0.083	76	89	0.1	0.1	4.279	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	779	195	119	2635	0.295	779	752	0.6	0.4	1.940	A
B - Foxhall Rd West	182	45	689	1203	0.151	182	88	0.2	0.2	3.528	A
C - A12 South	709	177	68	2605	0.272	709	820	0.5	0.4	1.898	A
D - Newbourne Rd East	62	16	826	1003	0.062	62	73	0.1	0.1	3.829	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	100	2648	0.246	652	630	0.4	0.3	1.803	A
B - Foxhall Rd West	152	38	577	1264	0.120	152	74	0.2	0.1	3.237	A
C - A12 South	593	148	57	2611	0.227	594	686	0.4	0.3	1.786	A
D - Newbourne Rd East	52	13	691	1065	0.049	52	61	0.1	0.1	3.555	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.25	0.57	0.57			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.50	0.03	0.25	0.50	0.50			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.36	2.69			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.27	0.49	0.89			N/A	N/A
C - A12 South	0.50	0.03	0.31	1.44	2.20			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	14.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1552	100.000
B - Foxhall Rd West		ONE HOUR	✓	493	100.000
C - A12 South		ONE HOUR	✓	1666	100.000
D - Newbourne Rd East		ONE HOUR	✓	211	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	140	1355	57
	B - Foxhall Rd West	277	0	164	52
	C - A12 South	1526	93	0	47
	D - Newbourne Rd East	118	30	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	12
	B - Foxhall Rd West	1	0	8	11
	C - A12 South	12	5	0	12
	D - Newbourne Rd East	12	20	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	4.64	2.2	4.6	A	1424	2136
B - Foxhall Rd West	0.96	79.99	11.6	48.4	F	452	679
C - A12 South	0.75	5.87	3.0	6.5	A	1529	2293
D - Newbourne Rd East	0.44	12.26	0.8	3.8	B	193	290

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	196	2540	0.460	1165	1441	0.0	0.8	2.611	A
B - Foxhall Rd West	371	93	1269	892	0.416	368	197	0.0	0.7	6.834	A
C - A12 South	1254	314	215	2507	0.500	1250	1187	0.0	1.0	2.855	A
D - Newbourne Rd East	159	40	1244	795	0.199	158	117	0.0	0.2	5.641	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1395	349	234	2516	0.555	1394	1724	0.8	1.2	3.204	A
B - Foxhall Rd West	443	111	1518	754	0.588	440	235	0.7	1.4	11.381	B
C - A12 South	1498	374	258	2481	0.604	1496	1420	1.0	1.5	3.644	A
D - Newbourne Rd East	189	47	1489	681	0.278	189	140	0.2	0.4	7.306	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1709	427	276	2490	0.686	1705	2093	1.2	2.2	4.575	A
B - Foxhall Rd West	543	136	1856	567	0.957	513	288	1.4	8.7	51.426	F
C - A12 South	1834	459	315	2447	0.749	1829	1728	1.5	2.9	5.765	A
D - Newbourne Rd East	232	58	1813	530	0.438	230	168	0.4	0.8	11.963	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1709	427	284	2485	0.688	1709	2109	2.2	2.2	4.638	A
B - Foxhall Rd West	543	136	1862	564	0.963	531	289	8.7	11.6	79.991	F
C - A12 South	1834	459	316	2447	0.750	1834	1738	2.9	3.0	5.874	A
D - Newbourne Rd East	232	58	1822	525	0.441	232	170	0.8	0.8	12.257	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1395	349	254	2504	0.557	1399	1756	2.2	1.3	3.270	A
B - Foxhall Rd West	443	111	1526	750	0.591	484	237	11.6	1.5	15.541	C
C - A12 South	1498	374	260	2480	0.604	1503	1439	3.0	1.5	3.708	A
D - Newbourne Rd East	189	47	1508	672	0.282	191	144	0.8	0.4	7.508	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	199	2539	0.460	1170	1451	1.3	0.9	2.633	A
B - Foxhall Rd West	371	93	1275	889	0.418	374	198	1.5	0.7	7.036	A
C - A12 South	1254	314	217	2506	0.501	1256	1194	1.5	1.0	2.887	A
D - Newbourne Rd East	159	40	1251	792	0.200	159	118	0.4	0.3	5.697	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.70	0.22	0.94	1.39	1.44			N/A	N/A
C - A12 South	1.00	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.05	0.48	2.96	4.60			N/A	N/A
B - Foxhall Rd West	1.38	0.04	0.45	3.55	5.68			N/A	N/A
C - A12 South	1.51	0.04	0.43	3.93	6.53			N/A	N/A
D - Newbourne Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.03	0.26	2.15	2.15			N/A	N/A
B - Foxhall Rd West	8.73	0.14	3.72	22.77	32.20			N/A	N/A
C - A12 South	2.92	0.03	0.27	2.92	4.15			N/A	N/A
D - Newbourne Rd East	0.76	0.03	0.26	0.76	0.76			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.03	0.26	2.18	2.18			N/A	N/A
B - Foxhall Rd West	11.58	0.10	3.41	32.47	48.44			N/A	N/A
C - A12 South	2.96	0.03	0.26	2.96	2.96			N/A	N/A
D - Newbourne Rd East	0.78	0.03	0.30	1.23	3.79			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.19	1.17	1.88	2.38			N/A	N/A
B - Foxhall Rd West	1.50	0.03	0.34	3.54	7.70			N/A	N/A
C - A12 South	1.54	0.09	1.17	3.00	4.04			N/A	N/A
D - Newbourne Rd East	0.40	0.03	0.28	0.50	0.97			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.07	0.77	1.45	1.86			N/A	N/A
B - Foxhall Rd West	0.73	0.03	0.28	0.73	2.40			N/A	N/A
C - A12 South	1.01	0.05	0.50	2.21	3.28			N/A	N/A
D - Newbourne Rd East	0.25	0.03	0.25	0.45	0.48			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	132.74	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1692	100.000
B - Foxhall Rd West		ONE HOUR	✓	544	100.000
C - A12 South		ONE HOUR	✓	2140	100.000
D - Newbourne Rd East		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	136	1435	121
	B - Foxhall Rd West	291	0	196	58
	C - A12 South	1869	167	1	104
	D - Newbourne Rd East	187	74	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	12
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	11	8	0	7
	D - Newbourne Rd East	9	3	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.86	3.0	7.1	A	1552	2329
B - Foxhall Rd West	1.95	1020.06	146.6	194.5	F	499	749
C - A12 South	0.98	38.53	24.4	110.3	E	1964	2946
D - Newbourne Rd East	0.71	23.03	2.3	11.5	C	315	473

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1274	318	267	2471	0.515	1269	1757	0.0	1.1	2.986	A
B - Foxhall Rd West	410	102	1619	718	0.571	405	282	0.0	1.3	11.306	B
C - A12 South	1611	403	297	2484	0.649	1604	1285	0.0	1.8	4.057	A
D - Newbourne Rd East	259	65	1325	790	0.328	257	212	0.0	0.5	6.731	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1521	380	313	2444	0.622	1519	2093	1.1	1.6	3.882	A
B - Foxhall Rd West	489	122	1935	543	0.902	470	337	1.3	6.1	42.019	E
C - A12 South	1924	481	355	2450	0.785	1917	1532	1.8	3.5	6.669	A
D - Newbourne Rd East	309	77	1580	664	0.465	308	252	0.5	0.9	10.057	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1863	466	266	2472	0.754	1857	2382	1.6	3.0	5.808	A
B - Foxhall Rd West	599	150	2320	329	1.819	328	408	6.1	73.8	470.770	F
C - A12 South	2357	589	432	2405	0.980	2296	1784	3.5	18.8	24.832	C
D - Newbourne Rd East	378	95	1843	533	0.711	373	279	0.9	2.3	21.805	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1863	466	258	2476	0.752	1863	2408	3.0	3.0	5.864	A
B - Foxhall Rd West	599	150	2358	308	1.946	308	412	73.8	146.6	977.716	F
C - A12 South	2357	589	437	2402	0.981	2334	1783	18.8	24.4	38.532	E
D - Newbourne Rd East	378	95	1841	534	0.709	378	280	2.3	2.3	23.033	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1521	380	328	2434	0.625	1526	2187	3.0	1.7	3.987	A
B - Foxhall Rd West	489	122	2021	495	0.989	494	346	146.6	145.6	1020.058	F
C - A12 South	1924	481	361	2446	0.786	2006	1549	24.4	3.8	9.675	A
D - Newbourne Rd East	309	77	1595	656	0.471	315	259	2.3	0.9	10.702	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1274	318	407	2387	0.534	1276	1932	1.7	1.2	3.246	A
B - Foxhall Rd West	410	102	1635	709	0.578	705	284	145.6	71.9	557.744	F
C - A12 South	1611	403	300	2483	0.649	1619	1399	3.8	1.9	4.206	A
D - Newbourne Rd East	259	65	1438	736	0.352	260	245	0.9	0.5	7.595	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.29	0.03	0.28	1.29	3.17			N/A	N/A
C - A12 South	1.82	0.26	1.06	3.00	3.83			N/A	N/A
D - Newbourne Rd East	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.63	0.04	0.44	4.32	7.08			N/A	N/A
B - Foxhall Rd West	6.06	0.05	0.58	17.43	30.14			N/A	N/A
C - A12 South	3.54	0.04	0.43	9.86	17.90			N/A	N/A
D - Newbourne Rd East	0.85	0.07	0.79	1.39	1.81			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.98	0.03	0.27	2.98	4.49			N/A	N/A
B - Foxhall Rd West	73.81	43.80	71.52	99.81	108.98			N/A	N/A
C - A12 South	18.79	0.15	6.95	51.71	75.23			N/A	N/A
D - Newbourne Rd East	2.27	0.03	0.31	3.58	11.52			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	146.64	146.05	146.50	146.90	146.95			N/A	N/A
C - A12 South	24.36	0.10	5.28	70.96	110.32			N/A	N/A
D - Newbourne Rd East	2.34	0.03	0.30	2.34	10.62			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.09	1.21	3.51	4.72			N/A	N/A
B - Foxhall Rd West	145.56	>199	>199	>199	>199			N/A	N/A
C - A12 South	3.83	0.04	0.42	10.57	19.66			N/A	N/A
D - Newbourne Rd East	0.91	0.05	0.48	1.92	2.86			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.05	0.61	2.62	3.80			N/A	N/A
B - Foxhall Rd West	71.86	36.52	68.64	103.81	115.58			N/A	N/A
C - A12 South	1.87	0.03	0.30	2.21	8.83			N/A	N/A
D - Newbourne Rd East	0.55	0.03	0.34	1.15	2.03			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	9.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1702	100.000
B - Foxhall Rd West		ONE HOUR	✓	411	100.000
C - A12 South		ONE HOUR	✓	1783	100.000
D - Newbourne Rd East		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	252	1314	134
	B - Foxhall Rd West	217	0	147	47
	C - A12 South	1506	218	1	59
	D - Newbourne Rd East	111	105	93	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	5
	B - Foxhall Rd West	5	0	6	6
	C - A12 South	8	5	0	1
	D - Newbourne Rd East	4	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.83	3.0	6.7	A	1562	2343
B - Foxhall Rd West	0.74	22.19	2.7	13.0	C	377	565
C - A12 South	0.80	7.49	4.0	12.8	A	1637	2455
D - Newbourne Rd East	0.63	18.13	1.7	7.4	C	284	427

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1281	320	191	2545	0.503	1277	1377	0.0	1.0	2.829	A
B - Foxhall Rd West	309	77	1260	922	0.335	307	431	0.0	0.5	5.836	A
C - A12 South	1343	336	353	2541	0.528	1338	1166	0.0	1.1	2.981	A
D - Newbourne Rd East	233	58	1287	847	0.275	232	181	0.0	0.4	5.834	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1530	383	228	2523	0.607	1528	1647	1.0	1.5	3.612	A
B - Foxhall Rd West	369	92	1508	792	0.466	368	516	0.5	0.9	8.455	A
C - A12 South	1603	401	422	2500	0.641	1601	1395	1.1	1.8	3.992	A
D - Newbourne Rd East	279	70	1540	718	0.388	278	216	0.4	0.6	8.160	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1874	469	277	2493	0.752	1868	2009	1.5	3.0	5.713	A
B - Foxhall Rd West	452	113	1841	617	0.733	446	629	0.9	2.5	20.248	C
C - A12 South	1964	491	515	2445	0.803	1955	1704	1.8	3.9	7.225	A
D - Newbourne Rd East	341	85	1881	543	0.629	337	264	0.6	1.6	17.206	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1874	469	280	2491	0.752	1874	2021	3.0	3.0	5.831	A
B - Foxhall Rd West	452	113	1849	613	0.738	452	632	2.5	2.7	22.188	C
C - A12 South	1964	491	518	2443	0.804	1963	1711	3.9	4.0	7.494	A
D - Newbourne Rd East	341	85	1889	539	0.633	341	266	1.6	1.7	18.128	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1530	383	233	2520	0.607	1536	1663	3.0	1.6	3.681	A
B - Foxhall Rd West	369	92	1519	786	0.470	376	520	2.7	0.9	8.936	A
C - A12 South	1603	401	427	2497	0.642	1612	1406	4.0	1.8	4.106	A
D - Newbourne Rd East	279	70	1550	713	0.391	283	218	1.7	0.7	8.453	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1281	320	193	2544	0.504	1284	1386	1.6	1.0	2.862	A
B - Foxhall Rd West	309	77	1268	918	0.337	311	434	0.9	0.5	5.939	A
C - A12 South	1343	336	356	2540	0.529	1345	1173	1.8	1.1	3.020	A
D - Newbourne Rd East	233	58	1294	844	0.277	234	182	0.7	0.4	5.919	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C - A12 South	1.11	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.43	3.98	6.67			N/A	N/A
B - Foxhall Rd West	0.86	0.06	0.70	1.56	1.97			N/A	N/A
C - A12 South	1.77	0.04	0.41	4.72	8.28			N/A	N/A
D - Newbourne Rd East	0.63	0.06	0.69	1.35	1.44			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.95	0.03	0.27	2.95	4.20			N/A	N/A
B - Foxhall Rd West	2.53	0.03	0.32	4.09	12.96			N/A	N/A
C - A12 South	3.92	0.03	0.29	3.92	12.76			N/A	N/A
D - Newbourne Rd East	1.61	0.03	0.28	1.61	5.61			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	2.68	0.03	0.30	2.89	12.43			N/A	N/A
C - A12 South	4.01	0.03	0.27	4.01	4.01			N/A	N/A
D - Newbourne Rd East	1.67	0.03	0.29	1.67	7.41			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.09	1.17	3.08	4.14			N/A	N/A
B - Foxhall Rd West	0.90	0.05	0.47	1.92	2.87			N/A	N/A
C - A12 South	1.82	0.07	1.01	4.32	6.19			N/A	N/A
D - Newbourne Rd East	0.65	0.05	0.54	1.34	1.34			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.05	0.50	2.26	3.36			N/A	N/A
B - Foxhall Rd West	0.51	0.03	0.33	1.00	1.99			N/A	N/A
C - A12 South	1.13	0.04	0.41	2.84	4.75			N/A	N/A
D - Newbourne Rd East	0.39	0.03	0.34	1.22	1.44			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1790	100.000
B - Foxhall Rd West		ONE HOUR	✓	396	100.000
C - A12 South		ONE HOUR	✓	1871	100.000
D - Newbourne Rd East		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	266	1395	128
	B - Foxhall Rd West	203	0	137	56
	C - A12 South	1505	335	1	31
	D - Newbourne Rd East	70	125	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	6	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	5	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	5.93	3.2	7.2	A	1643	2464
B - Foxhall Rd West	0.61	13.17	1.6	5.6	B	363	545
C - A12 South	0.82	7.70	4.3	15.0	A	1717	2575
D - Newbourne Rd East	0.56	15.25	1.3	5.7	C	253	379

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	168	2625	0.513	1344	1334	0.0	1.0	2.800	A
B - Foxhall Rd West	298	74	1206	1010	0.295	296	544	0.0	0.4	5.032	A
C - A12 South	1408	352	346	2624	0.537	1404	1211	0.0	1.2	2.940	A
D - Newbourne Rd East	207	52	1351	867	0.239	206	161	0.0	0.3	5.439	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	402	201	2605	0.618	1607	1596	1.0	1.6	3.600	A
B - Foxhall Rd West	356	89	1442	884	0.403	355	651	0.4	0.7	6.796	A
C - A12 South	1682	420	415	2583	0.651	1679	1449	1.2	1.8	3.972	A
D - Newbourne Rd East	247	62	1617	729	0.340	247	192	0.3	0.5	7.454	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1971	493	245	2579	0.765	1965	1948	1.6	3.2	5.810	A
B - Foxhall Rd West	436	109	1761	713	0.611	432	795	0.7	1.5	12.681	B
C - A12 South	2060	515	506	2527	0.815	2050	1770	1.8	4.2	7.403	A
D - Newbourne Rd East	303	76	1976	542	0.559	300	235	0.5	1.2	14.710	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1971	493	247	2578	0.765	1971	1958	3.2	3.2	5.933	A
B - Foxhall Rd West	436	109	1769	708	0.615	436	799	1.5	1.6	13.168	B
C - A12 South	2060	515	509	2525	0.816	2059	1777	4.2	4.3	7.705	A
D - Newbourne Rd East	303	76	1983	539	0.563	303	236	1.2	1.3	15.251	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	402	204	2604	0.618	1616	1609	3.2	1.6	3.668	A
B - Foxhall Rd West	356	89	1454	878	0.405	359	656	1.6	0.7	6.990	A
C - A12 South	1682	420	419	2580	0.652	1691	1458	4.3	1.9	4.094	A
D - Newbourne Rd East	247	62	1626	724	0.342	250	194	1.3	0.5	7.649	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	170	2624	0.514	1350	1342	1.6	1.1	2.832	A
B - Foxhall Rd West	298	74	1213	1007	0.296	299	548	0.7	0.4	5.096	A
C - A12 South	1408	352	349	2622	0.537	1411	1217	1.9	1.2	2.978	A
D - Newbourne Rd East	207	52	1358	863	0.240	208	162	0.5	0.3	5.504	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C - A12 South	1.15	0.55	1.03	1.15	1.15			N/A	N/A
D - Newbourne Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.04	0.42	4.25	7.22			N/A	N/A
B - Foxhall Rd West	0.67	0.07	0.73	1.37	1.45			N/A	N/A
C - A12 South	1.84	0.04	0.40	4.93	8.86			N/A	N/A
D - Newbourne Rd East	0.51	0.05	0.49	1.29	1.40			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.16	0.03	0.27	3.16	5.32			N/A	N/A
B - Foxhall Rd West	1.52	0.03	0.27	1.52	3.11			N/A	N/A
C - A12 South	4.22	0.03	0.29	4.22	15.01			N/A	N/A
D - Newbourne Rd East	1.22	0.03	0.27	1.22	1.72			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.21	0.03	0.26	3.21	3.21			N/A	N/A
B - Foxhall Rd West	1.56	0.03	0.28	1.56	5.59			N/A	N/A
C - A12 South	4.32	0.03	0.27	4.32	4.32			N/A	N/A
D - Newbourne Rd East	1.26	0.03	0.29	1.27	5.70			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.09	1.17	3.42	4.63			N/A	N/A
B - Foxhall Rd West	0.69	0.06	0.69	1.10	1.10			N/A	N/A
C - A12 South	1.90	0.06	0.97	4.63	6.73			N/A	N/A
D - Newbourne Rd East	0.53	0.05	0.48	1.30	1.40			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.05	0.48	2.47	3.70			N/A	N/A
B - Foxhall Rd West	0.42	0.04	0.36	1.24	1.41			N/A	N/A
C - A12 South	1.17	0.04	0.40	2.95	5.08			N/A	N/A
D - Newbourne Rd East	0.32	0.03	0.31	0.97	1.24			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	870	100.000
B - Foxhall Rd West		ONE HOUR	✓	205	100.000
C - A12 South		ONE HOUR	✓	734	100.000
D - Newbourne Rd East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	800	31
	B - Foxhall Rd West	101	0	81	23
	C - A12 South	666	38	0	31
	D - Newbourne Rd East	16	21	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.17	0.6	2.7	A	799	1198
B - Foxhall Rd West	0.19	3.85	0.2	0.7	A	188	282
C - A12 South	0.31	1.96	0.4	1.6	A	674	1011
D - Newbourne Rd East	0.09	4.29	0.1	0.5	A	65	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	655	164	101	2645	0.248	654	588	0.0	0.3	1.808	A
B - Foxhall Rd West	154	39	535	1294	0.119	154	74	0.0	0.1	3.156	A
C - A12 South	553	138	58	2663	0.208	552	687	0.0	0.3	1.705	A
D - Newbourne Rd East	54	13	692	1067	0.050	53	64	0.0	0.1	3.551	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	782	196	121	2632	0.297	782	703	0.3	0.4	1.946	A
B - Foxhall Rd West	184	46	640	1238	0.149	184	89	0.1	0.2	3.417	A
C - A12 South	660	165	69	2656	0.249	660	822	0.3	0.3	1.802	A
D - Newbourne Rd East	64	16	827	1004	0.064	64	76	0.1	0.1	3.828	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	958	240	149	2614	0.366	957	861	0.4	0.6	2.173	A
B - Foxhall Rd West	226	56	784	1161	0.194	225	109	0.2	0.2	3.848	A
C - A12 South	808	202	84	2647	0.305	808	1007	0.3	0.4	1.957	A
D - Newbourne Rd East	78	20	1013	918	0.085	78	93	0.1	0.1	4.288	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	958	240	149	2614	0.367	958	861	0.6	0.6	2.173	A
B - Foxhall Rd West	226	56	784	1160	0.194	226	109	0.2	0.2	3.850	A
C - A12 South	808	202	84	2647	0.305	808	1007	0.4	0.4	1.957	A
D - Newbourne Rd East	78	20	1014	917	0.085	78	93	0.1	0.1	4.290	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	782	196	122	2632	0.297	783	704	0.6	0.4	1.949	A
B - Foxhall Rd West	184	46	641	1237	0.149	185	89	0.2	0.2	3.422	A
C - A12 South	660	165	69	2656	0.249	660	823	0.4	0.3	1.806	A
D - Newbourne Rd East	64	16	828	1003	0.064	64	76	0.1	0.1	3.831	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	655	164	102	2645	0.248	656	589	0.4	0.3	1.809	A
B - Foxhall Rd West	154	39	536	1293	0.119	154	74	0.2	0.1	3.164	A
C - A12 South	553	138	58	2662	0.208	553	689	0.3	0.3	1.708	A
D - Newbourne Rd East	54	13	694	1066	0.050	54	64	0.1	0.1	3.554	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - Foxhall Rd West	0.24	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.44	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.30	1.34	2.71			N/A	N/A
B - Foxhall Rd West	0.24	0.03	0.27	0.48	0.71			N/A	N/A
C - A12 South	0.44	0.03	0.33	1.38	1.63			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	10.76	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1569	100.000
B - Foxhall Rd West		ONE HOUR	✓	510	100.000
C - A12 South		ONE HOUR	✓	1615	100.000
D - Newbourne Rd East		ONE HOUR	✓	216	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	177	1334	58
	B - Foxhall Rd West	290	0	164	56
	C - A12 South	1472	93	0	50
	D - Newbourne Rd East	118	33	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	1	0	8	11
	C - A12 South	9	5	0	12
	D - Newbourne Rd East	12	19	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	4.65	2.2	4.7	A	1440	2160
B - Foxhall Rd West	0.90	48.13	7.0	36.8	E	468	702
C - A12 South	0.71	5.00	2.4	5.3	A	1482	2223
D - Newbourne Rd East	0.45	12.51	0.8	3.9	B	198	297

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1181	295	201	2562	0.461	1178	1410	0.0	0.9	2.594	A
B - Foxhall Rd West	384	96	1231	935	0.411	381	227	0.0	0.7	6.469	A
C - A12 South	1216	304	245	2568	0.473	1212	1173	0.0	0.9	2.649	A
D - Newbourne Rd East	162	41	1257	796	0.204	161	123	0.0	0.3	5.661	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1411	353	241	2536	0.556	1409	1687	0.9	1.2	3.189	A
B - Foxhall Rd West	458	115	1472	805	0.570	456	271	0.7	1.3	10.252	B
C - A12 South	1452	363	294	2539	0.572	1450	1403	0.9	1.3	3.301	A
D - Newbourne Rd East	194	48	1503	682	0.284	193	147	0.3	0.4	7.359	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1728	432	288	2506	0.689	1724	2055	1.2	2.2	4.580	A
B - Foxhall Rd West	561	140	1801	628	0.894	543	332	1.3	6.0	36.390	E
C - A12 South	1778	445	359	2499	0.712	1774	1711	1.3	2.4	4.934	A
D - Newbourne Rd East	237	59	1834	529	0.449	236	178	0.4	0.8	12.233	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1728	432	295	2502	0.690	1727	2068	2.2	2.2	4.646	A
B - Foxhall Rd West	561	140	1805	625	0.898	557	333	6.0	7.0	48.127	E
C - A12 South	1778	445	360	2498	0.712	1778	1720	2.4	2.4	4.997	A
D - Newbourne Rd East	237	59	1842	525	0.452	237	180	0.8	0.8	12.513	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1411	353	252	2530	0.558	1414	1708	2.2	1.3	3.238	A
B - Foxhall Rd West	458	115	1479	801	0.572	481	273	7.0	1.4	11.998	B
C - A12 South	1452	363	296	2537	0.572	1456	1416	2.4	1.3	3.342	A
D - Newbourne Rd East	194	48	1516	676	0.287	195	150	0.8	0.4	7.518	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1181	295	204	2560	0.461	1183	1419	1.3	0.9	2.616	A
B - Foxhall Rd West	384	96	1237	932	0.412	387	228	1.4	0.7	6.637	A
C - A12 South	1216	304	247	2567	0.474	1218	1179	1.3	0.9	2.670	A
D - Newbourne Rd East	162	41	1263	793	0.205	163	124	0.4	0.3	5.717	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.69	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	0.89	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.05	0.48	2.99	4.69			N/A	N/A
B - Foxhall Rd West	1.29	0.05	0.48	3.17	4.89			N/A	N/A
C - A12 South	1.32	0.05	0.46	3.36	5.31			N/A	N/A
D - Newbourne Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.03	0.26	2.18	2.18			N/A	N/A
B - Foxhall Rd West	5.99	0.06	1.16	17.20	27.78			N/A	N/A
C - A12 South	2.42	0.03	0.27	2.42	2.42			N/A	N/A
D - Newbourne Rd East	0.80	0.03	0.26	0.80	0.80			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.21	0.03	0.26	2.21	2.21			N/A	N/A
B - Foxhall Rd West	6.99	0.05	0.45	19.53	36.82			N/A	N/A
C - A12 South	2.45	0.03	0.26	2.45	2.45			N/A	N/A
D - Newbourne Rd East	0.81	0.03	0.30	1.22	3.94			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.18	1.16	1.90	2.42			N/A	N/A
B - Foxhall Rd West	1.38	0.04	0.37	3.52	6.68			N/A	N/A
C - A12 South	1.35	0.14	1.18	2.24	2.85			N/A	N/A
D - Newbourne Rd East	0.41	0.03	0.29	0.80	1.15			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.07	0.76	1.47	1.88			N/A	N/A
B - Foxhall Rd West	0.71	0.03	0.29	1.20	3.09			N/A	N/A
C - A12 South	0.90	0.06	0.70	1.71	2.31			N/A	N/A
D - Newbourne Rd East	0.26	0.03	0.25	0.45	0.48			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	187.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1763	100.000
B - Foxhall Rd West		ONE HOUR	✓	595	100.000
C - A12 South		ONE HOUR	✓	2166	100.000
D - Newbourne Rd East		ONE HOUR	✓	353	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	157	1484	122
	B - Foxhall Rd West	336	0	194	66
	C - A12 South	1894	167	1	105
	D - Newbourne Rd East	188	57	108	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	8	8	0	8
	D - Newbourne Rd East	9	4	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.40	3.4	8.0	A	1618	2426
B - Foxhall Rd West	2.03	1442.91	173.5	200.0	F	546	819
C - A12 South	0.97	31.21	19.6	99.5	D	1988	2982
D - Newbourne Rd East	0.76	29.42	3.0	15.4	D	324	485

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1327	332	272	2494	0.532	1323	1810	0.0	1.1	3.062	A
B - Foxhall Rd West	448	112	1640	733	0.612	442	285	0.0	1.5	12.158	B
C - A12 South	1631	408	301	2550	0.639	1624	1338	0.0	1.8	3.857	A
D - Newbourne Rd East	266	66	1375	772	0.344	263	219	0.0	0.5	7.049	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1585	396	316	2468	0.642	1582	2151	1.1	1.8	4.054	A
B - Foxhall Rd West	535	134	1960	559	0.957	506	341	1.5	8.7	52.379	F
C - A12 South	1947	487	360	2515	0.774	1941	1594	1.8	3.3	6.209	A
D - Newbourne Rd East	317	79	1638	644	0.493	315	260	0.5	0.9	10.905	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1941	485	264	2499	0.777	1934	2437	1.8	3.4	6.308	A
B - Foxhall Rd West	655	164	2358	344	1.908	343	413	8.7	86.9	533.803	F
C - A12 South	2385	596	436	2469	0.966	2335	1857	3.3	16.0	21.558	C
D - Newbourne Rd East	388	97	1913	508	0.764	381	285	0.9	2.9	26.739	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1941	485	257	2503	0.775	1941	2461	3.4	3.4	6.401	A
B - Foxhall Rd West	655	164	2395	324	2.026	323	417	86.9	169.9	1442.912	F
C - A12 South	2385	596	442	2465	0.968	2371	1859	16.0	19.6	31.212	D
D - Newbourne Rd East	388	97	1913	508	0.764	388	285	2.9	3.0	29.416	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1585	396	325	2462	0.644	1591	2226	3.4	1.8	4.165	A
B - Foxhall Rd West	535	134	2030	521	1.027	521	349	169.9	173.5	1112.627	F
C - A12 South	1947	487	367	2510	0.776	2012	1609	19.6	3.6	8.125	A
D - Newbourne Rd East	317	79	1651	637	0.497	325	265	3.0	1.0	11.809	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1327	332	394	2420	0.548	1329	1981	1.8	1.2	3.306	A
B - Foxhall Rd West	448	112	1655	724	0.619	720	287	173.5	105.5	698.954	F
C - A12 South	1631	408	304	2548	0.640	1638	1436	3.6	1.8	3.984	A
D - Newbourne Rd East	266	66	1472	726	0.366	267	251	1.0	0.6	7.878	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.52	0.03	0.27	1.52	1.81			N/A	N/A
C - A12 South	1.75	0.30	1.02	2.84	3.55			N/A	N/A
D - Newbourne Rd East	0.52	0.52	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.04	0.43	4.76	8.01			N/A	N/A
B - Foxhall Rd West	8.70	0.07	1.04	25.25	40.70			N/A	N/A
C - A12 South	3.33	0.04	0.42	9.19	16.95			N/A	N/A
D - Newbourne Rd East	0.95	0.06	0.76	1.76	2.38			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.38	0.03	0.28	3.38	7.45			N/A	N/A
B - Foxhall Rd West	86.87	52.22	84.35	116.95	127.52			N/A	N/A
C - A12 South	15.96	0.10	3.67	46.04	70.88			N/A	N/A
D - Newbourne Rd East	2.87	0.03	0.35	6.64	15.40			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.41	0.03	0.27	3.41	3.41			N/A	N/A
B - Foxhall Rd West	169.86	169.05	169.50	169.90	169.95			N/A	N/A
C - A12 South	19.60	0.06	1.29	57.77	99.50			N/A	N/A
D - Newbourne Rd East	3.03	0.03	0.32	4.74	15.43			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.08	1.16	4.09	5.74			N/A	N/A
B - Foxhall Rd West	173.52	>199	>199	>199	>199			N/A	N/A
C - A12 South	3.58	0.04	0.43	9.93	18.20			N/A	N/A
D - Newbourne Rd East	1.01	0.04	0.43	2.45	3.83			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.05	0.48	2.94	4.55			N/A	N/A
B - Foxhall Rd West	105.51	58.83	101.87	147.20	162.13			N/A	N/A
C - A12 South	1.80	0.03	0.30	2.44	8.78			N/A	N/A
D - Newbourne Rd East	0.58	0.03	0.32	1.22	2.61			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	13.06	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1785	100.000
B - Foxhall Rd West		ONE HOUR	✓	498	100.000
C - A12 South		ONE HOUR	✓	1835	100.000
D - Newbourne Rd East		ONE HOUR	✓	323	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	282	1365	136
	B - Foxhall Rd West	301	0	147	50
	C - A12 South	1554	219	1	62
	D - Newbourne Rd East	114	95	113	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	5
	B - Foxhall Rd West	3	0	6	6
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	4	7	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.27	3.4	7.5	A	1638	2457
B - Foxhall Rd West	0.90	50.75	7.2	37.4	F	457	685
C - A12 South	0.82	7.90	4.3	15.5	A	1684	2526
D - Newbourne Rd East	0.69	22.41	2.1	10.1	C	296	445

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1344	336	195	2596	0.518	1340	1478	0.0	1.1	2.857	A
B - Foxhall Rd West	375	94	1301	923	0.406	372	447	0.0	0.7	6.507	A
C - A12 South	1382	345	370	2580	0.536	1377	1219	0.0	1.1	2.982	A
D - Newbourne Rd East	243	61	1348	831	0.293	241	187	0.0	0.4	6.091	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1605	401	233	2572	0.624	1602	1768	1.1	1.6	3.704	A
B - Foxhall Rd West	448	112	1556	790	0.566	445	534	0.7	1.3	10.365	B
C - A12 South	1650	413	443	2536	0.651	1647	1458	1.1	1.8	4.038	A
D - Newbourne Rd East	290	73	1612	698	0.416	289	224	0.4	0.7	8.783	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1965	491	279	2543	0.773	1959	2149	1.6	3.3	6.091	A
B - Foxhall Rd West	548	137	1899	612	0.896	529	652	1.3	6.0	37.369	E
C - A12 South	2021	505	539	2477	0.816	2011	1777	1.8	4.2	7.571	A
D - Newbourne Rd East	356	89	1966	520	0.684	350	272	0.7	2.0	20.632	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1965	491	285	2539	0.774	1965	2167	3.3	3.4	6.266	A
B - Foxhall Rd West	548	137	1909	607	0.903	543	655	6.0	7.2	50.748	F
C - A12 South	2021	505	544	2475	0.817	2020	1788	4.2	4.3	7.903	A
D - Newbourne Rd East	356	89	1976	515	0.691	355	274	2.0	2.1	22.411	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1605	401	244	2565	0.626	1611	1796	3.4	1.7	3.800	A
B - Foxhall Rd West	448	112	1569	783	0.572	471	539	7.2	1.4	12.349	B
C - A12 South	1650	413	449	2532	0.652	1660	1475	4.3	1.9	4.171	A
D - Newbourne Rd East	290	73	1628	690	0.421	296	227	2.1	0.7	9.263	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1344	336	197	2594	0.518	1346	1488	1.7	1.1	2.890	A
B - Foxhall Rd West	375	94	1308	919	0.408	377	449	1.4	0.7	6.685	A
C - A12 South	1382	345	373	2578	0.536	1385	1227	1.9	1.2	3.025	A
D - Newbourne Rd East	243	61	1356	827	0.294	244	188	0.7	0.4	6.193	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.68	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.15	0.55	1.03	1.15	1.15			N/A	N/A
D - Newbourne Rd East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.04	0.42	4.38	7.49			N/A	N/A
B - Foxhall Rd West	1.27	0.05	0.48	3.10	4.82			N/A	N/A
C - A12 South	1.84	0.04	0.40	4.92	8.81			N/A	N/A
D - Newbourne Rd East	0.70	0.06	0.69	1.23	1.23			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.30	0.03	0.28	3.30	6.65			N/A	N/A
B - Foxhall Rd West	6.02	0.06	1.23	17.27	27.70			N/A	N/A
C - A12 South	4.24	0.03	0.29	4.24	15.48			N/A	N/A
D - Newbourne Rd East	2.02	0.03	0.30	2.34	9.48			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.37	0.03	0.27	3.37	3.37			N/A	N/A
B - Foxhall Rd West	7.19	0.05	0.47	20.41	37.40			N/A	N/A
C - A12 South	4.34	0.03	0.27	4.34	4.34			N/A	N/A
D - Newbourne Rd East	2.14	0.03	0.30	2.54	10.08			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.69	0.08	1.15	3.65	4.95			N/A	N/A
B - Foxhall Rd West	1.37	0.04	0.37	3.51	6.66			N/A	N/A
C - A12 South	1.89	0.06	0.95	4.65	6.76			N/A	N/A
D - Newbourne Rd East	0.74	0.05	0.48	1.40	1.92			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.05	0.46	2.59	3.92			N/A	N/A
B - Foxhall Rd West	0.70	0.03	0.29	1.15	2.98			N/A	N/A
C - A12 South	1.16	0.04	0.39	2.94	5.10			N/A	N/A
D - Newbourne Rd East	0.42	0.03	0.33	1.34	1.45			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	11.03	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1921	100.000
B - Foxhall Rd West		ONE HOUR	✓	437	100.000
C - A12 South		ONE HOUR	✓	1988	100.000
D - Newbourne Rd East		ONE HOUR	✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	316	1473	131
	B - Foxhall Rd West	242	0	137	58
	C - A12 South	1618	335	1	35
	D - Newbourne Rd East	70	128	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	7.03	4.1	12.1	A	1763	2645
B - Foxhall Rd West	0.74	21.34	2.7	13.0	C	401	601
C - A12 South	0.87	11.22	6.6	32.8	B	1824	2736
D - Newbourne Rd East	0.65	21.21	1.8	8.7	C	265	398

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1447	362	173	2676	0.541	1442	1447	0.0	1.2	2.906	A
B - Foxhall Rd West	329	82	1293	969	0.339	327	584	0.0	0.5	5.572	A
C - A12 South	1496	374	386	2615	0.572	1491	1277	0.0	1.3	3.188	A
D - Newbourne Rd East	218	54	1447	831	0.262	216	167	0.0	0.4	5.841	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1727	432	207	2655	0.651	1725	1731	1.2	1.8	3.859	A
B - Foxhall Rd West	393	98	1547	834	0.471	391	699	0.5	0.9	8.105	A
C - A12 South	1787	447	462	2569	0.696	1783	1528	1.3	2.2	4.558	A
D - Newbourne Rd East	260	65	1731	687	0.379	259	200	0.4	0.6	8.397	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2116	529	251	2628	0.805	2107	2107	1.8	4.0	6.801	A
B - Foxhall Rd West	481	120	1884	654	0.735	474	851	0.9	2.6	19.283	C
C - A12 South	2188	547	563	2508	0.873	2172	1865	2.2	6.3	10.272	B
D - Newbourne Rd East	319	80	2114	492	0.647	314	244	0.6	1.7	19.752	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2116	529	253	2626	0.806	2115	2124	4.0	4.1	7.034	A
B - Foxhall Rd West	481	120	1897	647	0.743	480	857	2.6	2.7	21.343	C
C - A12 South	2188	547	567	2505	0.874	2187	1874	6.3	6.6	11.221	B
D - Newbourne Rd East	319	80	2123	487	0.654	318	245	1.7	1.8	21.208	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1727	432	211	2652	0.651	1736	1754	4.1	1.9	3.964	A
B - Foxhall Rd West	393	98	1565	824	0.476	400	706	2.7	0.9	8.626	A
C - A12 South	1787	447	468	2566	0.696	1804	1541	6.6	2.3	4.828	A
D - Newbourne Rd East	260	65	1744	680	0.382	265	202	1.8	0.6	8.765	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1447	362	174	2675	0.541	1449	1458	1.9	1.2	2.943	A
B - Foxhall Rd West	329	82	1302	964	0.341	330	588	0.9	0.5	5.691	A
C - A12 South	1496	374	389	2614	0.573	1500	1285	2.3	1.4	3.246	A
D - Newbourne Rd East	218	54	1455	827	0.263	219	168	0.6	0.4	5.927	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.51	0.51	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.33	0.56	1.22	1.70	1.87			N/A	N/A
D - Newbourne Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.04	0.40	4.92	8.80			N/A	N/A
B - Foxhall Rd West	0.88	0.06	0.69	1.63	2.12			N/A	N/A
C - A12 South	2.25	0.04	0.39	6.00	11.26			N/A	N/A
D - Newbourne Rd East	0.60	0.06	0.63	1.34	1.43			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.98	0.03	0.29	3.98	12.08			N/A	N/A
B - Foxhall Rd West	2.56	0.03	0.31	3.94	12.97			N/A	N/A
C - A12 South	6.29	0.03	0.33	10.63	32.84			N/A	N/A
D - Newbourne Rd East	1.73	0.03	0.29	1.73	7.15			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.06	0.03	0.27	4.06	4.06			N/A	N/A
B - Foxhall Rd West	2.74	0.03	0.30	2.81	12.53			N/A	N/A
C - A12 South	6.59	0.03	0.29	6.59	20.46			N/A	N/A
D - Newbourne Rd East	1.82	0.03	0.30	2.26	8.68			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.89	0.07	1.06	4.51	6.44			N/A	N/A
B - Foxhall Rd West	0.93	0.05	0.49	1.95	2.91			N/A	N/A
C - A12 South	2.33	0.05	0.56	6.33	10.06			N/A	N/A
D - Newbourne Rd East	0.63	0.05	0.48	1.43	1.43			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.19	0.04	0.42	2.97	4.93			N/A	N/A
B - Foxhall Rd West	0.52	0.03	0.33	1.04	2.03			N/A	N/A
C - A12 South	1.35	0.03	0.34	3.23	6.84			N/A	N/A
D - Newbourne Rd East	0.36	0.03	0.33	1.20	1.45			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	873	100.000
B - Foxhall Rd West		ONE HOUR	✓	212	100.000
C - A12 South		ONE HOUR	✓	874	100.000
D - Newbourne Rd East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	803	31
	B - Foxhall Rd West	108	0	81	23
	C - A12 South	806	38	0	31
	D - Newbourne Rd East	18	21	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	11	5	0	5
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	2.18	0.6	2.7	A	801	1202
B - Foxhall Rd West	0.22	4.28	0.3	1.2	A	195	292
C - A12 South	0.37	2.17	0.6	2.7	A	802	1203
D - Newbourne Rd East	0.09	4.29	0.1	0.5	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	657	164	101	2645	0.249	656	699	0.0	0.3	1.810	A
B - Foxhall Rd West	160	40	642	1236	0.129	159	74	0.0	0.1	3.341	A
C - A12 South	658	165	59	2638	0.249	657	690	0.0	0.3	1.817	A
D - Newbourne Rd East	55	14	694	1070	0.051	55	64	0.0	0.1	3.545	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	785	196	121	2632	0.298	785	837	0.3	0.4	1.948	A
B - Foxhall Rd West	191	48	768	1168	0.163	190	89	0.1	0.2	3.682	A
C - A12 South	786	196	71	2631	0.299	786	825	0.3	0.4	1.950	A
D - Newbourne Rd East	66	16	830	1007	0.065	66	76	0.1	0.1	3.825	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	961	240	149	2615	0.368	961	1024	0.4	0.6	2.177	A
B - Foxhall Rd West	233	58	940	1075	0.217	233	109	0.2	0.3	4.274	A
C - A12 South	962	241	87	2622	0.367	962	1010	0.4	0.6	2.168	A
D - Newbourne Rd East	80	20	1016	920	0.087	80	93	0.1	0.1	4.289	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	961	240	149	2615	0.368	961	1025	0.6	0.6	2.177	A
B - Foxhall Rd West	233	58	940	1074	0.217	233	109	0.3	0.3	4.280	A
C - A12 South	962	241	87	2622	0.367	962	1011	0.6	0.6	2.168	A
D - Newbourne Rd East	80	20	1017	919	0.088	80	93	0.1	0.1	4.291	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	785	196	122	2632	0.298	786	838	0.6	0.4	1.950	A
B - Foxhall Rd West	191	48	769	1167	0.163	191	89	0.3	0.2	3.690	A
C - A12 South	786	196	71	2631	0.299	786	826	0.6	0.4	1.951	A
D - Newbourne Rd East	66	16	831	1006	0.065	66	76	0.1	0.1	3.828	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	657	164	102	2645	0.249	658	701	0.4	0.3	1.814	A
B - Foxhall Rd West	160	40	643	1235	0.129	160	74	0.2	0.1	3.348	A
C - A12 South	658	165	59	2638	0.249	659	692	0.4	0.3	1.817	A
D - Newbourne Rd East	55	14	696	1069	0.051	55	64	0.1	0.1	3.552	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	0.42	0.00	0.00	0.42	0.42			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.25	0.58	0.58			N/A	N/A
B - Foxhall Rd West	0.28	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.58	0.03	0.25	0.58	0.58			N/A	N/A
D - Newbourne Rd East	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.03	0.30	1.33	2.72			N/A	N/A
B - Foxhall Rd West	0.28	0.03	0.29	0.84	1.18			N/A	N/A
C - A12 South	0.58	0.03	0.29	1.33	2.71			N/A	N/A
D - Newbourne Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - Foxhall Rd West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.43	0.00	0.00	0.43	0.43			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	22.78	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1546	100.000
B - Foxhall Rd West		ONE HOUR	✓	510	100.000
C - A12 South		ONE HOUR	✓	1724	100.000
D - Newbourne Rd East		ONE HOUR	✓	218	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	171	1317	58
	B - Foxhall Rd West	290	0	164	56
	C - A12 South	1581	93	0	50
	D - Newbourne Rd East	120	33	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	1	0	8	11
	C - A12 South	11	5	0	12
	D - Newbourne Rd East	12	19	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.48	2.1	4.4	A	1419	2128
B - Foxhall Rd West	1.05	142.69	23.5	62.5	F	468	702
C - A12 South	0.78	6.61	3.4	7.8	A	1582	2373
D - Newbourne Rd East	0.44	11.97	0.8	3.8	B	200	299

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1164	291	201	2556	0.455	1161	1493	0.0	0.8	2.573	A
B - Foxhall Rd West	384	96	1314	874	0.439	381	222	0.0	0.8	7.256	A
C - A12 South	1298	324	242	2510	0.517	1294	1160	0.0	1.1	2.950	A
D - Newbourne Rd East	164	41	1239	804	0.204	163	123	0.0	0.3	5.598	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1390	347	241	2531	0.549	1388	1786	0.8	1.2	3.146	A
B - Foxhall Rd West	458	115	1572	732	0.626	455	266	0.8	1.6	12.855	B
C - A12 South	1550	387	290	2482	0.625	1547	1387	1.1	1.6	3.845	A
D - Newbourne Rd East	196	49	1482	691	0.283	195	147	0.3	0.4	7.252	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1702	426	274	2510	0.678	1699	2156	1.2	2.1	4.422	A
B - Foxhall Rd West	561	140	1920	540	1.041	510	325	1.6	14.6	75.567	F
C - A12 South	1898	475	354	2443	0.777	1891	1682	1.6	3.4	6.441	A
D - Newbourne Rd East	240	60	1798	544	0.440	238	174	0.4	0.8	11.705	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1702	426	281	2505	0.680	1702	2172	2.1	2.1	4.482	A
B - Foxhall Rd West	561	140	1928	536	1.048	526	326	14.6	23.5	142.692	F
C - A12 South	1898	475	356	2442	0.777	1898	1691	3.4	3.4	6.606	A
D - Newbourne Rd East	240	60	1807	540	0.444	240	176	0.8	0.8	11.969	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1390	347	280	2506	0.555	1393	1847	2.1	1.3	3.246	A
B - Foxhall Rd West	458	115	1581	726	0.631	545	267	23.5	1.8	29.912	D
C - A12 South	1550	387	292	2480	0.625	1557	1421	3.4	1.7	3.928	A
D - Newbourne Rd East	196	49	1516	675	0.290	197	157	0.8	0.4	7.555	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1164	291	204	2554	0.456	1166	1504	1.3	0.8	2.595	A
B - Foxhall Rd West	384	96	1321	870	0.441	388	223	1.8	0.8	7.531	A
C - A12 South	1298	324	244	2509	0.517	1300	1167	1.7	1.1	2.983	A
D - Newbourne Rd East	164	41	1246	801	0.205	164	124	0.4	0.3	5.663	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.77	0.10	0.86	1.42	1.49			N/A	N/A
C - A12 South	1.06	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.05	0.49	2.88	4.41			N/A	N/A
B - Foxhall Rd West	1.62	0.04	0.43	4.29	7.20			N/A	N/A
C - A12 South	1.64	0.04	0.42	4.39	7.47			N/A	N/A
D - Newbourne Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.08	0.03	0.26	2.08	2.08			N/A	N/A
B - Foxhall Rd West	14.56	1.39	10.65	30.73	38.96			N/A	N/A
C - A12 South	3.38	0.03	0.28	3.38	7.81			N/A	N/A
D - Newbourne Rd East	0.77	0.03	0.26	0.77	0.77			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.10	0.03	0.26	2.10	2.10			N/A	N/A
B - Foxhall Rd West	23.47	1.87	17.62	49.50	62.53			N/A	N/A
C - A12 South	3.43	0.03	0.27	3.43	3.43			N/A	N/A
D - Newbourne Rd East	0.79	0.03	0.30	1.17	3.81			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.24	1.17	1.83	2.15			N/A	N/A
B - Foxhall Rd West	1.81	0.03	0.33	3.71	9.51			N/A	N/A
C - A12 South	1.68	0.08	1.11	3.71	5.11			N/A	N/A
D - Newbourne Rd East	0.41	0.03	0.29	0.77	1.14			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.07	0.78	1.34	1.77			N/A	N/A
B - Foxhall Rd West	0.80	0.03	0.27	0.80	1.29			N/A	N/A
C - A12 South	1.08	0.04	0.45	2.62	4.02			N/A	N/A
D - Newbourne Rd East	0.26	0.03	0.25	0.45	0.48			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	199.07	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1756	100.000
B - Foxhall Rd West		ONE HOUR	✓	562	100.000
C - A12 South		ONE HOUR	✓	2191	100.000
D - Newbourne Rd East		ONE HOUR	✓	353	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	163	1471	122
	B - Foxhall Rd West	303	0	194	66
	C - A12 South	1920	167	1	104
	D - Newbourne Rd East	189	59	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	11	8	0	8
	D - Newbourne Rd East	9	4	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.45	3.4	8.1	A	1611	2417
B - Foxhall Rd West	2.11	1554.23	179.9	179.9	F	516	774
C - A12 South	1.00	52.74	35.9	127.5	F	2011	3016
D - Newbourne Rd East	0.77	29.63	3.1	15.6	D	324	485

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1322	330	271	2478	0.533	1317	1805	0.0	1.1	3.091	A
B - Foxhall Rd West	423	106	1658	701	0.604	417	291	0.0	1.5	12.439	B
C - A12 South	1650	412	307	2491	0.662	1642	1326	0.0	1.9	4.204	A
D - Newbourne Rd East	266	66	1370	770	0.345	263	218	0.0	0.5	7.075	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1578	395	313	2452	0.644	1576	2144	1.1	1.8	4.095	A
B - Foxhall Rd West	506	126	1982	523	0.967	475	348	1.5	9.0	56.818	F
C - A12 South	1970	492	368	2455	0.802	1962	1578	1.9	3.9	7.184	A
D - Newbourne Rd East	317	79	1631	642	0.494	315	258	0.5	1.0	10.962	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1933	483	257	2485	0.778	1927	2414	1.8	3.4	6.368	A
B - Foxhall Rd West	619	155	2356	316	1.958	316	419	9.0	84.9	572.548	F
C - A12 South	2413	603	446	2409	1.001	2329	1837	3.9	24.9	30.223	D
D - Newbourne Rd East	388	97	1902	507	0.766	381	281	1.0	2.9	26.985	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1933	483	249	2490	0.776	1933	2441	3.4	3.4	6.454	A
B - Foxhall Rd West	619	155	2396	294	2.107	294	424	84.9	166.2	1554.228	F
C - A12 South	2413	603	452	2406	1.003	2368	1837	24.9	35.9	52.738	F
D - Newbourne Rd East	388	97	1901	508	0.765	388	281	2.9	3.1	29.629	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1578	395	309	2455	0.643	1585	2254	3.4	1.8	4.167	A
B - Foxhall Rd West	506	126	2111	451	1.121	451	361	166.2	179.9	1220.923	F
C - A12 South	1970	492	376	2451	0.804	2096	1581	35.9	4.3	13.824	B
D - Newbourne Rd East	317	79	1631	642	0.494	325	262	3.1	1.0	11.654	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1322	330	397	2402	0.550	1324	1967	1.8	1.2	3.345	A
B - Foxhall Rd West	423	106	1676	692	0.612	688	293	179.9	113.8	770.111	F
C - A12 South	1650	412	311	2489	0.663	1659	1426	4.3	2.0	4.384	A
D - Newbourne Rd East	266	66	1470	723	0.367	267	251	1.0	0.6	7.929	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.47	0.03	0.27	1.47	1.47			N/A	N/A
C - A12 South	1.93	0.20	1.08	3.52	4.46			N/A	N/A
D - Newbourne Rd East	0.52	0.52	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.04	0.43	4.79	8.06			N/A	N/A
B - Foxhall Rd West	9.02	0.07	1.19	26.19	42.03			N/A	N/A
C - A12 South	3.90	0.04	0.45	10.97	19.67			N/A	N/A
D - Newbourne Rd East	0.95	0.06	0.76	1.77	2.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.39	0.03	0.28	3.39	7.68			N/A	N/A
B - Foxhall Rd West	84.91	50.28	82.33	115.06	125.69			N/A	N/A
C - A12 South	24.89	0.49	14.30	61.52	83.29			N/A	N/A
D - Newbourne Rd East	2.90	0.04	0.35	6.76	15.53			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.42	0.03	0.27	3.42	3.42			N/A	N/A
B - Foxhall Rd West	166.24	165.05	165.50	166.24	166.24			N/A	N/A
C - A12 South	35.94	0.43	18.86	92.37	127.50			N/A	N/A
D - Newbourne Rd East	3.06	0.03	0.32	4.81	15.58			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.08	1.13	4.13	5.80			N/A	N/A
B - Foxhall Rd West	179.88	179.05	179.50	179.90	179.95			N/A	N/A
C - A12 South	4.31	0.04	0.42	11.88	22.35			N/A	N/A
D - Newbourne Rd East	1.00	0.04	0.42	2.42	3.84			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.05	0.48	2.96	4.62			N/A	N/A
B - Foxhall Rd West	113.78	66.49	110.34	155.48	170.17			N/A	N/A
C - A12 South	1.99	0.03	0.30	1.99	8.91			N/A	N/A
D - Newbourne Rd East	0.59	0.03	0.32	1.23	2.63			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	13.06	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1745	100.000
B - Foxhall Rd West		ONE HOUR	✓	464	100.000
C - A12 South		ONE HOUR	✓	1850	100.000
D - Newbourne Rd East		ONE HOUR	✓	323	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	271	1339	133
	B - Foxhall Rd West	266	0	147	51
	C - A12 South	1569	219	1	62
	D - Newbourne Rd East	114	101	107	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	5
	B - Foxhall Rd West	4	0	6	6
	C - A12 South	8	5	0	1
	D - Newbourne Rd East	4	7	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.25	3.3	7.3	A	1601	2402
B - Foxhall Rd West	0.89	48.90	6.5	34.0	E	426	638
C - A12 South	0.84	9.22	5.1	22.0	A	1698	2547
D - Newbourne Rd East	0.69	21.86	2.1	9.8	C	296	445

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1314	328	196	2552	0.515	1310	1463	0.0	1.1	2.889	A
B - Foxhall Rd West	349	87	1312	898	0.389	347	443	0.0	0.6	6.497	A
C - A12 South	1393	348	366	2528	0.551	1388	1195	0.0	1.2	3.147	A
D - Newbourne Rd East	243	61	1320	834	0.292	242	185	0.0	0.4	6.064	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1569	392	234	2528	0.621	1567	1750	1.1	1.6	3.733	A
B - Foxhall Rd West	417	104	1569	762	0.547	415	530	0.6	1.2	10.301	B
C - A12 South	1664	416	438	2485	0.669	1660	1430	1.2	2.0	4.350	A
D - Newbourne Rd East	290	73	1579	701	0.414	289	222	0.4	0.7	8.712	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1921	480	281	2500	0.769	1915	2127	1.6	3.2	6.087	A
B - Foxhall Rd West	511	128	1913	580	0.881	494	646	1.2	5.4	36.560	E
C - A12 South	2037	509	534	2428	0.839	2026	1742	2.0	4.9	8.703	A
D - Newbourne Rd East	356	89	1926	524	0.679	350	269	0.7	2.0	20.199	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1921	480	286	2496	0.770	1921	2145	3.2	3.3	6.253	A
B - Foxhall Rd West	511	128	1925	573	0.891	507	650	5.4	6.5	48.903	E
C - A12 South	2037	509	538	2426	0.840	2037	1753	4.9	5.1	9.218	A
D - Newbourne Rd East	356	89	1936	519	0.685	355	272	2.0	2.1	21.862	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1569	392	245	2522	0.622	1575	1778	3.3	1.7	3.830	A
B - Foxhall Rd West	417	104	1585	754	0.553	438	535	6.5	1.3	12.107	B
C - A12 South	1664	416	444	2481	0.670	1676	1446	5.1	2.1	4.534	A
D - Newbourne Rd East	290	73	1594	693	0.419	296	226	2.1	0.7	9.169	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1314	328	198	2550	0.515	1316	1473	1.7	1.1	2.921	A
B - Foxhall Rd West	349	87	1320	894	0.391	352	446	1.3	0.6	6.666	A
C - A12 South	1393	348	369	2526	0.552	1396	1203	2.1	1.2	3.198	A
D - Newbourne Rd East	243	61	1328	830	0.293	244	187	0.7	0.4	6.164	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.63	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.22	0.56	1.09	1.36	1.68			N/A	N/A
D - Newbourne Rd East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.04	0.42	4.30	7.29			N/A	N/A
B - Foxhall Rd West	1.18	0.05	0.48	2.81	4.29			N/A	N/A
C - A12 South	2.00	0.04	0.40	5.38	9.74			N/A	N/A
D - Newbourne Rd East	0.70	0.06	0.69	1.15	1.15			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.23	0.03	0.28	3.23	6.25			N/A	N/A
B - Foxhall Rd West	5.44	0.06	0.92	15.64	25.76			N/A	N/A
C - A12 South	4.92	0.03	0.30	4.92	21.98			N/A	N/A
D - Newbourne Rd East	1.98	0.03	0.30	2.09	9.10			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.29	0.03	0.26	3.29	3.29			N/A	N/A
B - Foxhall Rd West	6.46	0.04	0.44	17.96	34.05			N/A	N/A
C - A12 South	5.08	0.03	0.28	5.08	8.64			N/A	N/A
D - Newbourne Rd East	2.09	0.03	0.30	2.38	9.76			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.08	1.15	3.55	4.82			N/A	N/A
B - Foxhall Rd West	1.27	0.04	0.37	3.25	6.02			N/A	N/A
C - A12 South	2.06	0.06	0.80	5.35	8.09			N/A	N/A
D - Newbourne Rd East	0.73	0.05	0.49	1.36	1.88			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.05	0.47	2.53	3.83			N/A	N/A
B - Foxhall Rd West	0.65	0.03	0.29	1.18	2.86			N/A	N/A
C - A12 South	1.24	0.04	0.37	3.14	5.87			N/A	N/A
D - Newbourne Rd East	0.42	0.03	0.33	1.33	1.40			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	10.92	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1842	100.000
B - Foxhall Rd West		ONE HOUR	✓	436	100.000
C - A12 South		ONE HOUR	✓	1990	100.000
D - Newbourne Rd East		ONE HOUR	✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	294	1419	128
	B - Foxhall Rd West	240	0	137	59
	C - A12 South	1620	335	1	35
	D - Newbourne Rd East	71	137	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	6	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	5	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.51	3.6	8.5	A	1691	2536
B - Foxhall Rd West	0.75	22.31	2.9	13.7	C	400	600
C - A12 South	0.88	11.54	6.8	34.2	B	1826	2739
D - Newbourne Rd East	0.62	18.53	1.6	7.4	C	265	398

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1387	347	173	2630	0.527	1383	1448	0.0	1.1	2.875	A
B - Foxhall Rd West	328	82	1295	963	0.341	326	574	0.0	0.5	5.634	A
C - A12 South	1498	374	377	2605	0.575	1493	1229	0.0	1.3	3.219	A
D - Newbourne Rd East	218	54	1390	848	0.257	216	166	0.0	0.3	5.686	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1656	414	207	2609	0.635	1654	1732	1.1	1.7	3.758	A
B - Foxhall Rd West	392	98	1549	827	0.474	390	687	0.5	0.9	8.215	A
C - A12 South	1789	447	451	2560	0.699	1785	1471	1.3	2.3	4.621	A
D - Newbourne Rd East	260	65	1663	707	0.368	259	198	0.3	0.6	8.021	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2029	507	251	2583	0.785	2021	2108	1.7	3.5	6.332	A
B - Foxhall Rd West	480	120	1887	646	0.743	473	837	0.9	2.7	20.004	C
C - A12 South	2191	548	550	2500	0.876	2174	1796	2.3	6.5	10.527	B
D - Newbourne Rd East	319	80	2031	516	0.617	315	242	0.6	1.5	17.530	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2029	507	255	2581	0.786	2028	2125	3.5	3.6	6.509	A
B - Foxhall Rd West	480	120	1901	639	0.751	479	843	2.7	2.9	22.310	C
C - A12 South	2191	548	554	2498	0.877	2189	1804	6.5	6.8	11.543	B
D - Newbourne Rd East	319	80	2040	512	0.622	318	243	1.5	1.6	18.532	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1656	414	212	2607	0.635	1664	1756	3.6	1.8	3.847	A
B - Foxhall Rd West	392	98	1568	817	0.480	399	694	2.9	0.9	8.778	A
C - A12 South	1789	447	456	2557	0.699	1806	1483	6.8	2.4	4.902	A
D - Newbourne Rd East	260	65	1675	701	0.371	264	201	1.6	0.6	8.316	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1387	347	175	2629	0.528	1390	1458	1.8	1.1	2.912	A
B - Foxhall Rd West	328	82	1304	958	0.342	330	578	0.9	0.5	5.739	A
C - A12 South	1498	374	380	2604	0.575	1502	1237	2.4	1.4	3.278	A
D - Newbourne Rd East	218	54	1398	844	0.258	219	167	0.6	0.4	5.765	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.51	0.51	1.00	1.40	1.45			N/A	N/A
C - A12 South	1.34	0.56	1.24	1.73	1.89			N/A	N/A
D - Newbourne Rd East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.72	0.04	0.41	4.60	7.97			N/A	N/A
B - Foxhall Rd West	0.89	0.06	0.68	1.67	2.23			N/A	N/A
C - A12 South	2.28	0.04	0.40	6.10	11.44			N/A	N/A
D - Newbourne Rd East	0.57	0.06	0.63	1.33	1.42			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.55	0.03	0.28	3.55	8.48			N/A	N/A
B - Foxhall Rd West	2.66	0.03	0.32	4.48	13.73			N/A	N/A
C - A12 South	6.46	0.03	0.34	11.52	34.17			N/A	N/A
D - Newbourne Rd East	1.53	0.03	0.28	1.53	4.99			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.61	0.03	0.27	3.61	3.61			N/A	N/A
B - Foxhall Rd West	2.85	0.03	0.30	3.21	13.35			N/A	N/A
C - A12 South	6.77	0.03	0.29	6.77	22.26			N/A	N/A
D - Newbourne Rd East	1.60	0.03	0.30	1.72	7.35			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.76	0.08	1.12	3.93	5.53			N/A	N/A
B - Foxhall Rd West	0.94	0.05	0.48	2.00	3.01			N/A	N/A
C - A12 South	2.37	0.05	0.52	6.46	10.34			N/A	N/A
D - Newbourne Rd East	0.60	0.05	0.50	1.38	1.49			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.04	0.44	2.75	4.33			N/A	N/A
B - Foxhall Rd West	0.53	0.03	0.33	1.05	2.11			N/A	N/A
C - A12 South	1.37	0.03	0.34	3.23	6.95			N/A	N/A
D - Newbourne Rd East	0.35	0.03	0.33	1.14	1.37			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	895	100.000
B - Foxhall Rd West		ONE HOUR	✓	252	100.000
C - A12 South		ONE HOUR	✓	768	100.000
D - Newbourne Rd East		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	823	33
	B - Foxhall Rd West	144	0	82	26
	C - A12 South	697	39	0	33
	D - Newbourne Rd East	16	23	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	6
	B - Foxhall Rd West	1	0	10	11
	C - A12 South	10	5	0	6
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.22	0.6	2.8	A	821	1232
B - Foxhall Rd West	0.24	4.11	0.3	1.3	A	231	347
C - A12 South	0.32	2.00	0.5	1.9	A	705	1057
D - Newbourne Rd East	0.09	4.36	0.1	0.5	A	69	103

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	674	168	106	2642	0.255	673	643	0.0	0.3	1.828	A
B - Foxhall Rd West	190	47	560	1293	0.147	189	76	0.0	0.2	3.259	A
C - A12 South	578	145	59	2666	0.217	577	707	0.0	0.3	1.723	A
D - Newbourne Rd East	57	14	710	1062	0.053	56	69	0.0	0.1	3.580	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	805	201	127	2628	0.306	804	769	0.3	0.4	1.973	A
B - Foxhall Rd West	227	57	670	1234	0.184	226	91	0.2	0.2	3.572	A
C - A12 South	691	173	71	2659	0.260	690	846	0.3	0.3	1.828	A
D - Newbourne Rd East	67	17	849	997	0.068	67	82	0.1	0.1	3.873	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	986	246	155	2610	0.378	985	942	0.4	0.6	2.214	A
B - Foxhall Rd West	277	69	820	1153	0.241	277	112	0.2	0.3	4.108	A
C - A12 South	846	211	87	2650	0.319	845	1035	0.3	0.5	1.995	A
D - Newbourne Rd East	83	21	1039	908	0.091	83	101	0.1	0.1	4.361	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	986	246	155	2610	0.378	986	943	0.6	0.6	2.216	A
B - Foxhall Rd West	277	69	820	1153	0.241	277	112	0.3	0.3	4.113	A
C - A12 South	846	211	87	2649	0.319	846	1036	0.5	0.5	1.995	A
D - Newbourne Rd East	83	21	1040	908	0.091	83	101	0.1	0.1	4.363	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	805	201	127	2628	0.306	805	770	0.6	0.4	1.977	A
B - Foxhall Rd West	227	57	670	1233	0.184	227	92	0.3	0.2	3.579	A
C - A12 South	691	173	71	2659	0.260	691	847	0.5	0.4	1.828	A
D - Newbourne Rd East	67	17	850	996	0.068	68	82	0.1	0.1	3.877	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	674	168	106	2641	0.255	674	645	0.4	0.3	1.829	A
B - Foxhall Rd West	190	47	561	1292	0.147	190	77	0.2	0.2	3.265	A
C - A12 South	578	145	59	2666	0.217	579	709	0.4	0.3	1.724	A
D - Newbourne Rd East	57	14	712	1061	0.053	57	69	0.1	0.1	3.583	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Foxhall Rd West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.25	0.60	0.60			N/A	N/A
B - Foxhall Rd West	0.32	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.47	0.03	0.25	0.47	0.48			N/A	N/A
D - Newbourne Rd East	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.03	0.29	1.24	2.76			N/A	N/A
B - Foxhall Rd West	0.32	0.03	0.32	1.07	1.32			N/A	N/A
C - A12 South	0.47	0.03	0.32	1.42	1.88			N/A	N/A
D - Newbourne Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Foxhall Rd West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	27.54	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1655	100.000
B - Foxhall Rd West		ONE HOUR	✓	588	100.000
C - A12 South		ONE HOUR	✓	1673	100.000
D - Newbourne Rd East		ONE HOUR	✓	223	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	224	1372	59
	B - Foxhall Rd West	359	0	165	64
	C - A12 South	1527	94	0	52
	D - Newbourne Rd East	119	36	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	12
	B - Foxhall Rd West	1	0	8	10
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	12	18	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	5.08	2.5	5.7	A	1519	2278
B - Foxhall Rd West	1.07	161.96	31.5	73.5	F	540	809
C - A12 South	0.74	5.57	2.8	6.2	A	1535	2303
D - Newbourne Rd East	0.49	14.30	1.0	4.6	B	204	306

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1246	312	209	2582	0.483	1242	1504	0.0	0.9	2.678	A
B - Foxhall Rd West	443	111	1274	922	0.480	439	265	0.0	0.9	7.397	A
C - A12 South	1259	315	283	2568	0.490	1256	1204	0.0	1.0	2.735	A
D - Newbourne Rd East	168	42	1321	774	0.217	166	131	0.0	0.3	5.917	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1488	372	250	2556	0.582	1486	1798	0.9	1.4	3.358	A
B - Foxhall Rd West	529	132	1524	788	0.671	524	317	0.9	2.0	13.452	B
C - A12 South	1504	376	339	2534	0.593	1502	1440	1.0	1.4	3.482	A
D - Newbourne Rd East	200	50	1580	655	0.306	199	156	0.3	0.4	7.897	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1822	456	282	2535	0.719	1818	2161	1.4	2.5	4.986	A
B - Foxhall Rd West	647	162	1863	606	1.069	581	388	2.0	18.7	81.318	F
C - A12 South	1842	460	414	2488	0.740	1837	1744	1.4	2.8	5.479	A
D - Newbourne Rd East	245	61	1915	501	0.490	243	185	0.4	0.9	13.874	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1822	456	289	2531	0.720	1822	2177	2.5	2.5	5.076	A
B - Foxhall Rd West	647	162	1869	603	1.074	596	389	18.7	31.5	161.965	F
C - A12 South	1842	460	416	2487	0.741	1842	1753	2.8	2.8	5.574	A
D - Newbourne Rd East	245	61	1924	497	0.494	245	187	0.9	1.0	14.295	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1488	372	298	2526	0.589	1492	1880	2.5	1.4	3.497	A
B - Foxhall Rd West	529	132	1533	783	0.675	646	319	31.5	2.2	46.931	E
C - A12 South	1504	376	342	2532	0.594	1509	1480	2.8	1.5	3.538	A
D - Newbourne Rd East	200	50	1620	636	0.315	202	170	1.0	0.5	8.333	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1246	312	213	2580	0.483	1248	1515	1.4	0.9	2.708	A
B - Foxhall Rd West	443	111	1281	919	0.482	448	266	2.2	0.9	7.728	A
C - A12 South	1259	315	285	2567	0.491	1262	1212	1.5	1.0	2.761	A
D - Newbourne Rd East	168	42	1329	770	0.218	168	132	0.5	0.3	5.989	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.91	0.10	0.91	1.30	1.71			N/A	N/A
C - A12 South	0.96	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.05	0.45	3.54	5.66			N/A	N/A
B - Foxhall Rd West	1.95	0.04	0.44	5.29	8.91			N/A	N/A
C - A12 South	1.45	0.04	0.44	3.77	6.18			N/A	N/A
D - Newbourne Rd East	0.43	0.00	0.00	0.43	0.43			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.51	0.03	0.27	2.51	2.51			N/A	N/A
B - Foxhall Rd West	18.66	2.39	14.87	36.67	45.22			N/A	N/A
C - A12 South	2.79	0.03	0.27	2.79	3.07			N/A	N/A
D - Newbourne Rd East	0.93	0.03	0.26	0.93	0.93			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.54	0.03	0.26	2.54	2.54			N/A	N/A
B - Foxhall Rd West	31.48	5.34	26.10	60.30	73.52			N/A	N/A
C - A12 South	2.82	0.03	0.26	2.82	2.82			N/A	N/A
D - Newbourne Rd East	0.96	0.03	0.30	1.26	4.58			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.14	1.23	2.51	3.11			N/A	N/A
B - Foxhall Rd West	2.24	0.03	0.33	4.73	11.90			N/A	N/A
C - A12 South	1.48	0.10	1.17	2.79	3.69			N/A	N/A
D - Newbourne Rd East	0.47	0.04	0.40	1.23	1.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.06	0.69	1.81	2.55			N/A	N/A
B - Foxhall Rd West	0.94	0.03	0.27	0.94	1.35			N/A	N/A
C - A12 South	0.97	0.05	0.56	1.98	2.92			N/A	N/A
D - Newbourne Rd East	0.28	0.03	0.27	0.48	0.74			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	183.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1816	100.000
B - Foxhall Rd West		ONE HOUR	✓	596	100.000
C - A12 South		ONE HOUR	✓	2167	100.000
D - Newbourne Rd East		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	171	1524	121
	B - Foxhall Rd West	325	0	195	77
	C - A12 South	1891	167	1	109
	D - Newbourne Rd East	192	51	131	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	8	5	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	6.87	3.8	10.3	A	1666	2499
B - Foxhall Rd West	2.01	1413.72	171.6	200.0	F	547	821
C - A12 South	0.97	30.40	19.1	98.1	D	1989	2983
D - Newbourne Rd East	0.84	42.58	4.6	24.7	E	343	514

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1367	342	284	2514	0.544	1362	1802	0.0	1.2	3.112	A
B - Foxhall Rd West	449	112	1643	735	0.611	443	291	0.0	1.5	12.092	B
C - A12 South	1632	408	309	2558	0.638	1625	1386	0.0	1.7	3.829	A
D - Newbourne Rd East	281	70	1417	762	0.369	279	230	0.0	0.6	7.426	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1632	408	330	2486	0.657	1629	2143	1.2	1.9	4.190	A
B - Foxhall Rd West	536	134	1964	562	0.954	508	348	1.5	8.5	51.417	F
C - A12 South	1948	487	370	2521	0.773	1942	1651	1.7	3.3	6.150	A
D - Newbourne Rd East	336	84	1688	630	0.533	334	272	0.6	1.1	12.063	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1999	500	277	2518	0.794	1992	2433	1.9	3.7	6.744	A
B - Foxhall Rd West	657	164	2363	347	1.889	347	421	8.5	86.0	522.459	F
C - A12 South	2386	597	447	2475	0.964	2337	1926	3.3	15.6	21.122	C
D - Newbourne Rd East	411	103	1973	491	0.838	399	295	1.1	4.1	35.535	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1999	500	269	2523	0.793	1999	2458	3.7	3.8	6.868	A
B - Foxhall Rd West	657	164	2401	327	2.007	327	426	86.0	168.3	1413.715	F
C - A12 South	2386	597	454	2470	0.966	2372	1929	15.6	19.1	30.402	D
D - Newbourne Rd East	411	103	1974	491	0.839	410	295	4.1	4.6	42.575	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1632	408	340	2480	0.658	1640	2219	3.8	2.0	4.321	A
B - Foxhall Rd West	536	134	2035	524	1.024	523	356	168.3	171.6	1099.957	F
C - A12 South	1948	487	381	2514	0.775	2010	1670	19.1	3.6	7.996	A
D - Newbourne Rd East	336	84	1702	623	0.539	349	278	4.6	1.2	13.750	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1367	342	412	2436	0.561	1370	1969	2.0	1.3	3.385	A
B - Foxhall Rd West	449	112	1659	727	0.618	723	293	171.6	103.2	686.060	F
C - A12 South	1632	408	313	2556	0.638	1639	1485	3.6	1.8	3.955	A
D - Newbourne Rd East	281	70	1515	715	0.394	284	267	1.2	0.7	8.393	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.52	0.03	0.27	1.52	2.03			N/A	N/A
C - A12 South	1.74	0.30	1.02	2.81	3.50			N/A	N/A
D - Newbourne Rd East	0.58	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.89	0.04	0.43	5.08	8.75			N/A	N/A
B - Foxhall Rd West	8.52	0.07	1.49	24.72	39.89			N/A	N/A
C - A12 South	3.30	0.04	0.42	9.09	16.81			N/A	N/A
D - Newbourne Rd East	1.11	0.06	0.69	2.40	3.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.72	0.03	0.28	3.72	10.35			N/A	N/A
B - Foxhall Rd West	85.99	51.68	83.48	115.76	126.21			N/A	N/A
C - A12 South	15.57	0.09	3.27	45.06	69.95			N/A	N/A
D - Newbourne Rd East	4.14	0.05	0.46	11.70	20.79			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.76	0.03	0.27	3.76	3.76			N/A	N/A
B - Foxhall Rd West	168.35	167.05	167.50	168.35	168.35			N/A	N/A
C - A12 South	19.08	0.06	1.47	56.09	98.12			N/A	N/A
D - Newbourne Rd East	4.56	0.04	0.37	11.04	24.67			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.95	0.07	1.10	4.64	6.61			N/A	N/A
B - Foxhall Rd West	171.56	>199	>199	>199	>199			N/A	N/A
C - A12 South	3.56	0.04	0.43	9.89	18.03			N/A	N/A
D - Newbourne Rd East	1.21	0.04	0.39	3.06	5.43			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.05	0.45	3.25	5.15			N/A	N/A
B - Foxhall Rd West	103.17	57.09	99.52	144.30	159.01			N/A	N/A
C - A12 South	1.79	0.03	0.31	2.47	8.75			N/A	N/A
D - Newbourne Rd East	0.66	0.03	0.30	1.00	3.14			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	48.89	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1819	100.000
B - Foxhall Rd West		ONE HOUR	✓	609	100.000
C - A12 South		ONE HOUR	✓	1952	100.000
D - Newbourne Rd East		ONE HOUR	✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	292	1386	139
	B - Foxhall Rd West	406	0	147	56
	C - A12 South	1662	222	1	68
	D - Newbourne Rd East	123	87	141	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	5	5
	B - Foxhall Rd West	2	0	6	5
	C - A12 South	4	5	0	2
	D - Newbourne Rd East	3	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	6.25	3.4	7.8	A	1669	2504
B - Foxhall Rd West	1.22	314.31	64.4	105.8	F	559	838
C - A12 South	0.87	10.62	6.1	29.6	B	1792	2687
D - Newbourne Rd East	0.74	26.53	2.7	13.7	D	323	484

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1370	342	204	2613	0.524	1365	1643	0.0	1.1	2.877	A
B - Foxhall Rd West	458	115	1393	887	0.517	454	450	0.0	1.0	8.237	A
C - A12 South	1470	367	378	2593	0.567	1465	1256	0.0	1.3	3.176	A
D - Newbourne Rd East	265	66	1371	826	0.321	263	198	0.0	0.5	6.372	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1635	409	243	2588	0.632	1633	1964	1.1	1.7	3.760	A
B - Foxhall Rd West	547	137	1666	745	0.734	541	539	1.0	2.6	17.150	C
C - A12 South	1755	439	453	2548	0.689	1752	1501	1.3	2.2	4.502	A
D - Newbourne Rd East	316	79	1639	692	0.457	315	237	0.5	0.8	9.506	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2003	501	258	2579	0.777	1996	2316	1.7	3.4	6.109	A
B - Foxhall Rd West	670	168	2029	556	1.205	546	657	2.6	33.7	136.976	F
C - A12 South	2150	537	551	2488	0.864	2135	1806	2.2	5.9	9.808	A
D - Newbourne Rd East	388	97	1976	524	0.739	381	278	0.8	2.6	23.979	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2003	501	260	2578	0.777	2003	2332	3.4	3.4	6.251	A
B - Foxhall Rd West	670	168	2043	549	1.221	548	661	33.7	64.4	314.314	F
C - A12 South	2150	537	556	2485	0.865	2149	1814	5.9	6.1	10.623	B
D - Newbourne Rd East	388	97	1983	521	0.744	387	280	2.6	2.7	26.529	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1635	409	304	2549	0.642	1642	2105	3.4	1.8	3.996	A
B - Foxhall Rd West	547	137	1686	735	0.745	724	544	64.4	20.3	214.239	F
C - A12 South	1755	439	459	2544	0.690	1771	1556	6.1	2.3	4.747	A
D - Newbourne Rd East	316	79	1691	666	0.475	324	255	2.7	0.9	10.727	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1370	342	231	2595	0.528	1372	1706	1.8	1.1	2.949	A
B - Foxhall Rd West	458	115	1402	882	0.519	535	453	20.3	1.1	12.910	B
C - A12 South	1470	367	382	2591	0.567	1474	1282	2.3	1.3	3.231	A
D - Newbourne Rd East	265	66	1397	813	0.326	267	206	0.9	0.5	6.608	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.05	0.06	0.69	2.14	3.01			N/A	N/A
C - A12 South	1.30	0.56	1.19	1.65	1.84			N/A	N/A
D - Newbourne Rd East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.70	0.04	0.42	4.55	7.79			N/A	N/A
B - Foxhall Rd West	2.58	0.04	0.45	7.14	12.28			N/A	N/A
C - A12 South	2.18	0.04	0.40	5.85	10.86			N/A	N/A
D - Newbourne Rd East	0.83	0.06	0.70	1.44	1.88			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.38	0.03	0.28	3.38	7.03			N/A	N/A
B - Foxhall Rd West	33.74	12.79	31.02	53.46	61.31			N/A	N/A
C - A12 South	5.88	0.03	0.32	8.71	29.63			N/A	N/A
D - Newbourne Rd East	2.57	0.03	0.33	5.04	13.65			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.03	0.27	3.43	3.43			N/A	N/A
B - Foxhall Rd West	64.38	31.30	61.18	94.53	105.76			N/A	N/A
C - A12 South	6.14	0.03	0.29	6.14	16.61			N/A	N/A
D - Newbourne Rd East	2.73	0.03	0.31	3.94	13.63			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.09	1.23	3.89	5.34			N/A	N/A
B - Foxhall Rd West	20.30	4.83	17.52	35.86	42.64			N/A	N/A
C - A12 South	2.26	0.05	0.63	6.06	9.55			N/A	N/A
D - Newbourne Rd East	0.92	0.05	0.48	1.97	2.96			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.05	0.46	2.71	4.15			N/A	N/A
B - Foxhall Rd West	1.11	0.03	0.26	1.11	1.11			N/A	N/A
C - A12 South	1.32	0.03	0.35	3.23	6.61			N/A	N/A
D - Newbourne Rd East	0.49	0.03	0.32	1.46	1.97			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	25.28	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1953	100.000
B - Foxhall Rd West		ONE HOUR	✓	553	100.000
C - A12 South		ONE HOUR	✓	2106	100.000
D - Newbourne Rd East		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	333	1491	128
	B - Foxhall Rd West	330	0	138	85
	C - A12 South	1686	339	1	81
	D - Newbourne Rd East	73	120	123	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	7.82	4.6	16.5	A	1793	2689
B - Foxhall Rd West	1.03	118.69	20.9	61.9	F	507	761
C - A12 South	0.92	17.17	10.5	54.7	C	1932	2898
D - Newbourne Rd East	0.72	26.60	2.5	12.5	D	290	435

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1471	368	228	2668	0.551	1466	1566	0.0	1.2	2.981	A
B - Foxhall Rd West	416	104	1381	930	0.447	413	594	0.0	0.8	6.919	A
C - A12 South	1585	396	395	2630	0.603	1579	1315	0.0	1.5	3.406	A
D - Newbourne Rd East	238	60	1474	825	0.289	237	220	0.0	0.4	6.105	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1756	439	272	2641	0.665	1753	1872	1.2	2.0	4.041	A
B - Foxhall Rd West	497	124	1651	787	0.631	493	710	0.8	1.7	12.104	B
C - A12 South	1893	473	473	2582	0.733	1888	1573	1.5	2.7	5.151	A
D - Newbourne Rd East	284	71	1763	679	0.419	283	263	0.4	0.7	9.063	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2151	538	316	2614	0.823	2141	2250	2.0	4.4	7.463	A
B - Foxhall Rd West	609	152	2003	602	1.011	564	863	1.7	12.9	63.524	F
C - A12 South	2318	580	575	2520	0.920	2291	1910	2.7	9.6	14.297	B
D - Newbourne Rd East	348	87	2143	488	0.714	342	314	0.7	2.3	23.788	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2151	538	322	2610	0.824	2150	2278	4.4	4.6	7.816	A
B - Foxhall Rd West	609	152	2024	590	1.031	577	871	12.9	20.9	118.691	F
C - A12 South	2318	580	580	2517	0.921	2315	1922	9.6	10.5	17.167	C
D - Newbourne Rd East	348	87	2155	481	0.723	348	318	2.3	2.5	26.604	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1756	439	306	2620	0.670	1766	1950	4.6	2.1	4.263	A
B - Foxhall Rd West	497	124	1682	771	0.645	573	721	20.9	1.9	25.311	D
C - A12 South	1893	473	480	2578	0.734	1924	1606	10.5	2.8	5.748	A
D - Newbourne Rd East	284	71	1795	663	0.429	291	277	2.5	0.8	9.847	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1471	368	231	2666	0.552	1474	1580	2.1	1.2	3.029	A
B - Foxhall Rd West	416	104	1391	925	0.450	420	598	1.9	0.8	7.197	A
C - A12 South	1585	396	398	2628	0.603	1590	1325	2.8	1.5	3.485	A
D - Newbourne Rd East	238	60	1483	820	0.290	240	222	0.8	0.4	6.216	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.08	1.24	1.62			N/A	N/A
B - Foxhall Rd West	0.80	0.14	0.91	1.41	1.48			N/A	N/A
C - A12 South	1.50	0.52	1.38	1.98	2.56			N/A	N/A
D - Newbourne Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.04	0.40	5.27	9.55			N/A	N/A
B - Foxhall Rd West	1.65	0.04	0.44	4.38	7.25			N/A	N/A
C - A12 South	2.69	0.04	0.40	7.21	13.70			N/A	N/A
D - Newbourne Rd East	0.71	0.06	0.65	1.46	1.46			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.44	0.03	0.29	4.44	16.52			N/A	N/A
B - Foxhall Rd West	12.90	0.64	8.38	29.38	38.48			N/A	N/A
C - A12 South	9.56	0.04	0.44	25.94	51.98			N/A	N/A
D - Newbourne Rd East	2.29	0.03	0.32	3.90	11.83			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.57	0.03	0.27	4.57	4.57			N/A	N/A
B - Foxhall Rd West	20.89	1.12	14.07	47.52	61.94			N/A	N/A
C - A12 South	10.46	0.03	0.34	17.66	54.72			N/A	N/A
D - Newbourne Rd East	2.46	0.03	0.31	3.87	12.53			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.06	0.07	1.02	5.08	7.46			N/A	N/A
B - Foxhall Rd West	1.91	0.03	0.34	4.44	9.97			N/A	N/A
C - A12 South	2.82	0.05	0.45	7.85	13.50			N/A	N/A
D - Newbourne Rd East	0.76	0.05	0.46	1.58	2.24			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.04	0.39	3.18	5.56			N/A	N/A
B - Foxhall Rd West	0.83	0.03	0.27	0.83	1.89			N/A	N/A
C - A12 South	1.53	0.03	0.32	2.93	7.96			N/A	N/A
D - Newbourne Rd East	0.41	0.03	0.32	1.33	1.60			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	896	100.000
B - Foxhall Rd West		ONE HOUR	✓	252	100.000
C - A12 South		ONE HOUR	✓	769	100.000
D - Newbourne Rd East		ONE HOUR	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	824	33
	B - Foxhall Rd West	144	0	82	26
	C - A12 South	698	39	0	33
	D - Newbourne Rd East	16	23	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	6
	B - Foxhall Rd West	1	0	10	11
	C - A12 South	10	5	0	6
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.22	0.6	2.8	A	822	1234
B - Foxhall Rd West	0.24	4.12	0.3	1.3	A	231	347
C - A12 South	0.32	2.00	0.5	1.9	A	706	1059
D - Newbourne Rd East	0.09	4.37	0.1	0.5	A	69	103

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	675	169	106	2642	0.255	673	644	0.0	0.3	1.829	A
B - Foxhall Rd West	190	47	561	1293	0.147	189	76	0.0	0.2	3.260	A
C - A12 South	579	145	59	2666	0.217	578	708	0.0	0.3	1.724	A
D - Newbourne Rd East	57	14	710	1062	0.053	56	69	0.0	0.1	3.581	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	806	201	127	2628	0.307	805	770	0.3	0.4	1.974	A
B - Foxhall Rd West	227	57	671	1233	0.184	226	91	0.2	0.2	3.574	A
C - A12 South	691	173	71	2659	0.260	691	846	0.3	0.4	1.828	A
D - Newbourne Rd East	67	17	850	997	0.068	67	82	0.1	0.1	3.874	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	987	247	155	2610	0.378	986	943	0.4	0.6	2.215	A
B - Foxhall Rd West	277	69	821	1152	0.241	277	112	0.2	0.3	4.111	A
C - A12 South	847	212	87	2650	0.320	846	1036	0.4	0.5	1.996	A
D - Newbourne Rd East	83	21	1040	908	0.091	83	101	0.1	0.1	4.363	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	987	247	155	2610	0.378	987	944	0.6	0.6	2.217	A
B - Foxhall Rd West	277	69	822	1152	0.241	277	112	0.3	0.3	4.115	A
C - A12 South	847	212	87	2650	0.320	847	1037	0.5	0.5	1.996	A
D - Newbourne Rd East	83	21	1041	907	0.091	83	101	0.1	0.1	4.365	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	806	201	127	2628	0.307	806	771	0.6	0.4	1.977	A
B - Foxhall Rd West	227	57	671	1233	0.184	227	92	0.3	0.2	3.578	A
C - A12 South	691	173	71	2659	0.260	692	848	0.5	0.4	1.832	A
D - Newbourne Rd East	67	17	851	996	0.068	68	82	0.1	0.1	3.879	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	675	169	106	2642	0.255	675	646	0.4	0.3	1.833	A
B - Foxhall Rd West	190	47	562	1292	0.147	190	77	0.2	0.2	3.266	A
C - A12 South	579	145	59	2666	0.217	579	710	0.4	0.3	1.727	A
D - Newbourne Rd East	57	14	712	1061	0.053	57	69	0.1	0.1	3.584	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Foxhall Rd West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.03	0.25	0.61	0.61			N/A	N/A
B - Foxhall Rd West	0.32	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.47	0.03	0.25	0.47	0.48			N/A	N/A
D - Newbourne Rd East	0.10	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.03	0.29	1.23	2.76			N/A	N/A
B - Foxhall Rd West	0.32	0.03	0.32	1.07	1.32			N/A	N/A
C - A12 South	0.47	0.03	0.32	1.43	1.88			N/A	N/A
D - Newbourne Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Foxhall Rd West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D - Newbourne Rd East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	24.66	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1676	100.000
B - Foxhall Rd West		ONE HOUR	✓	575	100.000
C - A12 South		ONE HOUR	✓	1674	100.000
D - Newbourne Rd East		ONE HOUR	✓	223	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	232	1384	60
	B - Foxhall Rd West	346	0	165	64
	C - A12 South	1529	94	0	51
	D - Newbourne Rd East	119	36	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	12
	B - Foxhall Rd West	1	0	8	10
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	12	18	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	5.25	2.7	5.9	A	1538	2307
B - Foxhall Rd West	1.05	143.46	26.8	68.5	F	528	791
C - A12 South	0.74	5.65	2.9	6.3	A	1536	2304
D - Newbourne Rd East	0.50	14.95	1.0	4.8	B	204	306

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1262	315	209	2583	0.488	1258	1495	0.0	0.9	2.708	A
B - Foxhall Rd West	433	108	1275	920	0.470	429	271	0.0	0.9	7.282	A
C - A12 South	1260	315	289	2562	0.492	1256	1213	0.0	1.0	2.749	A
D - Newbourne Rd East	168	42	1336	767	0.218	166	131	0.0	0.3	5.983	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1507	377	249	2557	0.589	1505	1789	0.9	1.4	3.415	A
B - Foxhall Rd West	517	129	1525	786	0.658	513	324	0.9	1.8	13.006	B
C - A12 South	1505	376	346	2527	0.595	1503	1451	1.0	1.5	3.509	A
D - Newbourne Rd East	200	50	1598	647	0.309	199	156	0.3	0.4	8.039	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1845	461	284	2535	0.728	1841	2155	1.4	2.6	5.151	A
B - Foxhall Rd West	633	158	1864	604	1.048	575	396	1.8	16.4	74.700	F
C - A12 South	1843	461	423	2481	0.743	1838	1759	1.5	2.8	5.550	A
D - Newbourne Rd East	245	61	1939	490	0.500	243	186	0.4	1.0	14.462	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1845	461	291	2530	0.729	1845	2171	2.6	2.7	5.252	A
B - Foxhall Rd West	633	158	1870	601	1.054	592	398	16.4	26.8	143.463	F
C - A12 South	1843	461	425	2479	0.743	1843	1768	2.8	2.9	5.651	A
D - Newbourne Rd East	245	61	1948	485	0.505	245	188	1.0	1.0	14.954	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1507	377	291	2531	0.595	1511	1859	2.7	1.5	3.550	A
B - Foxhall Rd West	517	129	1534	781	0.662	616	326	26.8	2.1	35.026	E
C - A12 South	1505	376	349	2525	0.596	1510	1487	2.9	1.5	3.564	A
D - Newbourne Rd East	200	50	1634	630	0.318	202	168	1.0	0.5	8.461	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1262	315	212	2581	0.489	1264	1507	1.5	1.0	2.738	A
B - Foxhall Rd West	433	108	1281	917	0.472	438	272	2.1	0.9	7.581	A
C - A12 South	1260	315	292	2561	0.492	1262	1221	1.5	1.0	2.776	A
D - Newbourne Rd East	168	42	1344	763	0.220	168	132	0.5	0.3	6.060	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.87	0.11	0.91	1.50	1.53			N/A	N/A
C - A12 South	0.96	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.04	0.44	3.68	5.93			N/A	N/A
B - Foxhall Rd West	1.84	0.04	0.44	4.95	8.32			N/A	N/A
C - A12 South	1.46	0.04	0.43	3.80	6.27			N/A	N/A
D - Newbourne Rd East	0.44	0.00	0.00	0.44	0.44			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.62	0.03	0.27	2.62	2.62			N/A	N/A
B - Foxhall Rd West	16.45	1.35	12.42	33.96	42.69			N/A	N/A
C - A12 South	2.82	0.03	0.27	2.82	3.37			N/A	N/A
D - Newbourne Rd East	0.97	0.03	0.26	0.97	0.97			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.66	0.03	0.26	2.66	2.66			N/A	N/A
B - Foxhall Rd West	26.82	2.85	20.86	54.88	68.51			N/A	N/A
C - A12 South	2.86	0.03	0.26	2.86	2.86			N/A	N/A
D - Newbourne Rd East	1.00	0.03	0.30	1.32	4.78			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.49	0.13	1.23	2.68	3.44			N/A	N/A
B - Foxhall Rd West	2.08	0.03	0.33	4.45	11.02			N/A	N/A
C - A12 South	1.49	0.10	1.17	2.84	3.77			N/A	N/A
D - Newbourne Rd East	0.47	0.04	0.41	1.24	1.37			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.06	0.65	1.91	2.75			N/A	N/A
B - Foxhall Rd West	0.91	0.03	0.27	0.91	1.59			N/A	N/A
C - A12 South	0.97	0.05	0.54	2.02	2.98			N/A	N/A
D - Newbourne Rd East	0.28	0.03	0.27	0.49	0.92			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	224.88	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1832	100.000
B - Foxhall Rd West		ONE HOUR	✓	617	100.000
C - A12 South		ONE HOUR	✓	2203	100.000
D - Newbourne Rd East		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	176	1533	123
	B - Foxhall Rd West	346	0	195	77
	C - A12 South	1927	167	1	109
	D - Newbourne Rd East	192	35	147	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	8	7	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	7.03	3.9	11.4	A	1681	2521
B - Foxhall Rd West	2.19	1711.60	206.7	206.9	F	566	850
C - A12 South	0.98	36.76	23.9	110.7	E	2022	3033
D - Newbourne Rd East	0.85	44.64	4.8	25.8	E	343	514

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1379	345	284	2511	0.549	1374	1844	0.0	1.2	3.153	A
B - Foxhall Rd West	465	116	1670	721	0.644	458	283	0.0	1.7	13.342	B
C - A12 South	1659	415	301	2562	0.647	1652	1405	0.0	1.8	3.922	A
D - Newbourne Rd East	281	70	1427	756	0.372	279	231	0.0	0.6	7.517	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1647	412	323	2487	0.662	1644	2184	1.2	1.9	4.254	A
B - Foxhall Rd West	555	139	1996	545	1.018	511	338	1.7	12.7	71.812	F
C - A12 South	1981	495	360	2527	0.784	1974	1669	1.8	3.5	6.433	A
D - Newbourne Rd East	336	84	1695	625	0.537	334	272	0.6	1.1	12.260	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2017	504	264	2523	0.799	2009	2460	1.9	3.8	6.906	A
B - Foxhall Rd West	680	170	2392	332	2.048	331	409	12.7	99.8	644.029	F
C - A12 South	2426	606	435	2482	0.978	2366	1944	3.5	18.5	23.833	C
D - Newbourne Rd East	411	103	1980	486	0.846	399	293	1.1	4.3	36.827	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2017	504	256	2528	0.798	2017	2486	3.8	3.9	7.032	A
B - Foxhall Rd West	680	170	2433	310	2.194	310	413	99.8	192.3	1711.602	F
C - A12 South	2426	606	442	2477	0.979	2404	1947	18.5	23.9	36.755	E
D - Newbourne Rd East	411	103	1980	486	0.846	410	293	4.3	4.8	44.639	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1647	412	322	2488	0.662	1654	2261	3.9	2.0	4.356	A
B - Foxhall Rd West	555	139	2085	497	1.116	497	347	192.3	206.7	1286.486	F
C - A12 South	1981	495	371	2520	0.786	2061	1680	23.9	3.8	9.192	A
D - Newbourne Rd East	336	84	1701	623	0.540	350	275	4.8	1.2	13.869	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1379	345	395	2444	0.564	1382	2000	2.0	1.3	3.400	A
B - Foxhall Rd West	465	116	1686	712	0.652	709	285	206.7	145.7	895.732	F
C - A12 South	1659	415	305	2560	0.648	1667	1492	3.8	1.9	4.062	A
D - Newbourne Rd East	281	70	1513	714	0.394	284	263	1.2	0.7	8.396	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.74	0.03	0.26	1.74	1.74			N/A	N/A
C - A12 South	1.81	0.25	1.04	2.99	3.82			N/A	N/A
D - Newbourne Rd East	0.59	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.93	0.04	0.43	5.23	8.99			N/A	N/A
B - Foxhall Rd West	12.74	0.10	3.26	36.27	55.03			N/A	N/A
C - A12 South	3.51	0.04	0.43	9.74	17.87			N/A	N/A
D - Newbourne Rd East	1.13	0.06	0.68	2.47	3.54			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.84	0.03	0.28	3.84	11.43			N/A	N/A
B - Foxhall Rd West	99.81	59.63	96.92	134.91	147.23			N/A	N/A
C - A12 South	18.46	0.14	6.32	51.36	75.48			N/A	N/A
D - Newbourne Rd East	4.30	0.05	0.48	12.23	21.25			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.89	0.03	0.27	3.89	3.89			N/A	N/A
B - Foxhall Rd West	192.28	191.05	191.50	192.28	192.28			N/A	N/A
C - A12 South	23.86	0.09	4.49	70.07	110.65			N/A	N/A
D - Newbourne Rd East	4.77	0.04	0.38	11.96	25.80			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.98	0.07	1.06	4.79	6.88			N/A	N/A
B - Foxhall Rd West	206.70	>199	>199	>199	>199			N/A	N/A
C - A12 South	3.81	0.04	0.43	10.57	19.51			N/A	N/A
D - Newbourne Rd East	1.21	0.04	0.38	3.05	5.53			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.04	0.44	3.33	5.36			N/A	N/A
B - Foxhall Rd West	145.65	>199	>199	>199	>199			N/A	N/A
C - A12 South	1.86	0.03	0.30	2.25	8.83			N/A	N/A
D - Newbourne Rd East	0.66	0.03	0.30	1.45	3.13			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	49.04	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1812	100.000
B - Foxhall Rd West		ONE HOUR	✓	609	100.000
C - A12 South		ONE HOUR	✓	1953	100.000
D - Newbourne Rd East		ONE HOUR	✓	352	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	289	1381	140
	B - Foxhall Rd West	406	0	147	56
	C - A12 South	1663	222	1	68
	D - Newbourne Rd East	123	90	138	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	5
	B - Foxhall Rd West	2	0	6	5
	C - A12 South	4	5	0	2
	D - Newbourne Rd East	3	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.19	3.4	7.7	A	1663	2494
B - Foxhall Rd West	1.22	315.63	64.6	106.0	F	559	838
C - A12 South	0.87	10.66	6.2	29.8	B	1793	2689
D - Newbourne Rd East	0.74	25.87	2.7	13.3	D	323	484

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1364	341	204	2610	0.523	1360	1644	0.0	1.1	2.870	A
B - Foxhall Rd West	458	115	1393	887	0.517	454	450	0.0	1.0	8.244	A
C - A12 South	1471	368	378	2593	0.567	1465	1250	0.0	1.3	3.177	A
D - Newbourne Rd East	265	66	1365	829	0.320	263	199	0.0	0.5	6.345	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1629	407	243	2586	0.630	1627	1965	1.1	1.7	3.743	A
B - Foxhall Rd West	547	137	1667	745	0.735	541	539	1.0	2.6	17.182	C
C - A12 South	1756	439	453	2548	0.689	1753	1494	1.3	2.2	4.506	A
D - Newbourne Rd East	316	79	1632	695	0.455	315	238	0.5	0.8	9.434	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1995	499	258	2577	0.774	1989	2317	1.7	3.3	6.055	A
B - Foxhall Rd West	670	168	2030	556	1.206	545	657	2.6	33.9	137.495	F
C - A12 South	2151	538	551	2488	0.864	2136	1797	2.2	5.9	9.832	A
D - Newbourne Rd East	388	97	1967	528	0.734	381	280	0.8	2.5	23.480	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1995	499	259	2576	0.775	1995	2332	3.3	3.4	6.191	A
B - Foxhall Rd West	670	168	2045	548	1.222	547	661	33.9	64.6	315.625	F
C - A12 South	2151	538	556	2485	0.865	2150	1805	5.9	6.2	10.655	B
D - Newbourne Rd East	388	97	1974	525	0.739	387	281	2.5	2.7	25.868	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1629	407	304	2547	0.640	1635	2105	3.4	1.8	3.977	A
B - Foxhall Rd West	547	137	1687	734	0.745	723	544	64.6	20.6	215.735	F
C - A12 South	1756	439	459	2544	0.690	1772	1548	6.2	2.3	4.754	A
D - Newbourne Rd East	316	79	1684	669	0.473	323	256	2.7	0.9	10.621	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1364	341	232	2593	0.526	1367	1708	1.8	1.1	2.942	A
B - Foxhall Rd West	458	115	1403	882	0.520	537	453	20.6	1.1	13.041	B
C - A12 South	1471	368	382	2591	0.568	1474	1276	2.3	1.3	3.235	A
D - Newbourne Rd East	265	66	1391	815	0.325	267	207	0.9	0.5	6.580	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.05	0.06	0.69	2.15	3.03			N/A	N/A
C - A12 South	1.30	0.56	1.19	1.65	1.84			N/A	N/A
D - Newbourne Rd East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.04	0.42	4.51	7.71			N/A	N/A
B - Foxhall Rd West	2.59	0.04	0.45	7.16	12.31			N/A	N/A
C - A12 South	2.18	0.04	0.40	5.85	10.88			N/A	N/A
D - Newbourne Rd East	0.82	0.06	0.70	1.41	1.85			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.33	0.03	0.28	3.33	6.69			N/A	N/A
B - Foxhall Rd West	33.86	12.89	31.16	53.61	61.48			N/A	N/A
C - A12 South	5.90	0.03	0.32	8.80	29.79			N/A	N/A
D - Newbourne Rd East	2.51	0.03	0.32	4.76	13.28			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.38	0.03	0.26	3.38	3.38			N/A	N/A
B - Foxhall Rd West	64.63	31.52	61.44	94.80	106.02			N/A	N/A
C - A12 South	6.16	0.03	0.29	6.16	16.79			N/A	N/A
D - Newbourne Rd East	2.67	0.03	0.31	3.71	13.15			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.09	1.23	3.83	5.22			N/A	N/A
B - Foxhall Rd West	20.65	5.07	17.89	36.25	43.01			N/A	N/A
C - A12 South	2.27	0.05	0.62	6.07	9.58			N/A	N/A
D - Newbourne Rd East	0.92	0.05	0.48	1.94	2.90			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.05	0.47	2.68	4.06			N/A	N/A
B - Foxhall Rd West	1.11	0.03	0.26	1.11	1.11			N/A	N/A
C - A12 South	1.32	0.03	0.35	3.23	6.63			N/A	N/A
D - Newbourne Rd East	0.49	0.03	0.32	1.46	1.94			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	20.21	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1953	100.000
B - Foxhall Rd West		ONE HOUR	✓	516	100.000
C - A12 South		ONE HOUR	✓	2108	100.000
D - Newbourne Rd East		ONE HOUR	✓	316	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	327	1497	128
	B - Foxhall Rd West	292	0	138	86
	C - A12 South	1689	339	1	80
	D - Newbourne Rd East	73	125	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	7.90	4.6	16.9	A	1793	2689
B - Foxhall Rd West	0.96	75.59	11.5	48.8	F	473	710
C - A12 South	0.92	17.27	10.5	55.3	C	1934	2901
D - Newbourne Rd East	0.73	27.05	2.5	12.8	D	290	435

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1471	368	228	2668	0.551	1466	1540	0.0	1.2	2.982	A
B - Foxhall Rd West	388	97	1382	929	0.418	385	593	0.0	0.7	6.588	A
C - A12 South	1587	397	394	2631	0.603	1581	1316	0.0	1.5	3.409	A
D - Newbourne Rd East	238	60	1474	825	0.289	237	220	0.0	0.4	6.106	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1756	439	272	2640	0.665	1753	1841	1.2	2.0	4.044	A
B - Foxhall Rd West	464	116	1653	786	0.590	461	709	0.7	1.4	10.972	B
C - A12 South	1895	474	472	2583	0.734	1890	1574	1.5	2.7	5.157	A
D - Newbourne Rd East	284	71	1763	679	0.419	283	263	0.4	0.7	9.066	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2151	538	322	2609	0.824	2141	2223	2.0	4.5	7.524	A
B - Foxhall Rd West	568	142	2005	600	0.946	540	862	1.4	8.3	47.162	E
C - A12 South	2321	580	574	2521	0.921	2293	1915	2.7	9.6	14.355	B
D - Newbourne Rd East	348	87	2147	486	0.717	342	316	0.7	2.3	24.072	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2151	538	330	2605	0.826	2150	2251	4.5	4.6	7.897	A
B - Foxhall Rd West	568	142	2026	589	0.964	555	870	8.3	11.5	75.590	F
C - A12 South	2321	580	579	2517	0.922	2317	1928	9.6	10.5	17.266	C
D - Newbourne Rd East	348	87	2159	479	0.727	348	320	2.3	2.5	27.054	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1756	439	292	2628	0.668	1766	1896	4.6	2.0	4.226	A
B - Foxhall Rd West	464	116	1684	770	0.603	503	720	11.5	1.6	15.497	C
C - A12 South	1895	474	479	2579	0.735	1926	1599	10.5	2.8	5.764	A
D - Newbourne Rd East	284	71	1787	667	0.426	291	272	2.5	0.8	9.751	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1471	368	231	2666	0.552	1474	1553	2.0	1.2	3.026	A
B - Foxhall Rd West	388	97	1392	924	0.420	392	597	1.6	0.7	6.808	A
C - A12 South	1587	397	398	2629	0.604	1592	1325	2.8	1.5	3.491	A
D - Newbourne Rd East	238	60	1483	820	0.290	240	222	0.8	0.4	6.215	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.08	1.25	1.63			N/A	N/A
B - Foxhall Rd West	0.71	0.27	0.95	1.39	1.45			N/A	N/A
C - A12 South	1.51	0.52	1.38	1.99	2.57			N/A	N/A
D - Newbourne Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.04	0.40	5.27	9.56			N/A	N/A
B - Foxhall Rd West	1.40	0.05	0.45	3.59	5.71			N/A	N/A
C - A12 South	2.70	0.04	0.40	7.23	13.73			N/A	N/A
D - Newbourne Rd East	0.71	0.06	0.64	1.47	1.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.48	0.03	0.29	4.48	16.89			N/A	N/A
B - Foxhall Rd West	8.26	0.12	2.97	22.20	32.11			N/A	N/A
C - A12 South	9.61	0.04	0.44	26.16	52.22			N/A	N/A
D - Newbourne Rd East	2.32	0.03	0.32	4.05	12.04			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.61	0.03	0.27	4.61	4.61			N/A	N/A
B - Foxhall Rd West	11.51	0.10	3.12	32.46	48.85			N/A	N/A
C - A12 South	10.53	0.03	0.34	18.00	55.27			N/A	N/A
D - Newbourne Rd East	2.50	0.03	0.32	4.02	12.81			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.06	0.98	5.07	7.48			N/A	N/A
B - Foxhall Rd West	1.57	0.04	0.36	3.90	7.96			N/A	N/A
C - A12 South	2.83	0.05	0.45	7.88	13.55			N/A	N/A
D - Newbourne Rd East	0.76	0.05	0.45	1.58	2.27			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.04	0.39	3.18	5.58			N/A	N/A
B - Foxhall Rd West	0.73	0.03	0.28	0.73	2.61			N/A	N/A
C - A12 South	1.54	0.03	0.32	2.93	7.97			N/A	N/A
D - Newbourne Rd East	0.41	0.03	0.32	1.33	1.61			N/A	N/A

2023 Reference Case [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	854	100.000
B - Foxhall Rd West		ONE HOUR	✓	201	100.000
C - A12 South		ONE HOUR	✓	714	100.000
D - Newbourne Rd East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	785	30
	B - Foxhall Rd West	98	0	81	22
	C - A12 South	648	38	0	29
	D - Newbourne Rd East	15	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.15	0.6	2.6	A	784	1176
B - Foxhall Rd West	0.19	3.79	0.2	0.5	A	185	277
C - A12 South	0.30	1.94	0.4	1.5	A	655	983
D - Newbourne Rd East	0.08	4.25	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	643	161	99	2646	0.243	642	571	0.0	0.3	1.796	A
B - Foxhall Rd West	151	38	519	1301	0.116	151	73	0.0	0.1	3.129	A
C - A12 South	538	134	56	2660	0.202	537	676	0.0	0.3	1.695	A
D - Newbourne Rd East	52	13	681	1069	0.049	52	61	0.0	0.1	3.537	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	768	192	119	2633	0.292	768	683	0.3	0.4	1.929	A
B - Foxhall Rd West	181	45	621	1246	0.145	181	88	0.1	0.2	3.377	A
C - A12 South	642	161	67	2654	0.242	642	809	0.3	0.3	1.788	A
D - Newbourne Rd East	62	16	814	1007	0.062	62	72	0.1	0.1	3.807	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	940	235	145	2616	0.360	940	836	0.4	0.6	2.148	A
B - Foxhall Rd West	222	55	761	1172	0.189	221	107	0.2	0.2	3.787	A
C - A12 South	786	197	82	2645	0.297	786	991	0.3	0.4	1.936	A
D - Newbourne Rd East	76	19	997	923	0.082	76	89	0.1	0.1	4.251	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	940	235	146	2616	0.360	940	837	0.6	0.6	2.148	A
B - Foxhall Rd West	222	55	761	1172	0.189	222	108	0.2	0.2	3.788	A
C - A12 South	786	197	82	2645	0.297	786	991	0.4	0.4	1.936	A
D - Newbourne Rd East	76	19	997	922	0.082	76	89	0.1	0.1	4.253	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	768	192	119	2633	0.292	768	684	0.6	0.4	1.932	A
B - Foxhall Rd West	181	45	622	1246	0.145	181	88	0.2	0.2	3.383	A
C - A12 South	642	161	67	2654	0.242	642	810	0.4	0.3	1.789	A
D - Newbourne Rd East	62	16	815	1007	0.062	62	73	0.1	0.1	3.812	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	643	161	100	2646	0.243	643	573	0.4	0.3	1.800	A
B - Foxhall Rd West	151	38	521	1300	0.117	152	74	0.2	0.1	3.136	A
C - A12 South	538	134	56	2660	0.202	538	678	0.3	0.3	1.695	A
D - Newbourne Rd East	52	13	682	1068	0.049	52	61	0.1	0.1	3.543	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.25	0.56	0.56			N/A	N/A
B - Foxhall Rd West	0.23	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.30	1.38	2.63			N/A	N/A
B - Foxhall Rd West	0.23	0.03	0.26	0.47	0.50			N/A	N/A
C - A12 South	0.42	0.03	0.33	1.34	1.47			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Foxhall Rd West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Foxhall Rd West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Reference Case [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1509	100.000
B - Foxhall Rd West		ONE HOUR	✓	468	100.000
C - A12 South		ONE HOUR	✓	1566	100.000
D - Newbourne Rd East		ONE HOUR	✓	210	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	149	1303	57
	B - Foxhall Rd West	253	0	164	51
	C - A12 South	1425	93	0	48
	D - Newbourne Rd East	117	30	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	2	0	8	11
	C - A12 South	9	5	0	12
	D - Newbourne Rd East	12	20	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.66	4.28	2.0	3.9	A	1385	2077
B - Foxhall Rd West	0.79	25.92	3.5	17.9	D	429	644
C - A12 South	0.69	4.55	2.2	4.6	A	1437	2155
D - Newbourne Rd East	0.42	11.21	0.7	3.5	B	192	288

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1136	284	196	2561	0.444	1133	1347	0.0	0.8	2.516	A
B - Foxhall Rd West	352	88	1193	951	0.371	350	204	0.0	0.6	5.970	A
C - A12 South	1179	295	221	2578	0.457	1176	1148	0.0	0.8	2.559	A
D - Newbourne Rd East	158	39	1212	813	0.194	157	117	0.0	0.2	5.475	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	339	235	2536	0.535	1355	1612	0.8	1.1	3.044	A
B - Foxhall Rd West	421	105	1428	825	0.510	419	243	0.6	1.0	8.831	A
C - A12 South	1408	352	265	2552	0.552	1406	1374	0.8	1.2	3.139	A
D - Newbourne Rd East	188	47	1450	703	0.268	188	140	0.2	0.4	6.979	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1661	415	284	2504	0.663	1658	1968	1.1	1.9	4.239	A
B - Foxhall Rd West	515	129	1746	653	0.788	506	298	1.0	3.3	23.129	C
C - A12 South	1724	431	324	2516	0.685	1720	1678	1.2	2.1	4.507	A
D - Newbourne Rd East	231	58	1772	554	0.416	229	170	0.4	0.7	11.032	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1661	415	288	2502	0.664	1661	1976	1.9	2.0	4.284	A
B - Foxhall Rd West	515	129	1750	651	0.791	514	299	3.3	3.5	25.921	D
C - A12 South	1724	431	325	2515	0.686	1724	1684	2.1	2.2	4.552	A
D - Newbourne Rd East	231	58	1778	552	0.418	231	171	0.7	0.7	11.214	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1357	339	240	2532	0.536	1360	1624	2.0	1.2	3.077	A
B - Foxhall Rd West	421	105	1434	822	0.512	431	245	3.5	1.1	9.430	A
C - A12 South	1408	352	267	2551	0.552	1411	1382	2.2	1.2	3.172	A
D - Newbourne Rd East	188	47	1459	699	0.269	190	141	0.7	0.4	7.084	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1136	284	198	2559	0.444	1138	1355	1.2	0.8	2.535	A
B - Foxhall Rd West	352	88	1199	948	0.372	354	204	1.1	0.6	6.083	A
C - A12 South	1179	295	223	2577	0.457	1180	1154	1.2	0.8	2.581	A
D - Newbourne Rd East	158	39	1218	811	0.195	158	118	0.4	0.2	5.522	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.58	0.55	1.00	1.40	1.45			N/A	N/A
C - A12 South	0.84	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.05	0.51	2.66	3.92			N/A	N/A
B - Foxhall Rd West	1.02	0.05	0.64	2.10	2.99			N/A	N/A
C - A12 South	1.22	0.05	0.48	2.93	4.55			N/A	N/A
D - Newbourne Rd East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.94	0.03	0.26	1.94	1.94			N/A	N/A
B - Foxhall Rd West	3.32	0.04	0.35	7.61	17.90			N/A	N/A
C - A12 South	2.14	0.03	0.26	2.14	2.14			N/A	N/A
D - Newbourne Rd East	0.70	0.03	0.26	0.70	0.70			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.03	0.26	1.96	1.96			N/A	N/A
B - Foxhall Rd West	3.54	0.03	0.32	5.14	17.70			N/A	N/A
C - A12 South	2.16	0.03	0.26	2.16	2.16			N/A	N/A
D - Newbourne Rd East	0.71	0.03	0.30	1.18	3.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.27	1.11	1.66	1.89			N/A	N/A
B - Foxhall Rd West	1.07	0.04	0.43	2.63	4.14			N/A	N/A
C - A12 South	1.24	0.19	1.15	1.85	2.26			N/A	N/A
D - Newbourne Rd East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.08	0.80	1.03	1.57			N/A	N/A
B - Foxhall Rd West	0.60	0.03	0.32	1.20	2.76			N/A	N/A
C - A12 South	0.85	0.07	0.77	1.40	1.83			N/A	N/A
D - Newbourne Rd East	0.24	0.03	0.25	0.45	0.48			N/A	N/A

2023 Reference Case [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	98.95	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1712	100.000
B - Foxhall Rd West		ONE HOUR	✓	539	100.000
C - A12 South		ONE HOUR	✓	2112	100.000
D - Newbourne Rd East		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	160	1430	122
	B - Foxhall Rd West	288	0	194	58
	C - A12 South	1840	167	1	105
	D - Newbourne Rd East	187	74	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	9	3	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.01	3.1	7.2	A	1571	2356
B - Foxhall Rd West	1.69	762.96	122.1	162.5	F	495	742
C - A12 South	0.95	24.49	14.9	81.7	C	1938	2907
D - Newbourne Rd East	0.72	24.59	2.5	12.5	C	315	473

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1289	322	267	2491	0.517	1284	1733	0.0	1.1	2.973	A
B - Foxhall Rd West	406	102	1599	752	0.540	401	300	0.0	1.1	10.154	B
C - A12 South	1590	398	315	2539	0.626	1584	1280	0.0	1.7	3.743	A
D - Newbourne Rd East	259	65	1338	788	0.328	257	213	0.0	0.5	6.750	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	385	315	2462	0.625	1536	2069	1.1	1.6	3.880	A
B - Foxhall Rd West	485	121	1911	583	0.832	473	359	1.1	4.1	30.127	D
C - A12 South	1899	475	377	2502	0.759	1893	1528	1.7	3.1	5.862	A
D - Newbourne Rd East	309	77	1598	661	0.467	307	254	0.5	0.9	10.136	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1885	471	285	2480	0.760	1879	2389	1.6	3.1	5.935	A
B - Foxhall Rd West	594	148	2309	368	1.615	365	436	4.1	61.2	346.382	F
C - A12 South	2326	581	458	2453	0.948	2287	1791	3.1	12.8	18.441	C
D - Newbourne Rd East	378	95	1877	523	0.723	372	287	0.9	2.4	22.958	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1885	471	280	2483	0.759	1885	2411	3.1	3.1	6.011	A
B - Foxhall Rd West	594	148	2341	350	1.694	350	440	61.2	122.1	762.959	F
C - A12 South	2326	581	463	2450	0.949	2318	1792	12.8	14.9	24.493	C
D - Newbourne Rd East	378	95	1877	523	0.723	378	287	2.4	2.5	24.586	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	385	354	2438	0.631	1544	2159	3.1	1.7	4.050	A
B - Foxhall Rd West	485	121	1963	554	0.875	550	365	122.1	105.9	669.937	F
C - A12 South	1899	475	383	2498	0.760	1945	1564	14.9	3.3	7.045	A
D - Newbourne Rd East	309	77	1632	644	0.480	315	266	2.5	0.9	11.132	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1289	322	424	2397	0.538	1291	1926	1.7	1.2	3.264	A
B - Foxhall Rd West	406	102	1612	744	0.546	737	302	105.9	23.1	319.287	F
C - A12 South	1590	398	318	2537	0.627	1597	1406	3.3	1.7	3.853	A
D - Newbourne Rd East	259	65	1464	728	0.355	260	250	0.9	0.6	7.724	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.15	0.03	0.31	1.82	5.72			N/A	N/A
C - A12 South	1.66	0.40	1.48	2.58	2.99			N/A	N/A
D - Newbourne Rd East	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.65	0.04	0.44	4.38	7.25			N/A	N/A
B - Foxhall Rd West	4.12	0.05	0.45	11.63	20.77			N/A	N/A
C - A12 South	3.07	0.04	0.41	8.40	15.60			N/A	N/A
D - Newbourne Rd East	0.86	0.07	0.77	1.45	1.86			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.08	0.03	0.27	3.08	5.21			N/A	N/A
B - Foxhall Rd West	61.24	35.52	59.16	83.51	91.45			N/A	N/A
C - A12 South	12.83	0.06	1.04	37.73	63.24			N/A	N/A
D - Newbourne Rd East	2.39	0.03	0.32	4.25	12.48			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.11	0.03	0.26	3.11	3.11			N/A	N/A
B - Foxhall Rd West	122.10	85.88	120.13	152.39	162.49			N/A	N/A
C - A12 South	14.86	0.04	0.44	39.80	81.72			N/A	N/A
D - Newbourne Rd East	2.49	0.03	0.30	2.85	11.70			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.09	1.22	3.65	4.90			N/A	N/A
B - Foxhall Rd West	105.86	69.05	103.54	137.25	147.99			N/A	N/A
C - A12 South	3.26	0.04	0.43	9.09	16.33			N/A	N/A
D - Newbourne Rd East	0.94	0.05	0.48	2.00	2.99			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.05	0.58	2.70	3.93			N/A	N/A
B - Foxhall Rd West	23.07	1.85	17.33	48.56	61.31			N/A	N/A
C - A12 South	1.70	0.03	0.31	2.69	8.59			N/A	N/A
D - Newbourne Rd East	0.56	0.03	0.34	1.19	2.17			N/A	N/A

2023 Reference Case [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	8.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1733	100.000
B - Foxhall Rd West		ONE HOUR	✓	411	100.000
C - A12 South		ONE HOUR	✓	1773	100.000
D - Newbourne Rd East		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	273	1322	136
	B - Foxhall Rd West	216	0	147	48
	C - A12 South	1496	218	1	59
	D - Newbourne Rd East	110	105	93	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	5
	B - Foxhall Rd West	5	0	6	6
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	4	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.74	3.0	6.7	A	1590	2386
B - Foxhall Rd West	0.71	19.33	2.4	10.5	C	377	565
C - A12 South	0.79	6.89	3.7	9.7	A	1627	2441
D - Newbourne Rd East	0.63	17.96	1.7	7.3	C	284	425

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1305	326	191	2591	0.504	1301	1368	0.0	1.0	2.783	A
B - Foxhall Rd West	309	77	1252	939	0.329	307	447	0.0	0.5	5.684	A
C - A12 South	1335	334	368	2578	0.518	1331	1172	0.0	1.1	2.876	A
D - Newbourne Rd East	233	58	1309	848	0.274	231	183	0.0	0.4	5.824	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1558	390	229	2567	0.607	1556	1637	1.0	1.5	3.551	A
B - Foxhall Rd West	369	92	1498	812	0.455	368	534	0.5	0.8	8.081	A
C - A12 South	1594	399	440	2535	0.629	1592	1402	1.1	1.7	3.810	A
D - Newbourne Rd East	278	69	1566	718	0.387	277	219	0.4	0.6	8.135	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1908	477	279	2537	0.752	1902	1997	1.5	3.0	5.626	A
B - Foxhall Rd West	452	113	1829	641	0.706	447	653	0.8	2.2	18.008	C
C - A12 South	1953	488	537	2476	0.789	1945	1713	1.7	3.6	6.683	A
D - Newbourne Rd East	340	85	1914	543	0.626	336	268	0.6	1.6	17.079	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1908	477	281	2535	0.753	1908	2008	3.0	3.0	5.738	A
B - Foxhall Rd West	452	113	1837	637	0.710	452	656	2.2	2.4	19.333	C
C - A12 South	1953	488	540	2474	0.789	1952	1720	3.6	3.7	6.891	A
D - Newbourne Rd East	340	85	1921	540	0.630	340	269	1.6	1.7	17.964	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1558	390	233	2565	0.607	1564	1651	3.0	1.6	3.615	A
B - Foxhall Rd West	369	92	1509	807	0.458	375	539	2.4	0.9	8.460	A
C - A12 South	1594	399	445	2532	0.630	1602	1412	3.7	1.7	3.906	A
D - Newbourne Rd East	278	69	1576	713	0.389	282	221	1.7	0.6	8.417	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1305	326	193	2590	0.504	1307	1377	1.6	1.0	2.810	A
B - Foxhall Rd West	309	77	1259	935	0.331	311	449	0.9	0.5	5.776	A
C - A12 South	1335	334	371	2577	0.518	1338	1179	1.7	1.1	2.910	A
D - Newbourne Rd East	233	58	1316	844	0.276	234	184	0.6	0.4	5.905	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C - A12 South	1.07	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.43	3.99	6.71			N/A	N/A
B - Foxhall Rd West	0.82	0.06	0.72	1.38	1.82			N/A	N/A
C - A12 South	1.68	0.04	0.41	4.48	7.77			N/A	N/A
D - Newbourne Rd East	0.62	0.06	0.69	1.35	1.43			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.96	0.03	0.27	2.96	4.05			N/A	N/A
B - Foxhall Rd West	2.24	0.03	0.30	2.55	10.50			N/A	N/A
C - A12 South	3.61	0.03	0.28	3.61	9.66			N/A	N/A
D - Newbourne Rd East	1.59	0.03	0.28	1.59	5.44			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	2.35	0.03	0.29	2.35	10.07			N/A	N/A
C - A12 South	3.68	0.03	0.27	3.68	3.68			N/A	N/A
D - Newbourne Rd East	1.65	0.03	0.29	1.65	7.30			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.10	1.18	3.07	4.12			N/A	N/A
B - Foxhall Rd West	0.86	0.05	0.52	1.74	2.48			N/A	N/A
C - A12 South	1.72	0.07	1.07	3.88	5.48			N/A	N/A
D - Newbourne Rd East	0.65	0.05	0.54	1.30	1.30			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.05	0.50	2.26	3.34			N/A	N/A
B - Foxhall Rd West	0.50	0.03	0.34	1.47	1.80			N/A	N/A
C - A12 South	1.08	0.04	0.43	2.68	4.27			N/A	N/A
D - Newbourne Rd East	0.38	0.03	0.34	1.21	1.43			N/A	N/A

2023 Reference Case [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1842	100.000
B - Foxhall Rd West		ONE HOUR	✓	391	100.000
C - A12 South		ONE HOUR	✓	1857	100.000
D - Newbourne Rd East		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	302	1410	129
	B - Foxhall Rd West	198	0	137	56
	C - A12 South	1493	332	1	32
	D - Newbourne Rd East	70	125	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	1	0	0	4
	C - A12 South	4	2	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.01	3.3	7.5	A	1691	2536
B - Foxhall Rd West	0.60	12.43	1.5	5.2	B	359	538
C - A12 South	0.81	7.67	4.3	14.6	A	1704	2556
D - Newbourne Rd East	0.57	15.87	1.3	5.9	C	253	379

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1387	347	169	2676	0.518	1383	1321	0.0	1.1	2.775	A
B - Foxhall Rd West	294	74	1198	1018	0.289	293	569	0.0	0.4	4.954	A
C - A12 South	1398	349	374	2619	0.534	1393	1222	0.0	1.1	2.927	A
D - Newbourne Rd East	207	52	1390	860	0.241	206	162	0.0	0.3	5.491	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1656	414	202	2655	0.624	1654	1581	1.1	1.6	3.589	A
B - Foxhall Rd West	351	88	1432	892	0.394	350	681	0.4	0.6	6.628	A
C - A12 South	1669	417	447	2574	0.648	1666	1462	1.1	1.8	3.954	A
D - Newbourne Rd East	247	62	1662	721	0.343	247	194	0.3	0.5	7.572	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2029	507	247	2628	0.772	2022	1929	1.6	3.3	5.878	A
B - Foxhall Rd West	430	108	1749	724	0.594	427	831	0.6	1.4	12.010	B
C - A12 South	2044	511	545	2514	0.813	2035	1786	1.8	4.2	7.369	A
D - Newbourne Rd East	303	76	2032	533	0.569	300	237	0.5	1.3	15.261	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2029	507	248	2627	0.772	2028	1939	3.3	3.3	6.010	A
B - Foxhall Rd West	430	108	1757	719	0.598	430	835	1.4	1.5	12.425	B
C - A12 South	2044	511	548	2512	0.814	2044	1793	4.2	4.3	7.668	A
D - Newbourne Rd East	303	76	2039	530	0.572	303	238	1.3	1.3	15.866	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1656	414	204	2654	0.624	1663	1594	3.3	1.7	3.656	A
B - Foxhall Rd West	351	88	1444	887	0.396	354	686	1.5	0.7	6.804	A
C - A12 South	1669	417	451	2572	0.649	1679	1472	4.3	1.9	4.075	A
D - Newbourne Rd East	247	62	1672	716	0.345	251	195	1.3	0.5	7.779	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1387	347	170	2675	0.519	1389	1329	1.7	1.1	2.805	A
B - Foxhall Rd West	294	74	1204	1014	0.290	295	573	0.7	0.4	5.014	A
C - A12 South	1398	349	376	2617	0.534	1401	1229	1.9	1.2	2.967	A
D - Newbourne Rd East	207	52	1397	857	0.242	208	163	0.5	0.3	5.556	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A12 South	1.14	0.55	1.02	1.44	1.49			N/A	N/A
D - Newbourne Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.04	0.41	4.38	7.54			N/A	N/A
B - Foxhall Rd West	0.64	0.07	0.73	1.36	1.44			N/A	N/A
C - A12 South	1.82	0.04	0.40	4.87	8.74			N/A	N/A
D - Newbourne Rd East	0.52	0.05	0.51	1.30	1.40			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.29	0.03	0.28	3.29	6.09			N/A	N/A
B - Foxhall Rd West	1.42	0.03	0.27	1.42	2.14			N/A	N/A
C - A12 South	4.17	0.03	0.29	4.17	14.63			N/A	N/A
D - Newbourne Rd East	1.27	0.03	0.27	1.27	2.18			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.34	0.03	0.26	3.34	3.34			N/A	N/A
B - Foxhall Rd West	1.46	0.03	0.28	1.46	5.15			N/A	N/A
C - A12 South	4.27	0.03	0.27	4.27	4.27			N/A	N/A
D - Newbourne Rd East	1.31	0.03	0.29	1.35	5.94			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.09	1.16	3.59	4.86			N/A	N/A
B - Foxhall Rd West	0.66	0.06	0.69	1.38	1.47			N/A	N/A
C - A12 South	1.87	0.06	0.98	4.56	6.61			N/A	N/A
D - Newbourne Rd East	0.53	0.05	0.48	1.30	1.41			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.05	0.47	2.57	3.88			N/A	N/A
B - Foxhall Rd West	0.41	0.04	0.36	1.20	1.38			N/A	N/A
C - A12 South	1.15	0.04	0.40	2.91	4.97			N/A	N/A
D - Newbourne Rd East	0.32	0.03	0.31	1.00	1.26			N/A	N/A

2023 Early Years [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	2.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	866	100.000
B - Foxhall Rd West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	788	100.000
D - Newbourne Rd East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	797	30
	B - Foxhall Rd West	99	0	81	22
	C - A12 South	722	38	0	29
	D - Newbourne Rd East	16	20	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	12	5	0	5
	D - Newbourne Rd East	0	15	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.16	0.6	2.7	A	795	1192
B - Foxhall Rd West	0.20	4.02	0.2	0.9	A	186	278
C - A12 South	0.33	2.08	0.5	2.2	A	723	1085
D - Newbourne Rd East	0.08	4.28	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	99	2648	0.246	651	628	0.0	0.3	1.802	A
B - Foxhall Rd West	152	38	576	1265	0.120	152	73	0.0	0.1	3.231	A
C - A12 South	593	148	57	2611	0.227	592	685	0.0	0.3	1.783	A
D - Newbourne Rd East	52	13	690	1066	0.049	52	61	0.0	0.1	3.548	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	779	195	119	2635	0.295	778	751	0.3	0.4	1.938	A
B - Foxhall Rd West	182	45	688	1204	0.151	182	88	0.1	0.2	3.522	A
C - A12 South	709	177	68	2605	0.272	708	819	0.3	0.4	1.897	A
D - Newbourne Rd East	62	16	825	1003	0.062	62	72	0.1	0.1	3.823	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	954	238	145	2618	0.364	953	920	0.4	0.6	2.162	A
B - Foxhall Rd West	223	56	843	1119	0.199	222	107	0.2	0.2	4.012	A
C - A12 South	868	217	83	2596	0.334	867	1003	0.4	0.5	2.082	A
D - Newbourne Rd East	76	19	1010	918	0.083	76	89	0.1	0.1	4.277	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	954	238	146	2618	0.364	954	921	0.6	0.6	2.162	A
B - Foxhall Rd West	223	56	844	1119	0.199	223	108	0.2	0.2	4.015	A
C - A12 South	868	217	83	2596	0.334	868	1003	0.5	0.5	2.082	A
D - Newbourne Rd East	76	19	1011	917	0.083	76	89	0.1	0.1	4.279	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	779	195	119	2635	0.295	779	752	0.6	0.4	1.940	A
B - Foxhall Rd West	182	45	689	1203	0.151	182	88	0.2	0.2	3.528	A
C - A12 South	709	177	68	2605	0.272	709	820	0.5	0.4	1.898	A
D - Newbourne Rd East	62	16	826	1003	0.062	62	73	0.1	0.1	3.829	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	652	163	100	2648	0.246	652	630	0.4	0.3	1.803	A
B - Foxhall Rd West	152	38	577	1264	0.120	152	74	0.2	0.1	3.237	A
C - A12 South	593	148	57	2611	0.227	594	686	0.4	0.3	1.786	A
D - Newbourne Rd East	52	13	691	1065	0.049	52	61	0.1	0.1	3.555	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Newbourne Rd East	0.07	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.25	0.57	0.57			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	0.50	0.03	0.25	0.50	0.50			N/A	N/A
D - Newbourne Rd East	0.09	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.36	2.69			N/A	N/A
B - Foxhall Rd West	0.25	0.03	0.27	0.49	0.89			N/A	N/A
C - A12 South	0.50	0.03	0.31	1.44	2.20			N/A	N/A
D - Newbourne Rd East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Foxhall Rd West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Newbourne Rd East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Foxhall Rd West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Newbourne Rd East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2023 Early Years [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	14.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1552	100.000
B - Foxhall Rd West		ONE HOUR	✓	493	100.000
C - A12 South		ONE HOUR	✓	1666	100.000
D - Newbourne Rd East		ONE HOUR	✓	211	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	140	1355	57
	B - Foxhall Rd West	277	0	164	52
	C - A12 South	1526	93	0	47
	D - Newbourne Rd East	118	30	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	12
	B - Foxhall Rd West	1	0	8	11
	C - A12 South	12	5	0	12
	D - Newbourne Rd East	12	20	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.69	4.64	2.2	4.6	A	1424	2136
B - Foxhall Rd West	0.96	79.99	11.6	48.4	F	452	679
C - A12 South	0.75	5.87	3.0	6.5	A	1529	2293
D - Newbourne Rd East	0.44	12.26	0.8	3.8	B	193	290

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	196	2540	0.460	1165	1441	0.0	0.8	2.611	A
B - Foxhall Rd West	371	93	1269	892	0.416	368	197	0.0	0.7	6.834	A
C - A12 South	1254	314	215	2507	0.500	1250	1187	0.0	1.0	2.855	A
D - Newbourne Rd East	159	40	1244	795	0.199	158	117	0.0	0.2	5.641	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1395	349	234	2516	0.555	1394	1724	0.8	1.2	3.204	A
B - Foxhall Rd West	443	111	1518	754	0.588	440	235	0.7	1.4	11.381	B
C - A12 South	1498	374	258	2481	0.604	1496	1420	1.0	1.5	3.644	A
D - Newbourne Rd East	189	47	1489	681	0.278	189	140	0.2	0.4	7.306	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1709	427	276	2490	0.686	1705	2093	1.2	2.2	4.575	A
B - Foxhall Rd West	543	136	1856	567	0.957	513	288	1.4	8.7	51.426	F
C - A12 South	1834	459	315	2447	0.749	1829	1728	1.5	2.9	5.765	A
D - Newbourne Rd East	232	58	1813	530	0.438	230	168	0.4	0.8	11.963	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1709	427	284	2485	0.688	1709	2109	2.2	2.2	4.638	A
B - Foxhall Rd West	543	136	1862	564	0.963	531	289	8.7	11.6	79.991	F
C - A12 South	1834	459	316	2447	0.750	1834	1738	2.9	3.0	5.874	A
D - Newbourne Rd East	232	58	1822	525	0.441	232	170	0.8	0.8	12.257	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1395	349	254	2504	0.557	1399	1756	2.2	1.3	3.270	A
B - Foxhall Rd West	443	111	1526	750	0.591	484	237	11.6	1.5	15.541	C
C - A12 South	1498	374	260	2480	0.604	1503	1439	3.0	1.5	3.708	A
D - Newbourne Rd East	189	47	1508	672	0.282	191	144	0.8	0.4	7.508	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	199	2539	0.460	1170	1451	1.3	0.9	2.633	A
B - Foxhall Rd West	371	93	1275	889	0.418	374	198	1.5	0.7	7.036	A
C - A12 South	1254	314	217	2506	0.501	1256	1194	1.5	1.0	2.887	A
D - Newbourne Rd East	159	40	1251	792	0.200	159	118	0.4	0.3	5.697	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.70	0.22	0.94	1.39	1.44			N/A	N/A
C - A12 South	1.00	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.05	0.48	2.96	4.60			N/A	N/A
B - Foxhall Rd West	1.38	0.04	0.45	3.55	5.68			N/A	N/A
C - A12 South	1.51	0.04	0.43	3.93	6.53			N/A	N/A
D - Newbourne Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.03	0.26	2.15	2.15			N/A	N/A
B - Foxhall Rd West	8.73	0.14	3.72	22.77	32.20			N/A	N/A
C - A12 South	2.92	0.03	0.27	2.92	4.15			N/A	N/A
D - Newbourne Rd East	0.76	0.03	0.26	0.76	0.76			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.03	0.26	2.18	2.18			N/A	N/A
B - Foxhall Rd West	11.58	0.10	3.41	32.47	48.44			N/A	N/A
C - A12 South	2.96	0.03	0.26	2.96	2.96			N/A	N/A
D - Newbourne Rd East	0.78	0.03	0.30	1.23	3.79			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.19	1.17	1.88	2.38			N/A	N/A
B - Foxhall Rd West	1.50	0.03	0.34	3.54	7.70			N/A	N/A
C - A12 South	1.54	0.09	1.17	3.00	4.04			N/A	N/A
D - Newbourne Rd East	0.40	0.03	0.28	0.50	0.97			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.07	0.77	1.45	1.86			N/A	N/A
B - Foxhall Rd West	0.73	0.03	0.28	0.73	2.40			N/A	N/A
C - A12 South	1.01	0.05	0.50	2.21	3.28			N/A	N/A
D - Newbourne Rd East	0.25	0.03	0.25	0.45	0.48			N/A	N/A

2023 Early Years [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	132.74	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1692	100.000
B - Foxhall Rd West		ONE HOUR	✓	544	100.000
C - A12 South		ONE HOUR	✓	2140	100.000
D - Newbourne Rd East		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	136	1435	121
	B - Foxhall Rd West	291	0	196	58
	C - A12 South	1869	167	1	104
	D - Newbourne Rd East	187	74	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	12
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	11	8	0	7
	D - Newbourne Rd East	9	3	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.86	3.0	7.1	A	1552	2329
B - Foxhall Rd West	1.95	1020.06	146.6	194.5	F	499	749
C - A12 South	0.98	38.53	24.4	110.3	E	1964	2946
D - Newbourne Rd East	0.71	23.03	2.3	11.5	C	315	473

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1274	318	267	2471	0.515	1269	1757	0.0	1.1	2.986	A
B - Foxhall Rd West	410	102	1619	718	0.571	405	282	0.0	1.3	11.306	B
C - A12 South	1611	403	297	2484	0.649	1604	1285	0.0	1.8	4.057	A
D - Newbourne Rd East	259	65	1325	790	0.328	257	212	0.0	0.5	6.731	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1521	380	313	2444	0.622	1519	2093	1.1	1.6	3.882	A
B - Foxhall Rd West	489	122	1935	543	0.902	470	337	1.3	6.1	42.019	E
C - A12 South	1924	481	355	2450	0.785	1917	1532	1.8	3.5	6.669	A
D - Newbourne Rd East	309	77	1580	664	0.465	308	252	0.5	0.9	10.057	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1863	466	266	2472	0.754	1857	2382	1.6	3.0	5.808	A
B - Foxhall Rd West	599	150	2320	329	1.819	328	408	6.1	73.8	470.770	F
C - A12 South	2357	589	432	2405	0.980	2296	1784	3.5	18.8	24.832	C
D - Newbourne Rd East	378	95	1843	533	0.711	373	279	0.9	2.3	21.805	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1863	466	258	2476	0.752	1863	2408	3.0	3.0	5.864	A
B - Foxhall Rd West	599	150	2358	308	1.946	308	412	73.8	146.6	977.716	F
C - A12 South	2357	589	437	2402	0.981	2334	1783	18.8	24.4	38.532	E
D - Newbourne Rd East	378	95	1841	534	0.709	378	280	2.3	2.3	23.033	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1521	380	328	2434	0.625	1526	2187	3.0	1.7	3.987	A
B - Foxhall Rd West	489	122	2021	495	0.989	494	346	146.6	145.6	1020.058	F
C - A12 South	1924	481	361	2446	0.786	2006	1549	24.4	3.8	9.675	A
D - Newbourne Rd East	309	77	1595	656	0.471	315	259	2.3	0.9	10.702	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1274	318	407	2387	0.534	1276	1932	1.7	1.2	3.246	A
B - Foxhall Rd West	410	102	1635	709	0.578	705	284	145.6	71.9	557.744	F
C - A12 South	1611	403	300	2483	0.649	1619	1399	3.8	1.9	4.206	A
D - Newbourne Rd East	259	65	1438	736	0.352	260	245	0.9	0.5	7.595	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	1.29	0.03	0.28	1.29	3.17			N/A	N/A
C - A12 South	1.82	0.26	1.06	3.00	3.83			N/A	N/A
D - Newbourne Rd East	0.48	0.00	0.00	0.48	0.48			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.63	0.04	0.44	4.32	7.08			N/A	N/A
B - Foxhall Rd West	6.06	0.05	0.58	17.43	30.14			N/A	N/A
C - A12 South	3.54	0.04	0.43	9.86	17.90			N/A	N/A
D - Newbourne Rd East	0.85	0.07	0.79	1.39	1.81			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.98	0.03	0.27	2.98	4.49			N/A	N/A
B - Foxhall Rd West	73.81	43.80	71.52	99.81	108.98			N/A	N/A
C - A12 South	18.79	0.15	6.95	51.71	75.23			N/A	N/A
D - Newbourne Rd East	2.27	0.03	0.31	3.58	11.52			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	146.64	146.05	146.50	146.90	146.95			N/A	N/A
C - A12 South	24.36	0.10	5.28	70.96	110.32			N/A	N/A
D - Newbourne Rd East	2.34	0.03	0.30	2.34	10.62			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.09	1.21	3.51	4.72			N/A	N/A
B - Foxhall Rd West	145.56	>199	>199	>199	>199			N/A	N/A
C - A12 South	3.83	0.04	0.42	10.57	19.66			N/A	N/A
D - Newbourne Rd East	0.91	0.05	0.48	1.92	2.86			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.05	0.61	2.62	3.80			N/A	N/A
B - Foxhall Rd West	71.86	36.52	68.64	103.81	115.58			N/A	N/A
C - A12 South	1.87	0.03	0.30	2.21	8.83			N/A	N/A
D - Newbourne Rd East	0.55	0.03	0.34	1.15	2.03			N/A	N/A

2023 Early Years [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	9.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1702	100.000
B - Foxhall Rd West		ONE HOUR	✓	411	100.000
C - A12 South		ONE HOUR	✓	1783	100.000
D - Newbourne Rd East		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	252	1314	134
	B - Foxhall Rd West	217	0	147	47
	C - A12 South	1506	218	1	59
	D - Newbourne Rd East	111	105	93	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	5
	B - Foxhall Rd West	5	0	6	6
	C - A12 South	8	5	0	1
	D - Newbourne Rd East	4	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	5.83	3.0	6.7	A	1562	2343
B - Foxhall Rd West	0.74	22.19	2.7	13.0	C	377	565
C - A12 South	0.80	7.49	4.0	12.8	A	1637	2455
D - Newbourne Rd East	0.63	18.13	1.7	7.4	C	284	427

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1281	320	191	2545	0.503	1277	1377	0.0	1.0	2.829	A
B - Foxhall Rd West	309	77	1260	922	0.335	307	431	0.0	0.5	5.836	A
C - A12 South	1343	336	353	2541	0.528	1338	1166	0.0	1.1	2.981	A
D - Newbourne Rd East	233	58	1287	847	0.275	232	181	0.0	0.4	5.834	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1530	383	228	2523	0.607	1528	1647	1.0	1.5	3.612	A
B - Foxhall Rd West	369	92	1508	792	0.466	368	516	0.5	0.9	8.455	A
C - A12 South	1603	401	422	2500	0.641	1601	1395	1.1	1.8	3.992	A
D - Newbourne Rd East	279	70	1540	718	0.388	278	216	0.4	0.6	8.160	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1874	469	277	2493	0.752	1868	2009	1.5	3.0	5.713	A
B - Foxhall Rd West	452	113	1841	617	0.733	446	629	0.9	2.5	20.248	C
C - A12 South	1964	491	515	2445	0.803	1955	1704	1.8	3.9	7.225	A
D - Newbourne Rd East	341	85	1881	543	0.629	337	264	0.6	1.6	17.206	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1874	469	280	2491	0.752	1874	2021	3.0	3.0	5.831	A
B - Foxhall Rd West	452	113	1849	613	0.738	452	632	2.5	2.7	22.188	C
C - A12 South	1964	491	518	2443	0.804	1963	1711	3.9	4.0	7.494	A
D - Newbourne Rd East	341	85	1889	539	0.633	341	266	1.6	1.7	18.128	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1530	383	233	2520	0.607	1536	1663	3.0	1.6	3.681	A
B - Foxhall Rd West	369	92	1519	786	0.470	376	520	2.7	0.9	8.936	A
C - A12 South	1603	401	427	2497	0.642	1612	1406	4.0	1.8	4.106	A
D - Newbourne Rd East	279	70	1550	713	0.391	283	218	1.7	0.7	8.453	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1281	320	193	2544	0.504	1284	1386	1.6	1.0	2.862	A
B - Foxhall Rd West	309	77	1268	918	0.337	311	434	0.9	0.5	5.939	A
C - A12 South	1343	336	356	2540	0.529	1345	1173	1.8	1.1	3.020	A
D - Newbourne Rd East	233	58	1294	844	0.277	234	182	0.7	0.4	5.919	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C - A12 South	1.11	0.55	1.00	1.40	1.45			N/A	N/A
D - Newbourne Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.53	0.04	0.43	3.98	6.67			N/A	N/A
B - Foxhall Rd West	0.86	0.06	0.70	1.56	1.97			N/A	N/A
C - A12 South	1.77	0.04	0.41	4.72	8.28			N/A	N/A
D - Newbourne Rd East	0.63	0.06	0.69	1.35	1.44			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.95	0.03	0.27	2.95	4.20			N/A	N/A
B - Foxhall Rd West	2.53	0.03	0.32	4.09	12.96			N/A	N/A
C - A12 South	3.92	0.03	0.29	3.92	12.76			N/A	N/A
D - Newbourne Rd East	1.61	0.03	0.28	1.61	5.61			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.00	0.03	0.26	3.00	3.00			N/A	N/A
B - Foxhall Rd West	2.68	0.03	0.30	2.89	12.43			N/A	N/A
C - A12 South	4.01	0.03	0.27	4.01	4.01			N/A	N/A
D - Newbourne Rd East	1.67	0.03	0.29	1.67	7.41			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.09	1.17	3.08	4.14			N/A	N/A
B - Foxhall Rd West	0.90	0.05	0.47	1.92	2.87			N/A	N/A
C - A12 South	1.82	0.07	1.01	4.32	6.19			N/A	N/A
D - Newbourne Rd East	0.65	0.05	0.54	1.34	1.34			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.05	0.50	2.26	3.36			N/A	N/A
B - Foxhall Rd West	0.51	0.03	0.33	1.00	1.99			N/A	N/A
C - A12 South	1.13	0.04	0.41	2.84	4.75			N/A	N/A
D - Newbourne Rd East	0.39	0.03	0.34	1.22	1.44			N/A	N/A

2023 Early Years [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout	A, D, C, B	7.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1790	100.000
B - Foxhall Rd West		ONE HOUR	✓	396	100.000
C - A12 South		ONE HOUR	✓	1871	100.000
D - Newbourne Rd East		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	266	1395	128
	B - Foxhall Rd West	203	0	137	56
	C - A12 South	1505	335	1	31
	D - Newbourne Rd East	70	125	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	6	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	5	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	5.93	3.2	7.2	A	1643	2464
B - Foxhall Rd West	0.61	13.17	1.6	5.6	B	363	545
C - A12 South	0.82	7.70	4.3	15.0	A	1717	2575
D - Newbourne Rd East	0.56	15.25	1.3	5.7	C	253	379

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	168	2625	0.513	1344	1334	0.0	1.0	2.800	A
B - Foxhall Rd West	298	74	1206	1010	0.295	296	544	0.0	0.4	5.032	A
C - A12 South	1408	352	346	2624	0.537	1404	1211	0.0	1.2	2.940	A
D - Newbourne Rd East	207	52	1351	867	0.239	206	161	0.0	0.3	5.439	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	402	201	2605	0.618	1607	1596	1.0	1.6	3.600	A
B - Foxhall Rd West	356	89	1442	884	0.403	355	651	0.4	0.7	6.796	A
C - A12 South	1682	420	415	2583	0.651	1679	1449	1.2	1.8	3.972	A
D - Newbourne Rd East	247	62	1617	729	0.340	247	192	0.3	0.5	7.454	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1971	493	245	2579	0.765	1965	1948	1.6	3.2	5.810	A
B - Foxhall Rd West	436	109	1761	713	0.611	432	795	0.7	1.5	12.681	B
C - A12 South	2060	515	506	2527	0.815	2050	1770	1.8	4.2	7.403	A
D - Newbourne Rd East	303	76	1976	542	0.559	300	235	0.5	1.2	14.710	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1971	493	247	2578	0.765	1971	1958	3.2	3.2	5.933	A
B - Foxhall Rd West	436	109	1769	708	0.615	436	799	1.5	1.6	13.168	B
C - A12 South	2060	515	509	2525	0.816	2059	1777	4.2	4.3	7.705	A
D - Newbourne Rd East	303	76	1983	539	0.563	303	236	1.2	1.3	15.251	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1610	402	204	2604	0.618	1616	1609	3.2	1.6	3.668	A
B - Foxhall Rd West	356	89	1454	878	0.405	359	656	1.6	0.7	6.990	A
C - A12 South	1682	420	419	2580	0.652	1691	1458	4.3	1.9	4.094	A
D - Newbourne Rd East	247	62	1626	724	0.342	250	194	1.3	0.5	7.649	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1348	337	170	2624	0.514	1350	1342	1.6	1.1	2.832	A
B - Foxhall Rd West	298	74	1213	1007	0.296	299	548	0.7	0.4	5.096	A
C - A12 South	1408	352	349	2622	0.537	1411	1217	1.9	1.2	2.978	A
D - Newbourne Rd East	207	52	1358	863	0.240	208	162	0.5	0.3	5.504	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Foxhall Rd West	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C - A12 South	1.15	0.55	1.03	1.15	1.15			N/A	N/A
D - Newbourne Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.04	0.42	4.25	7.22			N/A	N/A
B - Foxhall Rd West	0.67	0.07	0.73	1.37	1.45			N/A	N/A
C - A12 South	1.84	0.04	0.40	4.93	8.86			N/A	N/A
D - Newbourne Rd East	0.51	0.05	0.49	1.29	1.40			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.16	0.03	0.27	3.16	5.32			N/A	N/A
B - Foxhall Rd West	1.52	0.03	0.27	1.52	3.11			N/A	N/A
C - A12 South	4.22	0.03	0.29	4.22	15.01			N/A	N/A
D - Newbourne Rd East	1.22	0.03	0.27	1.22	1.72			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.21	0.03	0.26	3.21	3.21			N/A	N/A
B - Foxhall Rd West	1.56	0.03	0.28	1.56	5.59			N/A	N/A
C - A12 South	4.32	0.03	0.27	4.32	4.32			N/A	N/A
D - Newbourne Rd East	1.26	0.03	0.29	1.27	5.70			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.09	1.17	3.42	4.63			N/A	N/A
B - Foxhall Rd West	0.69	0.06	0.69	1.10	1.10			N/A	N/A
C - A12 South	1.90	0.06	0.97	4.63	6.73			N/A	N/A
D - Newbourne Rd East	0.53	0.05	0.48	1.30	1.40			N/A	N/A

18:00 - 18:15

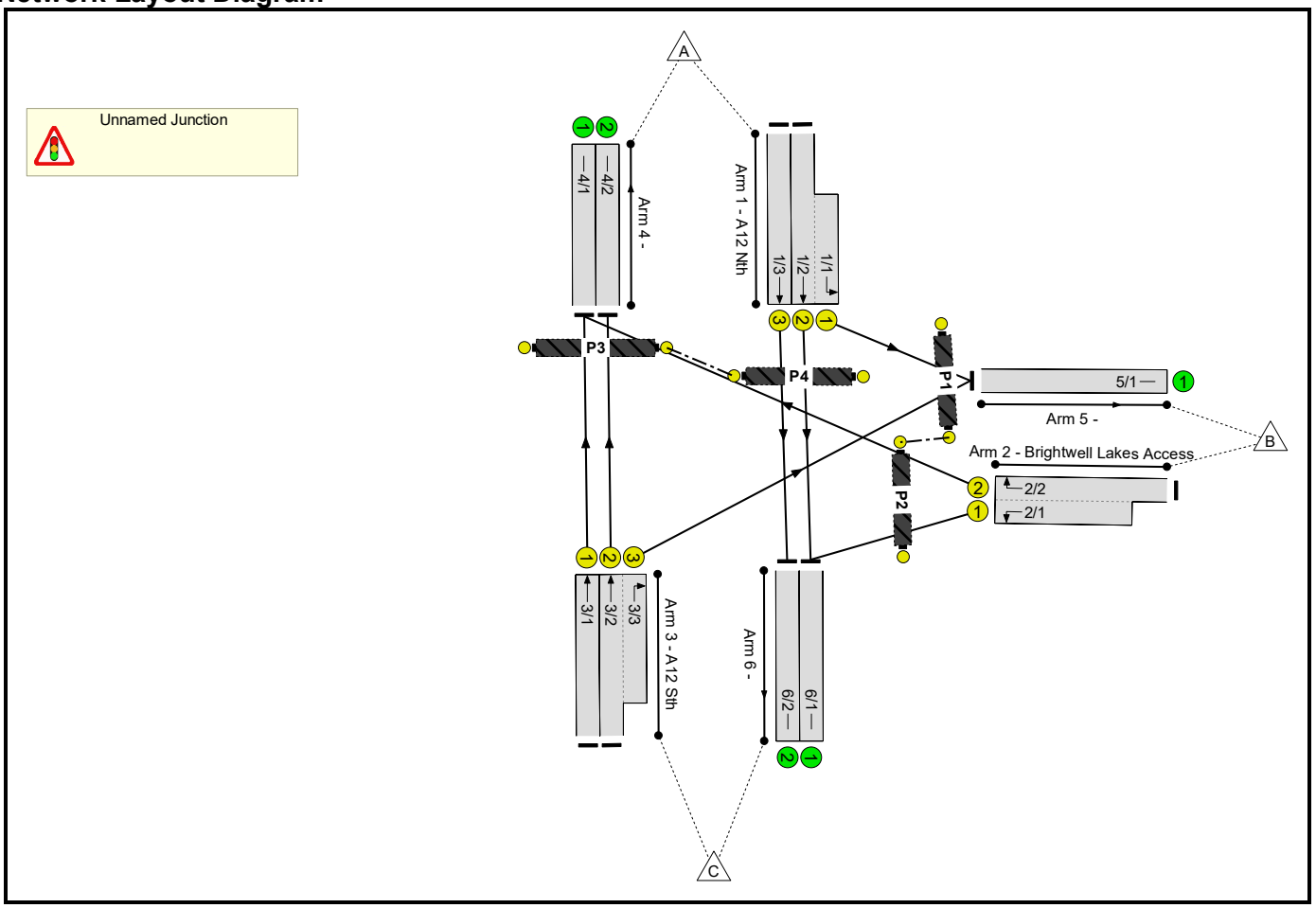
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.05	0.48	2.47	3.70			N/A	N/A
B - Foxhall Rd West	0.42	0.04	0.36	1.24	1.41			N/A	N/A
C - A12 South	1.17	0.04	0.40	2.95	5.08			N/A	N/A
D - Newbourne Rd East	0.32	0.03	0.31	0.97	1.24			N/A	N/A

Full Input Data And Results

User and Project Details

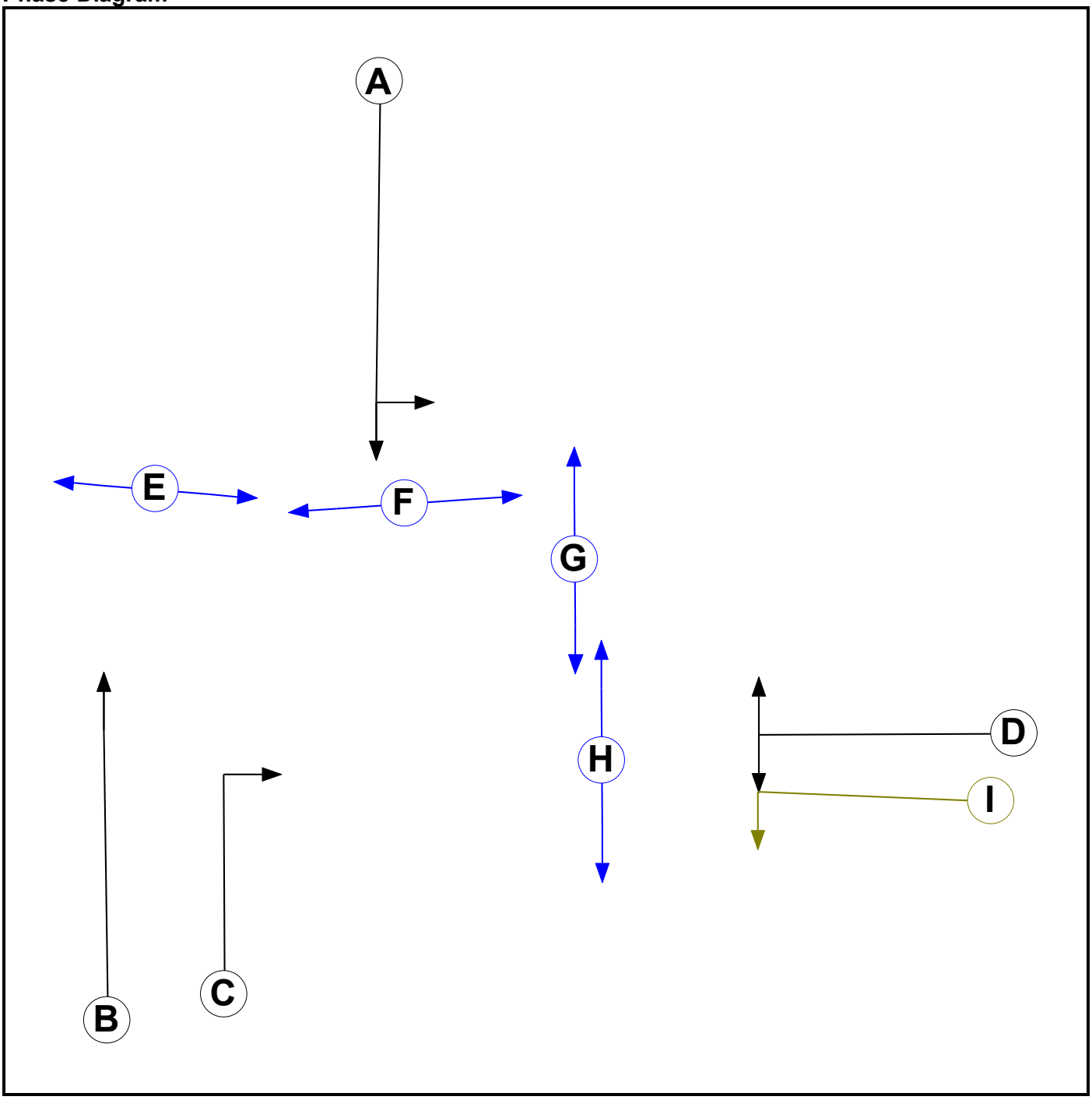
Project:	
Title:	
Location:	
Additional detail:	
File name:	Brightwell Lakes Access J22_miti_sens.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Filter	D	4	0

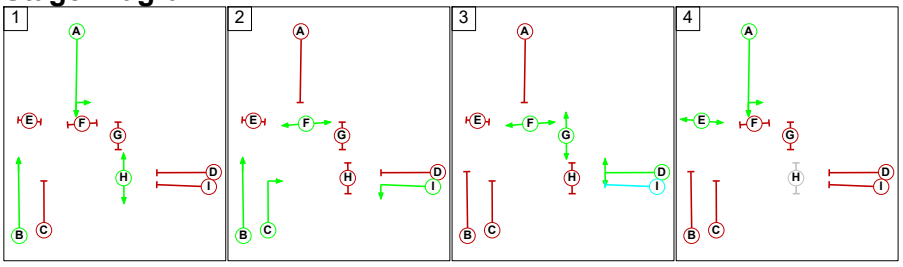
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		-	5	5	-	5	8	-	5
B	-		-	5	9	-	-	-	-
C	6	-		5	-	-	10	-	-
D	5	7	7		11	-	-	5	-
E	-	8	-	8		-	-	-	8
F	11	-	-	-	-		-	-	-
G	7	-	7	-	-	-		-	-
H	-	-	-	8	-	-	-		8
I	5	-	-	-	11	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B H
2	B C F I
3	D F G
4	A E

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	B	Losing	3	3

Full Input Data And Results

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		8	8	9
	2	X		10	X
	3	11	7		11
	4	8	8	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A12 Nth)	U	A	2	3	7.0	Geom	-	3.65	0.00	Y	Arm 5 Left	17.00
1/2 (A12 Nth)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 6 Ahead	Inf
1/3 (A12 Nth)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Ahead	Inf
2/1 (Brightwell Lakes Access)	U	D I	2	3	9.0	Geom	-	3.50	0.00	Y	Arm 6 Left	13.00
2/2 (Brightwell Lakes Access)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Right	15.00
3/1 (A12 Sth)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
3/2 (A12 Sth)	U	B	2	3	60.0	Geom	-	3.65	0.00	N	Arm 4 Ahead	Inf
3/3 (A12 Sth)	U	C	2	3	26.1	Geom	-	4.50	0.00	Y	Arm 5 Right	18.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '23RC 06:00-07:00'	06:00	07:00	01:00	
2: '23RC 07:00-08:00'	07:00	08:00	01:00	
3: '23RC 08:00-09:00'	08:00	09:00	01:00	
4: '23RC 15:00-16:00'	15:00	16:00	01:00	
5: '23RC 17:00-18:00'	17:00	18:00	01:00	
6: '23EY 06:00-07:00'	06:00	07:00	01:00	
7: '23EY 07:00-08:00'	07:00	08:00	01:00	
8: '23EY 08:00-09:00'	08:00	09:00	01:00	
9: '23EY 15:00-16:00'	15:00	16:00	01:00	
10: '23EY 17:00-18:00'	17:00	18:00	01:00	
11: '28RC 06:00-07:00'	06:00	07:00	01:00	
12: '28RC 07:00-08:00'	07:00	08:00	01:00	
13: '28RC 08:00-09:00'	08:00	09:00	01:00	
14: '28RC 15:00-16:00'	15:00	16:00	01:00	
15: '28RC 17:00-18:00'	17:00	18:00	01:00	
16: '28PC 06:00-07:00'	06:00	07:00	01:00	
17: '28PC 07:00-08:00'	07:00	08:00	01:00	
18: '28PC 08:00-09:00'	08:00	09:00	01:00	
19: '28PC 15:00-16:00'	15:00	16:00	01:00	
20: '28PC 17:00-18:00'	17:00	18:00	01:00	
21: '34RC 06:00-07:00'	06:00	07:00	01:00	
22: '34RC 07:00-08:00'	07:00	08:00	01:00	
23: '34RC 08:00-09:00'	08:00	09:00	01:00	
24: '34RC 15:00-16:00'	15:00	16:00	01:00	
25: '34RC 17:00-18:00'	17:00	18:00	01:00	
26: '34OP 06:00-07:00'	06:00	07:00	01:00	
27: '34OP 07:00-08:00'	07:00	08:00	01:00	
28: '34OP 08:00-09:00'	08:00	09:00	01:00	
29: '34OP 15:00-16:00'	15:00	16:00	01:00	
30: '34OP 17:00-18:00'	17:00	18:00	01:00	

Full Input Data And Results

Scenario 1: '23RC 06:00-07:00' (FG1: '23RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1	944	945
	B	3	0	0	3
	C	808	1	0	809
	Tot.	811	2	944	1757

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 23RC 06:00-07:00
Junction: Unnamed Junction	
1/1 (short)	1
1/2 (with short)	497(In) 496(Out)
1/3	448
2/1 (short)	0
2/2 (with short)	3(In) 3(Out)
3/1	380
3/2 (with short)	429(In) 428(Out)
3/3 (short)	1
4/1	383
4/2	428
5/1	2
6/1	496
6/2	448

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 2: '23RC 07:00-08:00' (FG2: '23RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	1659	1659
	B	8	0	9	17
	C	1897	1	0	1898
	Tot.	1905	1	1668	3574

Traffic Lane Flows

Lane	Scenario 2: 23RC 07:00-08:00
Junction: Unnamed Junction	
1/1 (short)	0
1/2 (with short)	863(In) 863(Out)
1/3	796
2/1 (short)	9
2/2 (with short)	17(In) 8(Out)
3/1	909
3/2 (with short)	989(In) 988(Out)
3/3 (short)	1
4/1	917
4/2	988
5/1	1
6/1	872
6/2	796

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 3: '23RC 08:00-09:00' (FG3: '23RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1	1866	1867
	B	21	0	0	21
	C	2472	1	0	2473
	Tot.	2493	2	1866	4361

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 23RC 08:00-09:00
Junction: Unnamed Junction	
1/1 (short)	1
1/2 (with short)	969(In) 968(Out)
1/3	898
2/1 (short)	0
2/2 (with short)	21(In) 21(Out)
3/1	1191
3/2 (with short)	1282(In) 1281(Out)
3/3 (short)	1
4/1	1212
4/2	1281
5/1	2
6/1	968
6/2	898

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 4: '23RC 15:00-16:00' (FG4: '23RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	10	1916	1926
	B	22	0	0	22
	C	1893	8	0	1901
	Tot.	1915	18	1916	3849

Traffic Lane Flows

Lane	Scenario 4: 23RC 15:00-16:00
Junction: Unnamed Junction	
1/1 (short)	10
1/2 (with short)	1001(In) 991(Out)
1/3	925
2/1 (short)	0
2/2 (with short)	22(In) 22(Out)
3/1	906
3/2 (with short)	995(In) 987(Out)
3/3 (short)	8
4/1	928
4/2	987
5/1	18
6/1	991
6/2	925

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 5: '23RC 17:00-18:00' (FG5: '23RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	9	1925	1934
	B	14	0	0	14
	C	1830	11	0	1841
	Tot.	1844	20	1925	3789

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 23RC 17:00-18:00
Junction: Unnamed Junction	
1/1 (short)	9
1/2 (with short)	1005(In) 996(Out)
1/3	929
2/1 (short)	0
2/2 (with short)	14(In) 14(Out)
3/1	876
3/2 (with short)	965(In) 954(Out)
3/3 (short)	11
4/1	890
4/2	954
5/1	20
6/1	996
6/2	929

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 6: '23EY 06:00-07:00' (FG6: '23EY 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1	956	957
	B	2	0	0	2
	C	808	2	0	810
	Tot.	810	3	956	1769

Traffic Lane Flows

Lane	Scenario 6: 23EY 06:00-07:00
Junction: Unnamed Junction	
1/1 (short)	1
1/2 (with short)	503(In) 502(Out)
1/3	454
2/1 (short)	0
2/2 (with short)	2(In) 2(Out)
3/1	380
3/2 (with short)	430(In) 428(Out)
3/3 (short)	2
4/1	382
4/2	428
5/1	3
6/1	502
6/2	454

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 7: '23EY 07:00-08:00' (FG7: '23EY 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	1711	1711
	B	8	0	0	8
	C	1897	2	0	1899
	Tot.	1905	2	1711	3618

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 23EY 07:00-08:00
Junction: Unnamed Junction	
1/1 (short)	0
1/2 (with short)	890(In) 890(Out)
1/3	821
2/1 (short)	0
2/2 (with short)	8(In) 8(Out)
3/1	909
3/2 (with short)	990(In) 988(Out)
3/3 (short)	2
4/1	917
4/2	988
5/1	2
6/1	890
6/2	821

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 8: '23EY 08:00-09:00' (FG8: '23EY 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	1871	1871
	B	21	0	0	21
	C	2472	1	0	2473
	Tot.	2493	1	1871	4365

Traffic Lane Flows

Lane	Scenario 8: 23EY 08:00-09:00
Junction: Unnamed Junction	
1/1 (short)	0
1/2 (with short)	971(In) 971(Out)
1/3	900
2/1 (short)	0
2/2 (with short)	21(In) 21(Out)
3/1	1191
3/2 (with short)	1282(In) 1281(Out)
3/3 (short)	1
4/1	1212
4/2	1281
5/1	1
6/1	971
6/2	900

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 9: '23EY 15:00-16:00' (FG9: '23EY 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	8	1908	1916
	B	22	0	0	22
	C	1893	9	0	1902
	Tot.	1915	17	1908	3840

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 23EY 15:00-16:00
Junction: Unnamed Junction	
1/1 (short)	8
1/2 (with short)	995(In) 987(Out)
1/3	921
2/1 (short)	0
2/2 (with short)	22(In) 22(Out)
3/1	906
3/2 (with short)	996(In) 987(Out)
3/3 (short)	9
4/1	928
4/2	987
5/1	17
6/1	987
6/2	921

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 10: '23EY 17:00-18:00' (FG10: '23EY 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	8	1910	1918
	B	14	0	0	14
	C	1830	11	0	1841
	Tot.	1844	19	1910	3773

Traffic Lane Flows

Lane	Scenario 10: 23EY 17:00-18:00
Junction: Unnamed Junction	
1/1 (short)	8
1/2 (with short)	996(In) 988(Out)
1/3	922
2/1 (short)	0
2/2 (with short)	14(In) 14(Out)
3/1	876
3/2 (with short)	965(In) 954(Out)
3/3 (short)	11
4/1	890
4/2	954
5/1	19
6/1	988
6/2	922

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 11: '28RC 06:00-07:00' (FG11: '28RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	2	958	960
	B	2	0	0	2
	C	806	2	0	808
	Tot.	808	4	958	1770

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 28RC 06:00-07:00
Junction: Unnamed Junction	
1/1 (short)	2
1/2 (with short)	505(In) 503(Out)
1/3	455
2/1 (short)	0
2/2 (with short)	2(In) 2(Out)
3/1	379
3/2 (with short)	429(In) 427(Out)
3/3 (short)	2
4/1	381
4/2	427
5/1	4
6/1	503
6/2	455

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 12: '28RC 07:00-08:00' (FG12: '28RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	10	1693	1703
	B	48	0	65	113
	C	1910	11	0	1921
	Tot.	1958	21	1758	3737

Traffic Lane Flows

Lane	Scenario 12: 28RC 07:00-08:00
Junction: Unnamed Junction	
1/1 (short)	10
1/2 (with short)	887(In) 877(Out)
1/3	816
2/1 (short)	65
2/2 (with short)	113(In) 48(Out)
3/1	915
3/2 (with short)	1006(In) 995(Out)
3/3 (short)	11
4/1	963
4/2	995
5/1	21
6/1	942
6/2	816

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 13: '28RC 08:00-09:00' (FG13: '28RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	21	1929	1950
	B	146	0	12	158
	C	2484	28	0	2512
	Tot.	2630	49	1941	4620

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 28RC 08:00-09:00
Junction: Unnamed Junction	
1/1 (short)	21
1/2 (with short)	1014(In) 993(Out)
1/3	936
2/1 (short)	12
2/2 (with short)	158(In) 146(Out)
3/1	1198
3/2 (with short)	1314(In) 1286(Out)
3/3 (short)	28
4/1	1344
4/2	1286
5/1	49
6/1	1005
6/2	936

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 14: '28RC 15:00-16:00' (FG14: '28RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	69	1974	2043
	B	81	0	15	96
	C	1894	56	0	1950
	Tot.	1975	125	1989	4089

Traffic Lane Flows

Lane	Scenario 14: 28RC 15:00-16:00
Junction: Unnamed Junction	
1/1 (short)	69
1/2 (with short)	1066(In) 997(Out)
1/3	977
2/1 (short)	15
2/2 (with short)	96(In) 81(Out)
3/1	906
3/2 (with short)	1044(In) 988(Out)
3/3 (short)	56
4/1	987
4/2	988
5/1	125
6/1	1012
6/2	977

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 15: '28RC 17:00-18:00' (FG15: '28RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	58	1998	2056
	B	73	0	23	96
	C	1848	77	0	1925
	Tot.	1921	135	2021	4077

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 15: 28RC 17:00-18:00
Junction: Unnamed Junction	
1/1 (short)	58
1/2 (with short)	1071(In) 1013(Out)
1/3	985
2/1 (short)	23
2/2 (with short)	96(In) 73(Out)
3/1	883
3/2 (with short)	1042(In) 965(Out)
3/3 (short)	77
4/1	956
4/2	965
5/1	135
6/1	1036
6/2	985

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 16: '28PC 06:00-07:00' (FG16: '28PC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	2	961	963
	B	2	0	0	2
	C	806	4	0	810
	Tot.	808	6	961	1775

Traffic Lane Flows

Lane	Scenario 16: 28PC 06:00-07:00
Junction: Unnamed Junction	
1/1 (short)	2
1/2 (with short)	506(In) 504(Out)
1/3	457
2/1 (short)	0
2/2 (with short)	2(In) 2(Out)
3/1	378
3/2 (with short)	432(In) 428(Out)
3/3 (short)	4
4/1	380
4/2	428
5/1	6
6/1	504
6/2	457

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 17: '28PC 07:00-08:00' (FG17: '28PC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	10	1676	1686
	B	48	0	59	107
	C	1910	13	0	1923
	Tot.	1958	23	1735	3716

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 17: 28PC 07:00-08:00
Junction: Unnamed Junction	
1/1 (short)	10
1/2 (with short)	878(In) 868(Out)
1/3	808
2/1 (short)	59
2/2 (with short)	107(In) 48(Out)
3/1	915
3/2 (with short)	1008(In) 995(Out)
3/3 (short)	13
4/1	963
4/2	995
5/1	23
6/1	927
6/2	808

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 18: '28PC 08:00-09:00' (FG18: '28PC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	21	1916	1937
	B	143	0	18	161
	C	2486	29	0	2515
	Tot.	2629	50	1934	4613

Traffic Lane Flows

Lane	Scenario 18: 28PC 08:00-09:00
Junction: Unnamed Junction	
1/1 (short)	21
1/2 (with short)	1007(In) 986(Out)
1/3	930
2/1 (short)	18
2/2 (with short)	161(In) 143(Out)
3/1	1199
3/2 (with short)	1316(In) 1287(Out)
3/3 (short)	29
4/1	1342
4/2	1287
5/1	50
6/1	1004
6/2	930

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 19: '28PC 15:00-16:00' (FG19: '28PC 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	66	1948	2014
	B	75	0	4	79
	C	1900	56	0	1956
	Tot.	1975	122	1952	4049

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 19: 28PC 15:00-16:00
Junction: Unnamed Junction	
1/1 (short)	66
1/2 (with short)	1051(In) 985(Out)
1/3	963
2/1 (short)	4
2/2 (with short)	79(In) 75(Out)
3/1	909
3/2 (with short)	1047(In) 991(Out)
3/3 (short)	56
4/1	984
4/2	991
5/1	122
6/1	989
6/2	963

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 20: '28PC 17:00-18:00' (FG20: '28PC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	55	1944	1999
	B	63	0	1	64
	C	1857	78	0	1935
	Tot.	1920	133	1945	3998

Traffic Lane Flows

Lane	Scenario 20: 28PC 17:00-18:00
Junction: Unnamed Junction	
1/1 (short)	55
1/2 (with short)	1042(In) 987(Out)
1/3	957
2/1 (short)	1
2/2 (with short)	64(In) 63(Out)
3/1	887
3/2 (with short)	1048(In) 970(Out)
3/3 (short)	78
4/1	950
4/2	970
5/1	133
6/1	988
6/2	957

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 21: '34RC 06:00-07:00' (FG21: '34RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	4	981	985
	B	4	0	0	4
	C	808	2	0	810
	Tot.	812	6	981	1799

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 21: 34RC 06:00-07:00
Junction: Unnamed Junction	
1/1 (short)	4
1/2 (with short)	518(In) 514(Out)
1/3	467
2/1 (short)	0
2/2 (with short)	4(In) 4(Out)
3/1	380
3/2 (with short)	430(In) 428(Out)
3/3 (short)	2
4/1	384
4/2	428
5/1	6
6/1	514
6/2	467

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 22: '34RC 07:00-08:00' (FG22: '34RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	13	1744	1757
	B	75	0	130	205
	C	1927	14	0	1941
	Tot.	2002	27	1874	3903

Traffic Lane Flows

Lane	Scenario 22: 34RC 07:00-08:00
Junction: Unnamed Junction	
1/1 (short)	13
1/2 (with short)	915(In) 902(Out)
1/3	842
2/1 (short)	130
2/2 (with short)	205(In) 75(Out)
3/1	923
3/2 (with short)	1018(In) 1004(Out)
3/3 (short)	14
4/1	998
4/2	1004
5/1	27
6/1	1032
6/2	842

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 23: '34RC 08:00-09:00' (FG23: '34RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	24	1982	2006
	B	231	0	42	273
	C	2513	36	0	2549
	Tot.	2744	60	2024	4828

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 23: 34RC 08:00-09:00
Junction: Unnamed Junction	
1/1 (short)	24
1/2 (with short)	1043(In) 1019(Out)
1/3	963
2/1 (short)	42
2/2 (with short)	273(In) 231(Out)
3/1	1213
3/2 (with short)	1336(In) 1300(Out)
3/3 (short)	36
4/1	1444
4/2	1300
5/1	60
6/1	1061
6/2	963

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 24: '34RC 15:00-16:00' (FG24: '34RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	108	2026	2134
	B	133	0	40	173
	C	1900	93	0	1993
	Tot.	2033	201	2066	4300

Traffic Lane Flows

Lane	Scenario 24: 34RC 15:00-16:00
Junction: Unnamed Junction	
1/1 (short)	108
1/2 (with short)	1115(In) 1007(Out)
1/3	1019
2/1 (short)	40
2/2 (with short)	173(In) 133(Out)
3/1	909
3/2 (with short)	1084(In) 991(Out)
3/3 (short)	93
4/1	1042
4/2	991
5/1	201
6/1	1047
6/2	1019

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 25: '34RC 17:00-18:00' (FG25: '34RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	89	2050	2139
	B	127	0	58	185
	C	1853	128	0	1981
	Tot.	1980	217	2108	4305

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 25: 34RC 17:00-18:00
Junction: Unnamed Junction	
1/1 (short)	89
1/2 (with short)	1115(In) 1026(Out)
1/3	1024
2/1 (short)	58
2/2 (with short)	185(In) 127(Out)
3/1	886
3/2 (with short)	1095(In) 967(Out)
3/3 (short)	128
4/1	1013
4/2	967
5/1	217
6/1	1084
6/2	1024

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 26: '34OP 06:00-07:00' (FG26: '34OP 06:00-07:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	4	982	986
	B	4	0	0	4
	C	808	2	0	810
	Tot.	812	6	982	1800

Traffic Lane Flows

Lane	Scenario 26: 34OP 06:00-07:00
Junction: Unnamed Junction	
1/1 (short)	4
1/2 (with short)	519(In) 515(Out)
1/3	467
2/1 (short)	0
2/2 (with short)	4(In) 4(Out)
3/1	380
3/2 (with short)	430(In) 428(Out)
3/3 (short)	2
4/1	384
4/2	428
5/1	6
6/1	515
6/2	467

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	0.0 %	1965	1965
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 27: '34OP 07:00-08:00' (FG27: '34OP 07:00-08:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	14	1756	1770
	B	75	0	138	213
	C	1927	14	0	1941
	Tot.	2002	28	1894	3924

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 27: 34OP 07:00-08:00
Junction: Unnamed Junction	
1/1 (short)	14
1/2 (with short)	922(In) 908(Out)
1/3	848
2/1 (short)	138
2/2 (with short)	213(In) 75(Out)
3/1	923
3/2 (with short)	1018(In) 1004(Out)
3/3 (short)	14
4/1	998
4/2	1004
5/1	28
6/1	1046
6/2	848

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 28: '34OP 08:00-09:00' (FG28: '34OP 08:00-09:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	1967	1967
	B	0	0	2	2
	C	2400	5	0	2405
	Tot.	2400	5	1969	4374

Traffic Lane Flows

Lane	Scenario 28: 34OP 08:00-09:00
Junction: Unnamed Junction	
1/1 (short)	0
1/2 (with short)	1020(In) 1020(Out)
1/3	947
2/1 (short)	2
2/2 (with short)	2(In) 0(Out)
3/1	1155
3/2 (with short)	1250(In) 1245(Out)
3/3 (short)	5
4/1	1155
4/2	1245
5/1	5
6/1	1022
6/2	947

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	0.0 %	1980	1980
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	0.0 %	1965	1965
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 29: '34OP 15:00-16:00' (FG29: '34OP 15:00-16:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	109	2021	2130
	B	130	0	37	167
	C	1903	93	0	1996
	Tot.	2033	202	2058	4293

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 29: 34OP 15:00-16:00
Junction: Unnamed Junction	
1/1 (short)	109
1/2 (with short)	1113(In) 1004(Out)
1/3	1017
2/1 (short)	37
2/2 (with short)	167(In) 130(Out)
3/1	910
3/2 (with short)	1086(In) 993(Out)
3/3 (short)	93
4/1	1040
4/2	993
5/1	202
6/1	1041
6/2	1017

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 30: '34OP 17:00-18:00' (FG30: '34OP 17:00-18:00', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	89	2056	2145
	B	122	0	52	174
	C	1858	128	0	1986
	Tot.	1980	217	2108	4305

Traffic Lane Flows

Lane	Scenario 30: 34OP 17:00-18:00
Junction: Unnamed Junction	
1/1 (short)	89
1/2 (with short)	1118(In) 1029(Out)
1/3	1027
2/1 (short)	52
2/2 (with short)	174(In) 122(Out)
3/1	888
3/2 (with short)	1098(In) 970(Out)
3/3 (short)	128
4/1	1010
4/2	970
5/1	217
6/1	1081
6/2	1027

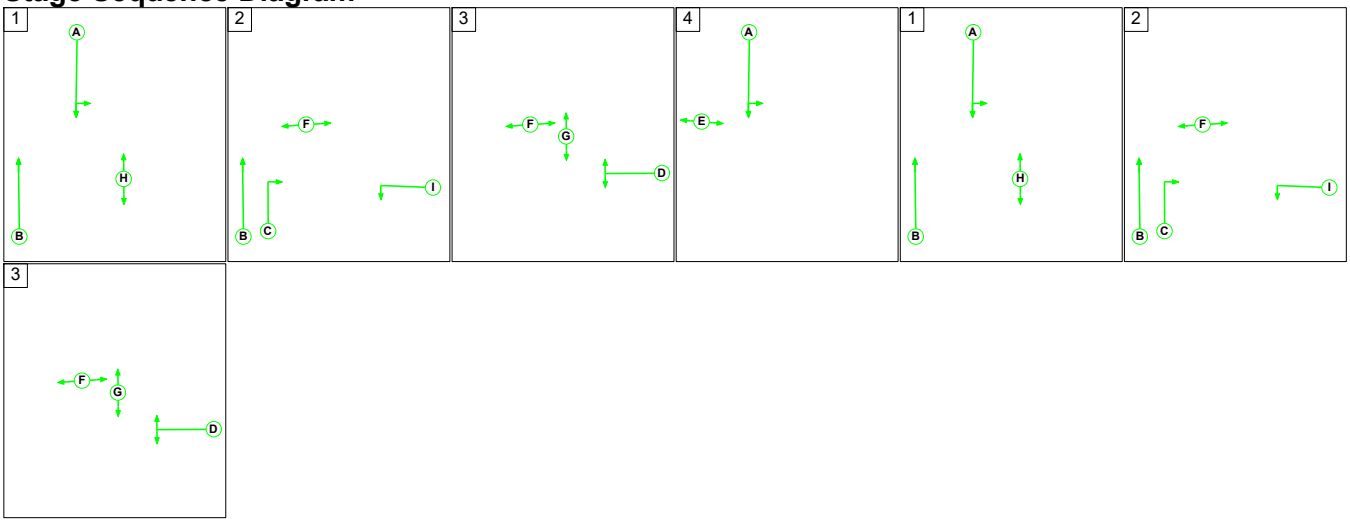
Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A12 Nth)	3.65	0.00	Y	Arm 5 Left	17.00	100.0 %	1819	1819
1/2 (A12 Nth)	3.65	0.00	N	Arm 6 Ahead	Inf	100.0 %	2120	2120
1/3 (A12 Nth)	3.65	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1980	1980
2/1 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 6 Left	13.00	100.0 %	1762	1762
2/2 (Brightwell Lakes Access)	3.50	0.00	Y	Arm 4 Right	15.00	100.0 %	1786	1786
3/1 (A12 Sth)	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/2 (A12 Sth)	3.65	0.00	N	Arm 4 Ahead	Inf	100.0 %	2120	2120
3/3 (A12 Sth)	4.50	0.00	Y	Arm 5 Right	18.00	100.0 %	1906	1906
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 1: '23RC 06:00-07:00' (FG1: '23RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

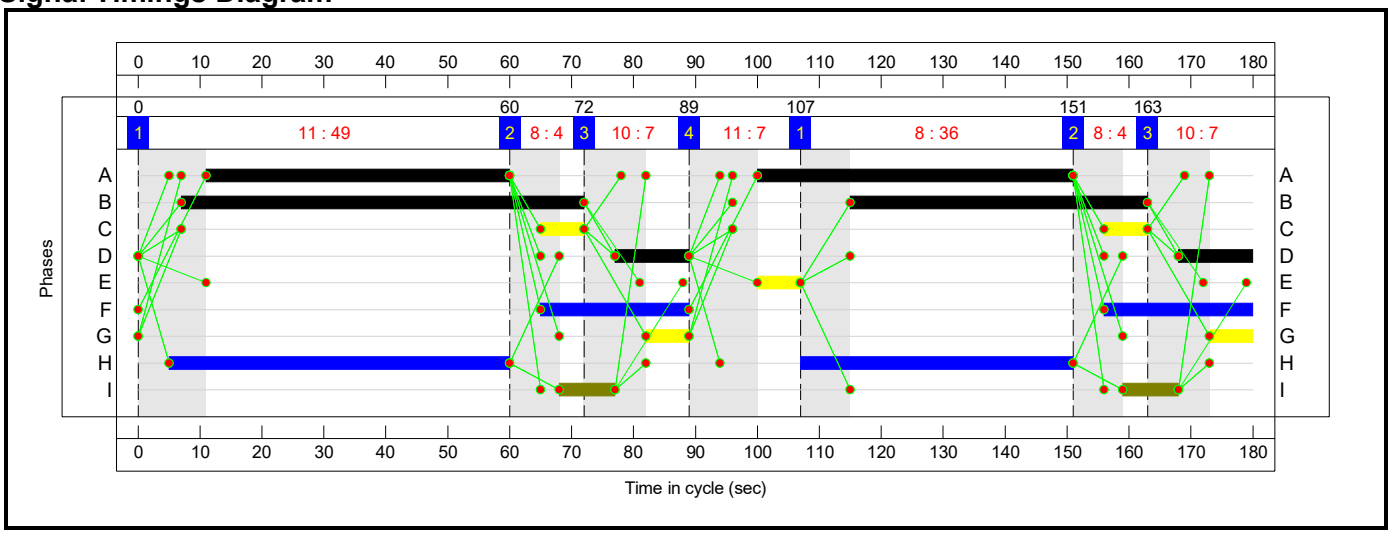


Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Full Input Data And Results

Signal Timings Diagram

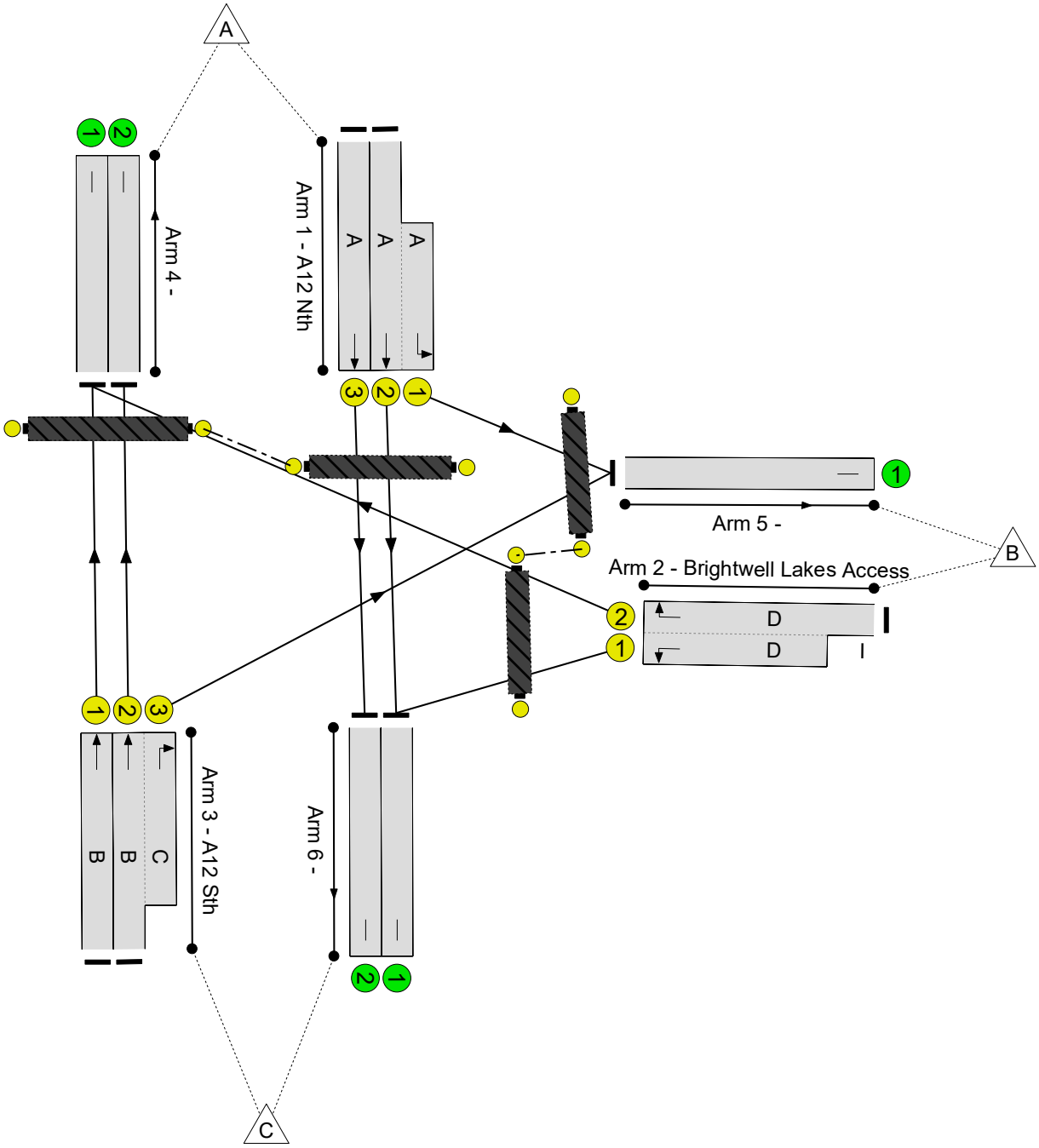


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 117.1 %
Total Traffic Delay: 5.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**41.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**41.5%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	497	2120:1819	1197+2	41.5 : 41.5%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	448	1980	1122	39.9%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	3	1786:1965	258+0	1.2 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	380	1980	1265	30.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	429	2120:1906	1354+3	31.6 : 31.6%
4/1		U	N/A	N/A	-		-	-	-	383	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	448	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

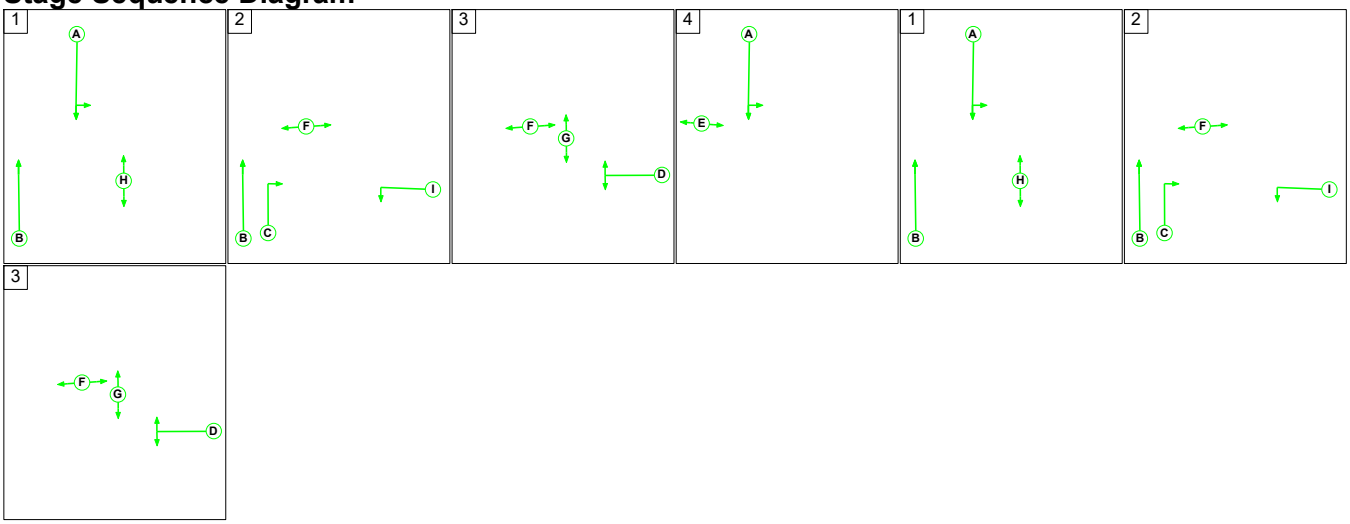
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.7**	**1.1**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.7**	**1.1**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
1/2+1/1	497	497	-	-	-	1.5	0.4	-	1.9	13.6	6.9	0.4	7.2
1/3	448	448	-	-	-	1.4	0.3	-	1.7	13.6	6.2	0.3	6.6
2/2+2/1	3	3	-	-	-	0.0	0.0	-	0.0	40.4	0.1	0.0	0.1
3/1	380	380	-	-	-	0.8	0.2	-	1.0	9.9	5.4	0.2	5.6
3/2+3/3	429	429	-	-	-	1.0	0.2	-	1.2	10.0	6.2	0.2	6.4
4/1	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	448	448	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 117.1 Total Delay for Signalled Lanes (pcuHr): 5.84 Cycle Time (s): 180
PRC Over All Lanes (%): 117.1 Total Delay Over All Lanes(pcuHr): 5.84

Full Input Data And Results

Scenario 2: '23RC 07:00-08:00' (FG2: '23RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

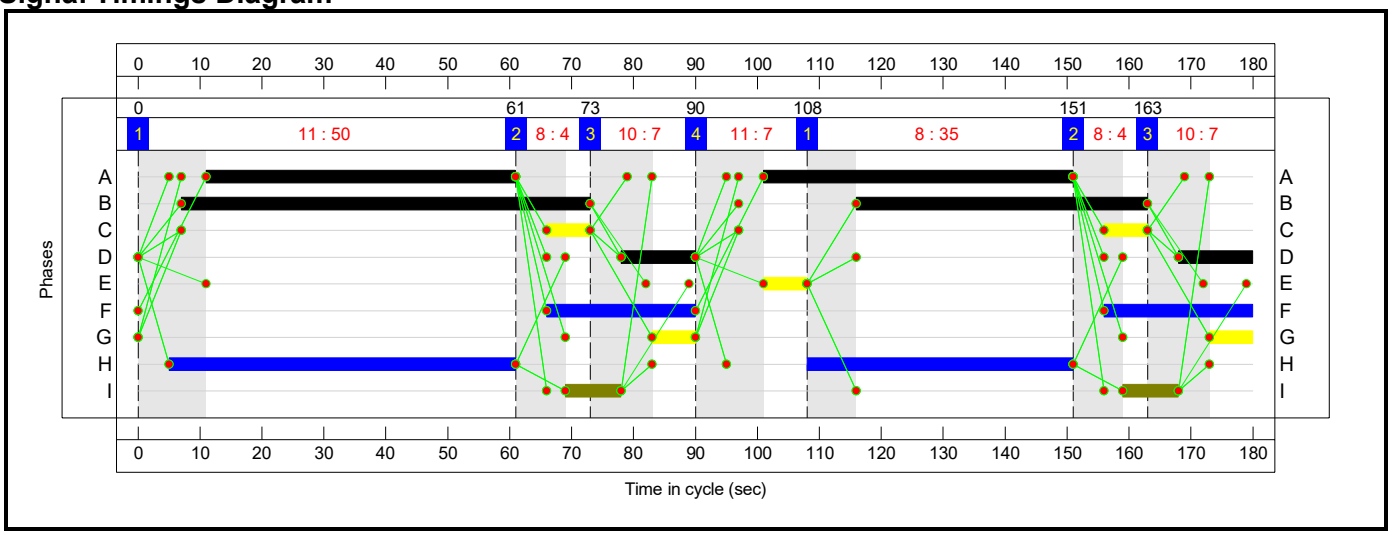
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

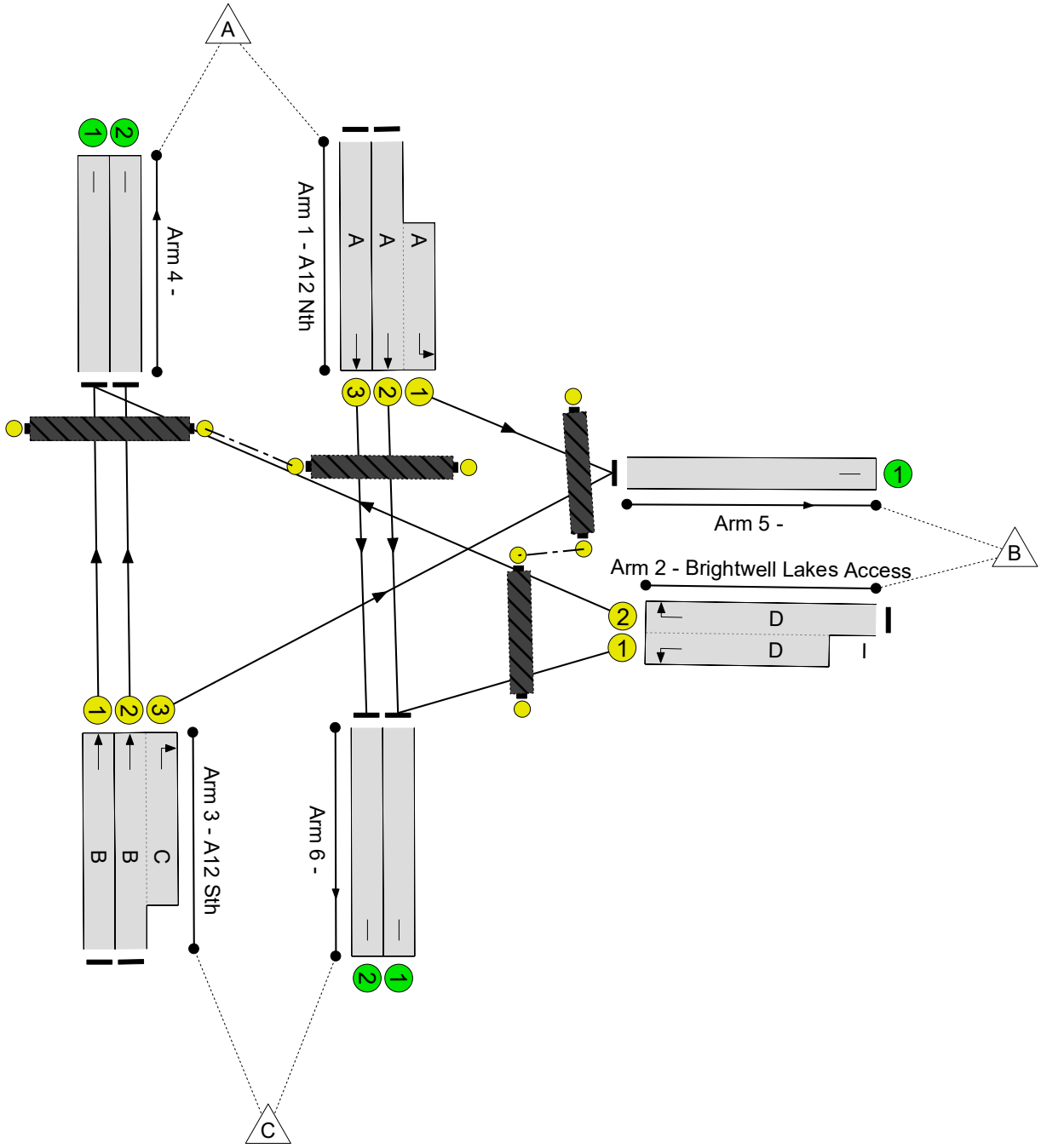


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 23.4 %
Total Traffic Delay: 18.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	863	2120:1980	1199+0	72.0 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	796	1980	1122	70.9%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	17	1786:1762	258+290	3.1 : 3.1%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	909	1980	1265	71.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	989	2120:1906	1354+1	72.9 : 72.9%
4/1		U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	872	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

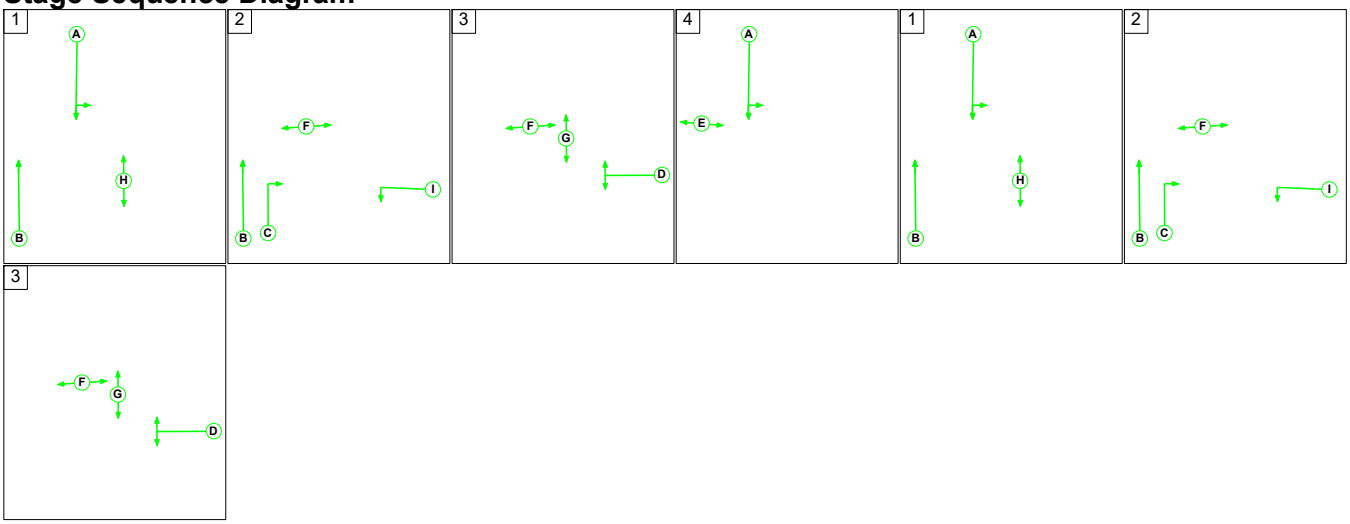
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.0**	**5.1**	**0.0**	**18.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**13.0**	**5.1**	**0.0**	**18.1**	**-**	**-**	**-**	**-**
1/2+1/1	863	863	-	-	-	3.4	1.3	-	4.7	19.6	15.6	1.3	16.9
1/3	796	796	-	-	-	3.1	1.2	-	4.3	19.6	14.4	1.2	15.6
2/2+2/1	17	17	-	-	-	0.1	0.0	-	0.2	32.9	0.2	0.0	0.2
3/1	909	909	-	-	-	3.0	1.3	-	4.2	16.8	19.4	1.3	20.7
3/2+3/3	989	989	-	-	-	3.3	1.3	-	4.6	16.8	21.4	1.3	22.7
4/1	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 23.4 Total Delay for Signalled Lanes (pcuHr): 18.06 Cycle Time (s): 180
PRC Over All Lanes (%): 23.4 Total Delay Over All Lanes(pcuHr): 18.06

Full Input Data And Results

Scenario 3: '23RC 08:00-09:00' (FG3: '23RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

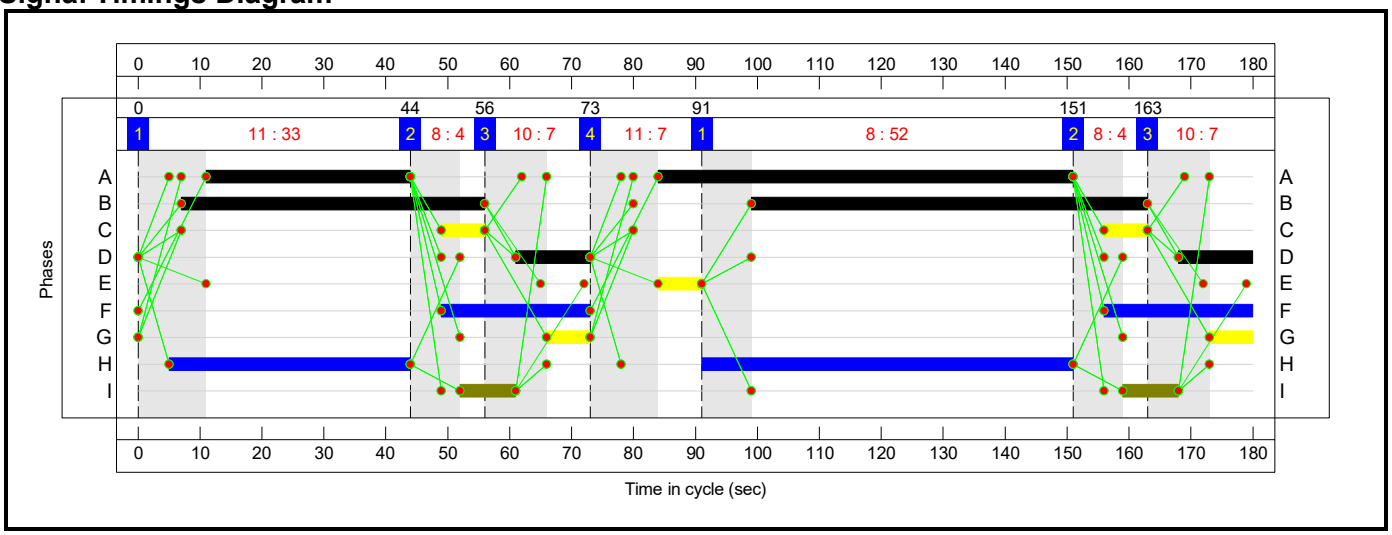
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	33	4	7	7	52	4	7
Change Point	0	44	56	73	91	151	163

Signal Timings Diagram

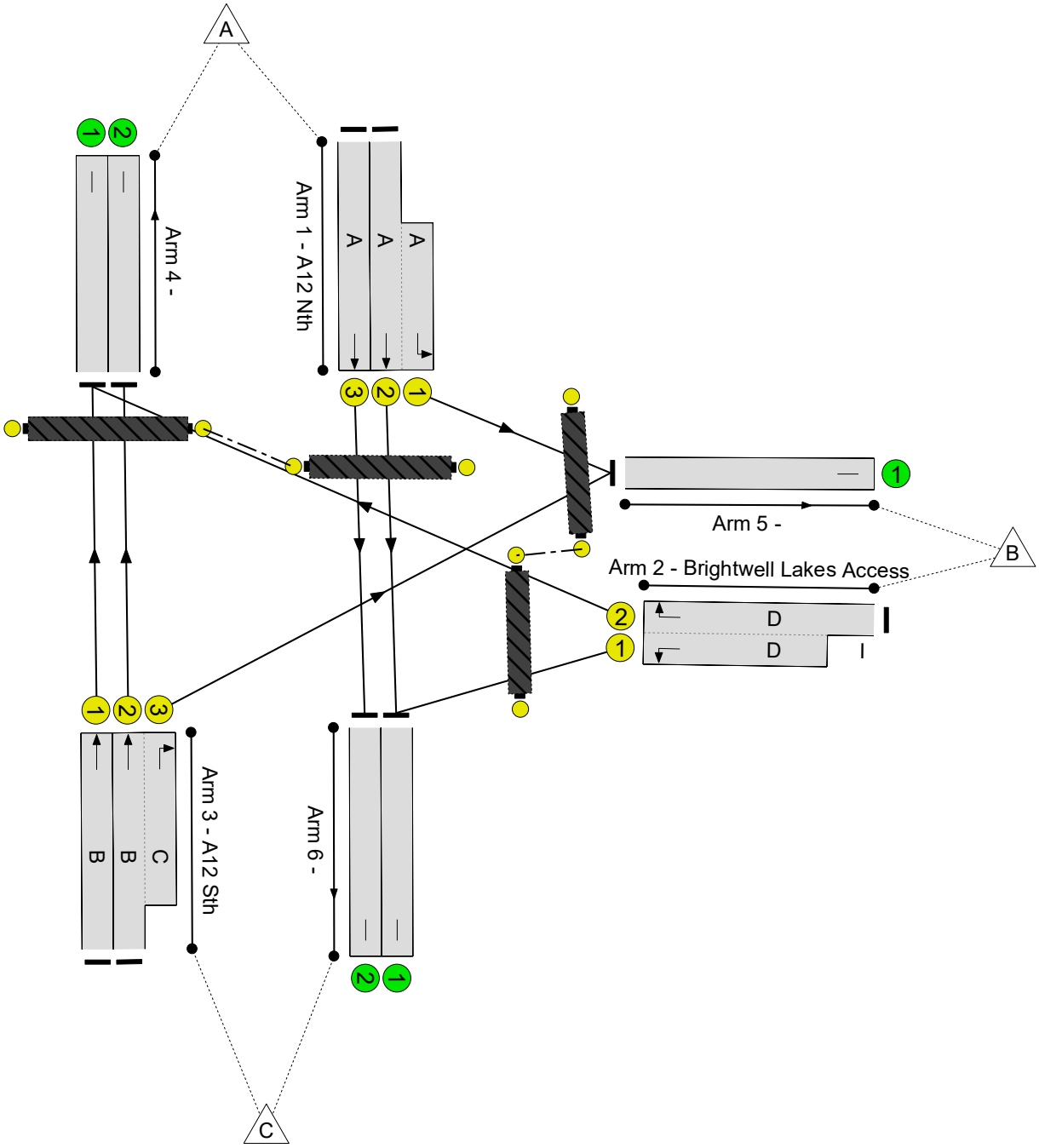


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -5.1 %
Total Traffic Delay: 37.5 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.6%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	969	2120:1819	1198+1	80.8 : 80.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	898	1980	1122	80.0%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	21	1786:1965	258+0	8.1 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1191	1980	1265	94.2%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1282	2120:1906	1354+1	94.6 : 94.6%
4/1		U	N/A	N/A	-		-	-	-	1212	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1281	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	968	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

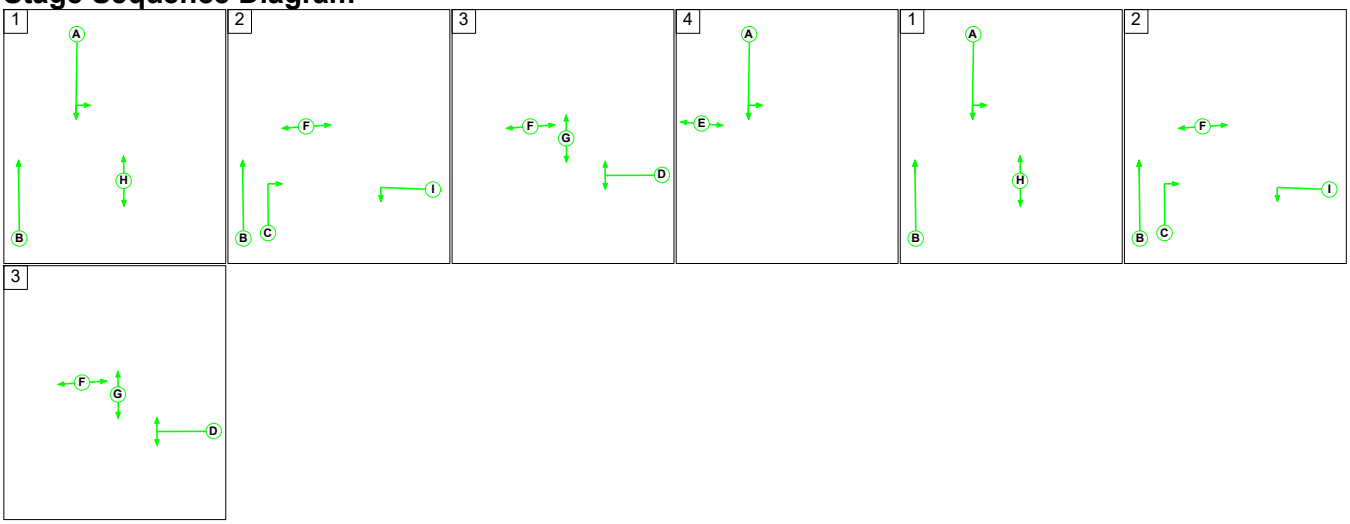
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.3**	**18.2**	**0.0**	**37.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.3**	**18.2**	**0.0**	**37.5**	**-**	**-**	**-**	**-**
1/2+1/1	969	969	-	-	-	4.2	2.1	-	6.3	23.3	19.4	2.1	21.4
1/3	898	898	-	-	-	3.9	2.0	-	5.8	23.4	17.7	2.0	19.7
2/2+2/1	21	21	-	-	-	0.2	0.0	-	0.2	42.6	0.6	0.0	0.6
3/1	1191	1191	-	-	-	5.3	6.8	-	12.1	36.5	34.7	6.8	41.5
3/2+3/3	1282	1282	-	-	-	5.7	7.3	-	13.0	36.6	37.7	7.3	45.0
4/1	1212	1212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1281	1281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	968	968	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -5.1 Total Delay for Signalled Lanes (pcuHr): 37.45 Cycle Time (s): 180
PRC Over All Lanes (%): -5.1 Total Delay Over All Lanes(pcuHr): 37.45

Full Input Data And Results

Scenario 4: '23RC 15:00-16:00' (FG4: '23RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

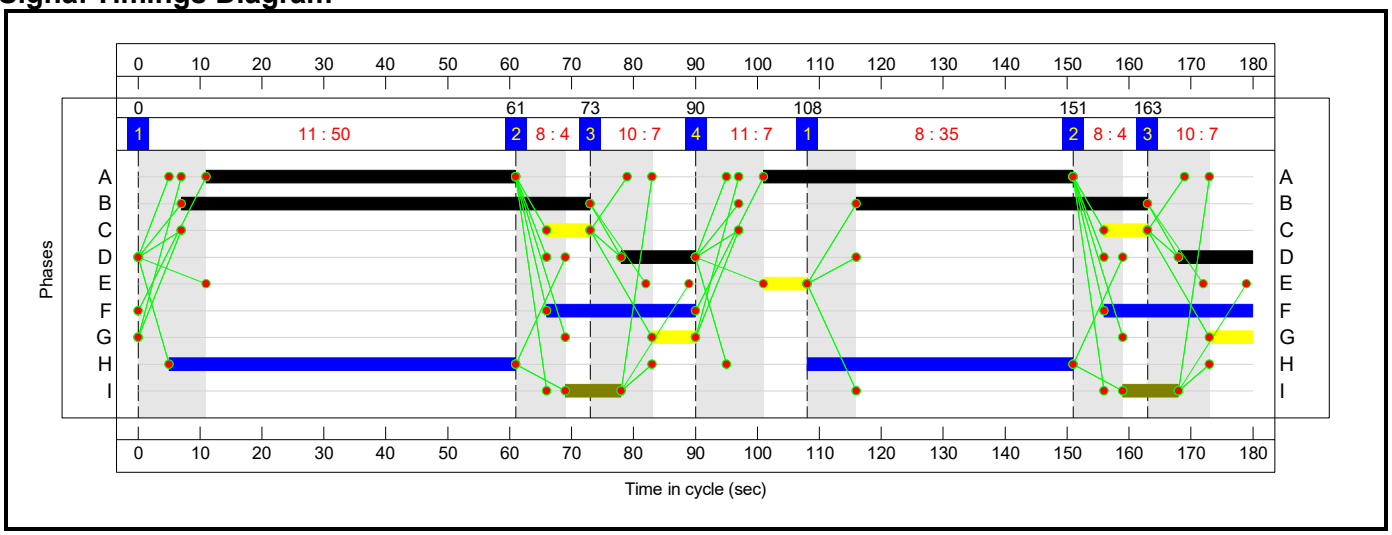
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

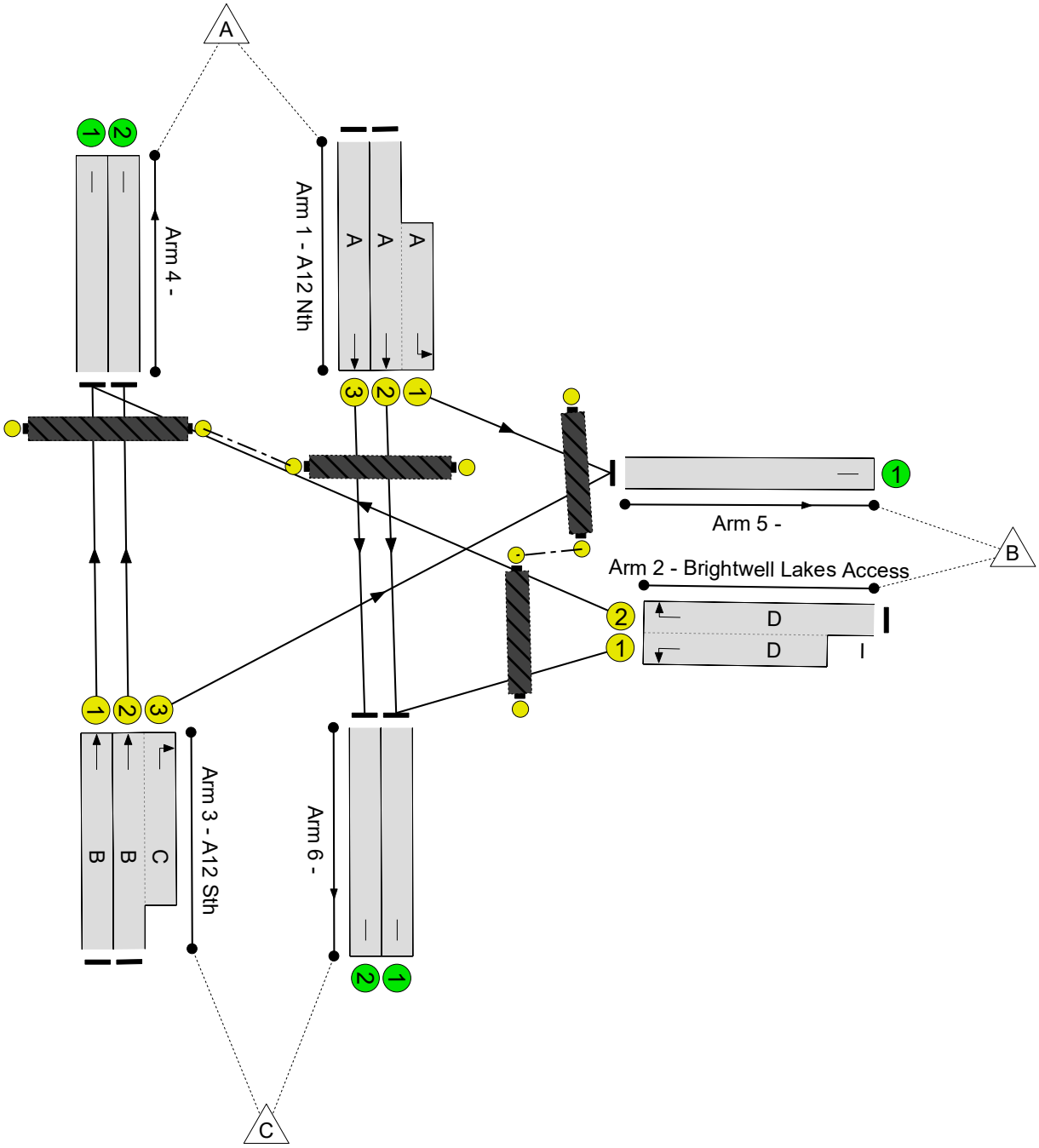


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 7.9 %
Total Traffic Delay: 22.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.4%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.4%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1001	2120:1819	1188+12	83.4 : 83.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	925	1980	1122	82.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	22	1786:1965	258+0	8.5 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	906	1980	1265	71.6%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	995	2120:1906	1354+11	72.9 : 72.9%
4/1		U	N/A	N/A	-		-	-	-	928	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	987	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	18	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	991	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	925	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

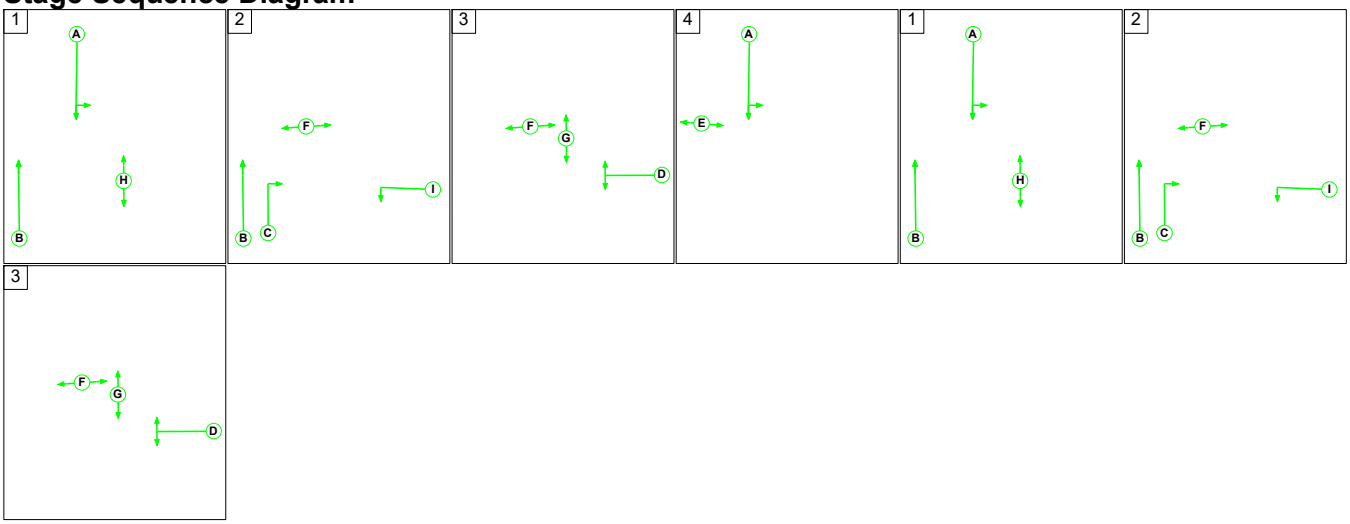
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.0**	**7.4**	**0.0**	**22.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**15.0**	**7.4**	**0.0**	**22.4**	**-**	**-**	**-**	**-**
1/2+1/1	1001	1001	-	-	-	4.4	2.5	-	6.9	24.8	20.2	2.5	22.7
1/3	925	925	-	-	-	4.1	2.3	-	6.4	24.8	18.8	2.3	21.1
2/2+2/1	22	22	-	-	-	0.2	0.0	-	0.3	41.0	0.5	0.0	0.5
3/1	906	906	-	-	-	3.0	1.3	-	4.2	16.7	19.4	1.3	20.6
3/2+3/3	995	995	-	-	-	3.4	1.3	-	4.7	17.0	21.4	1.3	22.7
4/1	928	928	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	987	987	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	18	18	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 7.9 Total Delay for Signalled Lanes (pcuHr): 22.41 Cycle Time (s): 180
PRC Over All Lanes (%): 7.9 Total Delay Over All Lanes(pcuHr): 22.41

Full Input Data And Results

Scenario 5: '23RC 17:00-18:00' (FG5: '23RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

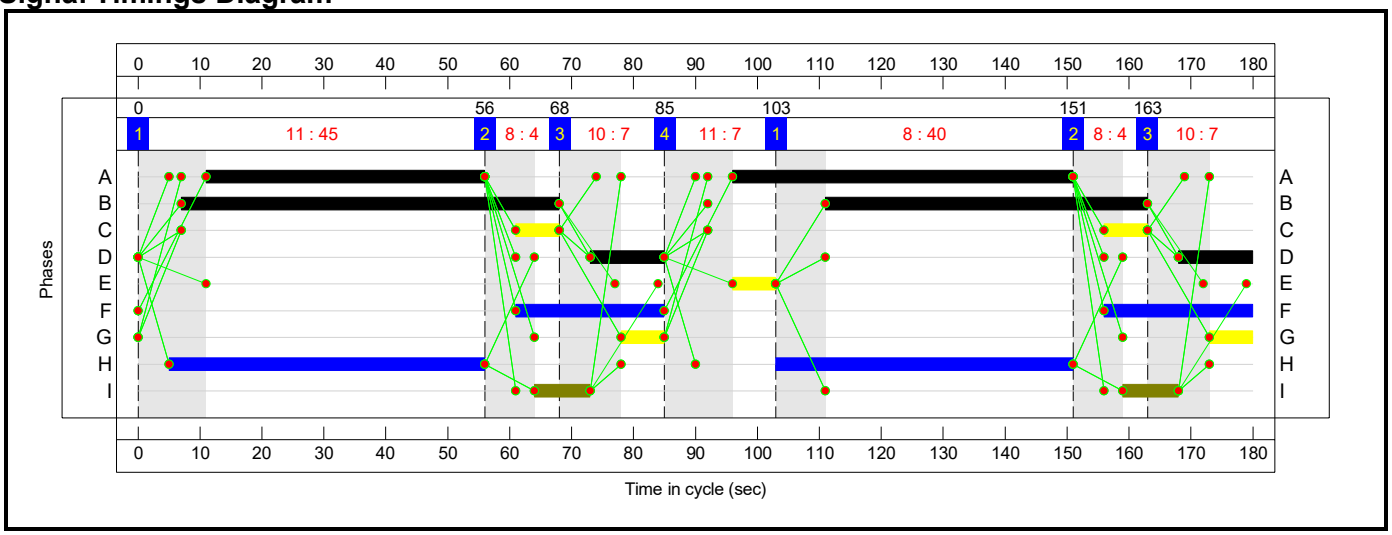
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	45	4	7	7	40	4	7
Change Point	0	56	68	85	103	151	163

Signal Timings Diagram

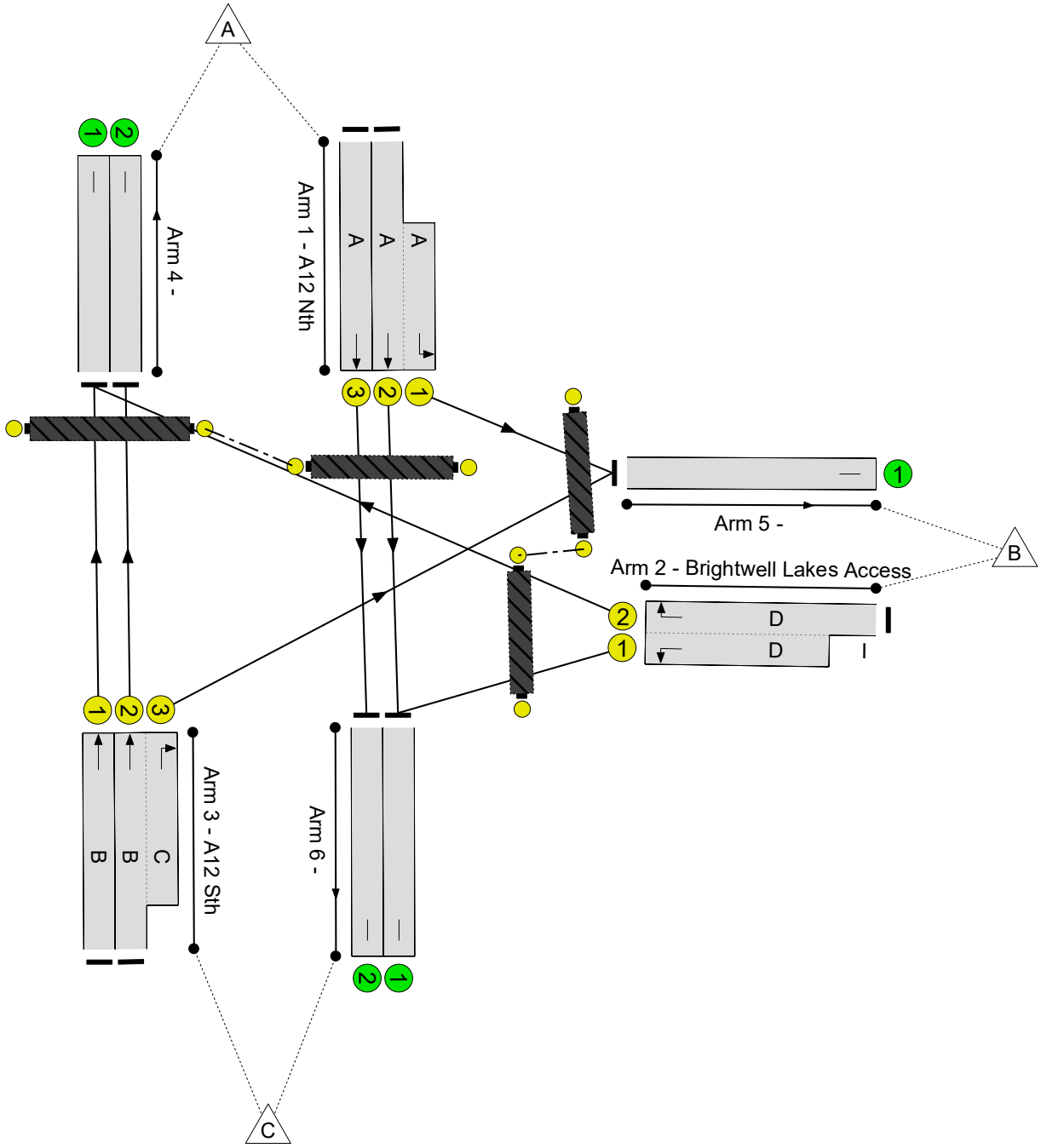


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 7.4 %
Total Traffic Delay: 21.9 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.8%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1005	2120:1819	1189+11	83.8 : 83.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	929	1980	1122	82.8%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	14	1786:1965	258+0	5.4 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	876	1980	1265	69.2%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	965	2120:1906	1354+16	70.4 : 70.4%
4/1		U	N/A	N/A	-		-	-	-	890	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	954	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	20	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	996	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	929	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

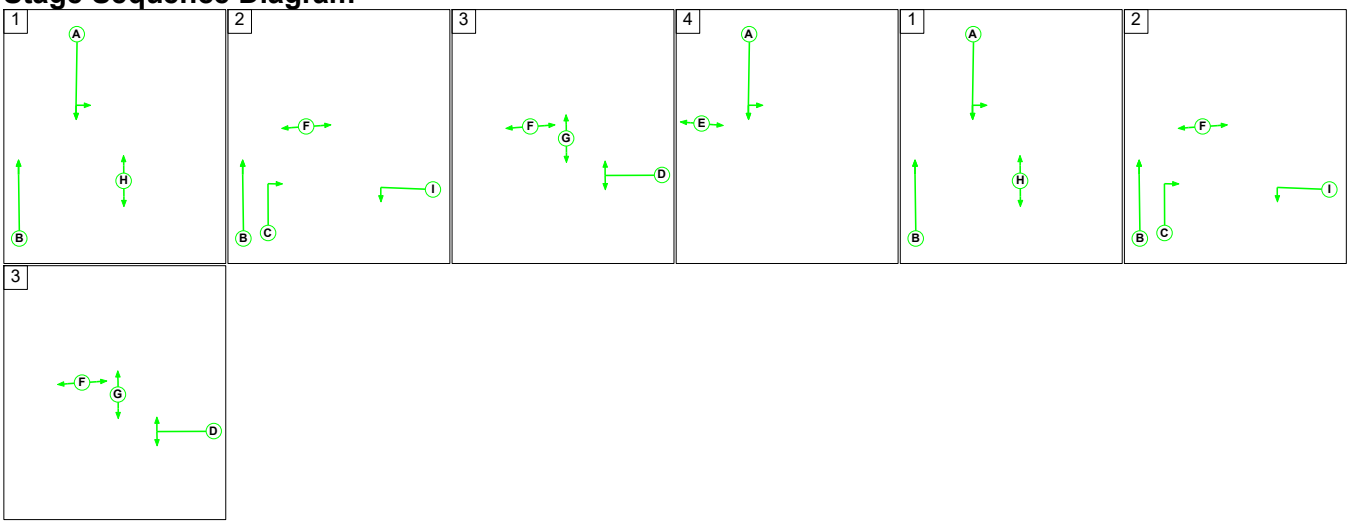
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.7**	**7.2**	**0.0**	**21.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**14.7**	**7.2**	**0.0**	**21.9**	**-**	**-**	**-**	**-**
1/2+1/1	1005	1005	-	-	-	4.5	2.5	-	7.0	25.1	20.6	2.5	23.1
1/3	929	929	-	-	-	4.1	2.3	-	6.5	25.0	18.8	2.3	21.2
2/2+2/1	14	14	-	-	-	0.1	0.0	-	0.2	40.9	0.3	0.0	0.3
3/1	876	876	-	-	-	2.8	1.1	-	3.9	16.0	18.2	1.1	19.4
3/2+3/3	965	965	-	-	-	3.2	1.2	-	4.4	16.3	20.1	1.2	21.3
4/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	954	954	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	20	20	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	996	996	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	929	929	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 7.4 Total Delay for Signalled Lanes (pcuHr): 21.88 Cycle Time (s): 180
PRC Over All Lanes (%): 7.4 Total Delay Over All Lanes(pcuHr): 21.88

Full Input Data And Results

Scenario 6: '23EY 06:00-07:00' (FG6: '23EY 06:00-07:00', Plan 2: 'Network Control Plan 2')

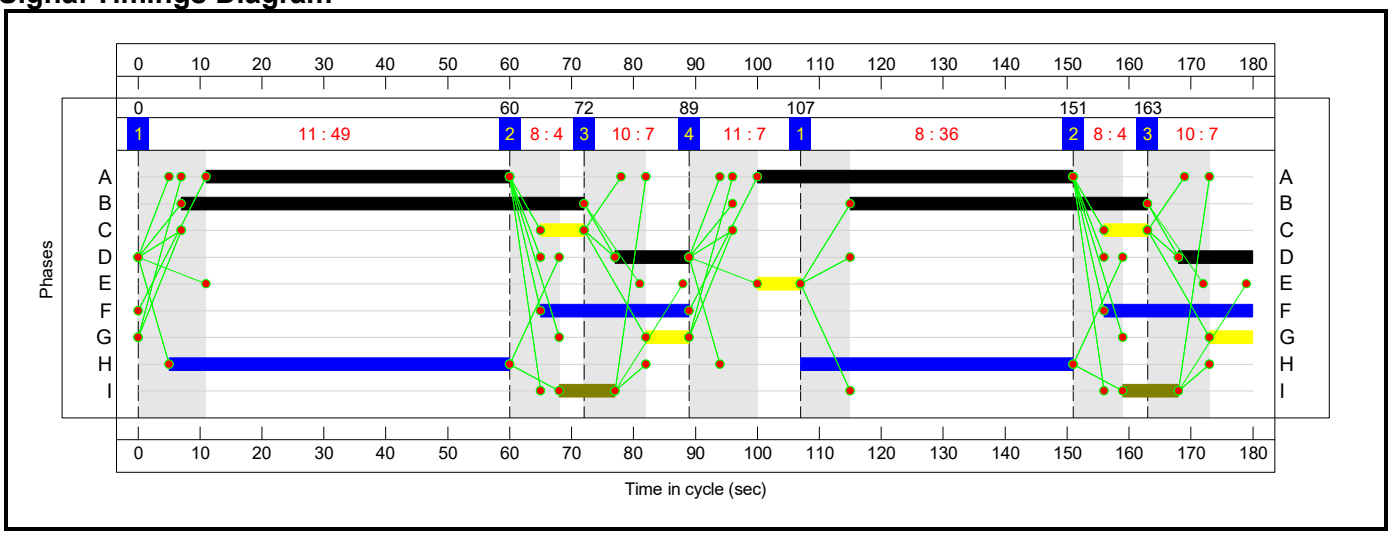
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

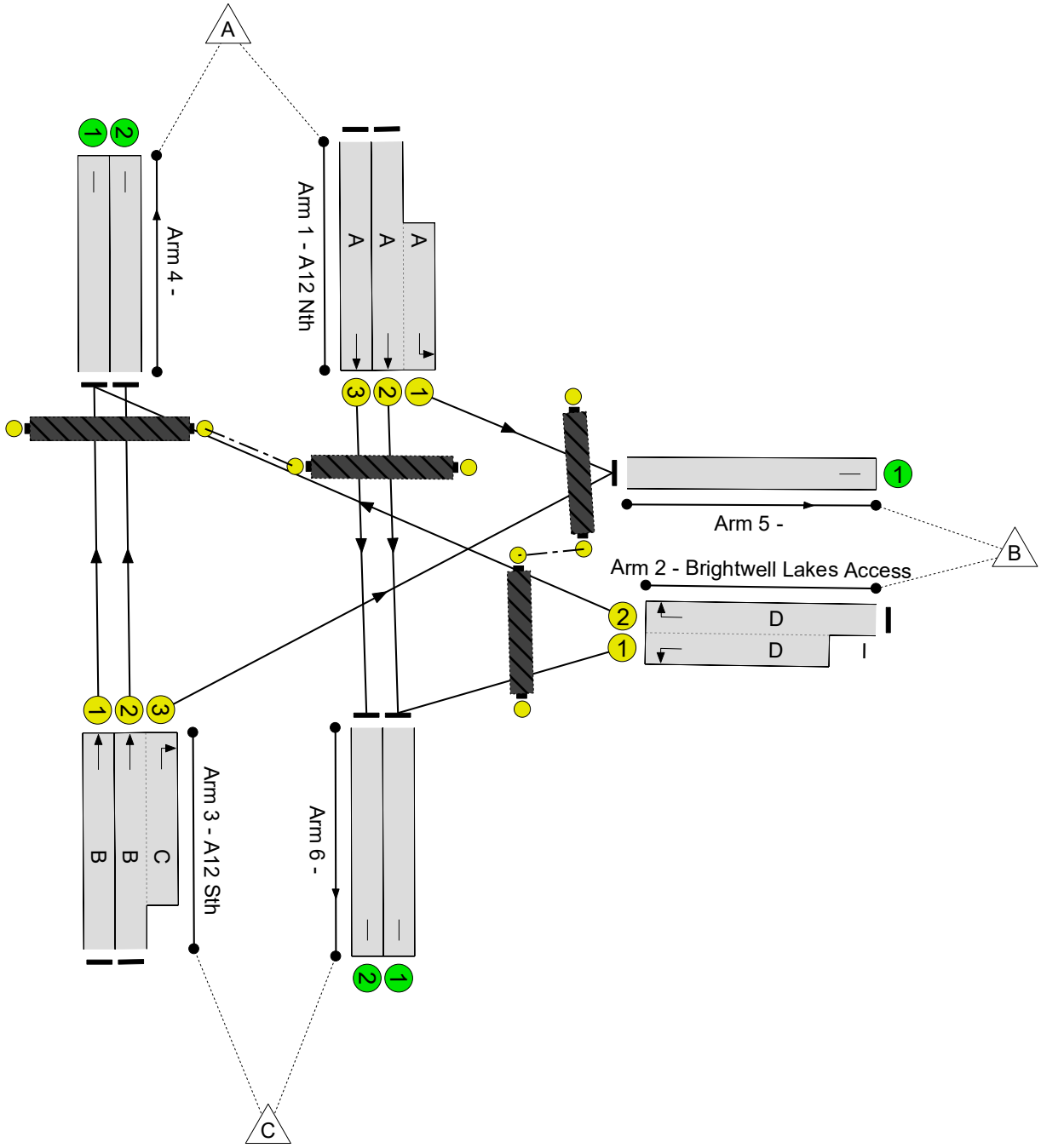


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 114.5 %
Total Traffic Delay: 5.9 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	503	2120:1819	1197+2	42.0 : 42.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	454	1980	1122	40.5%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	2	1786:1965	258+0	0.8 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	380	1980	1265	30.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	430	2120:1906	1354+6	31.6 : 31.6%
4/1		U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	3	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

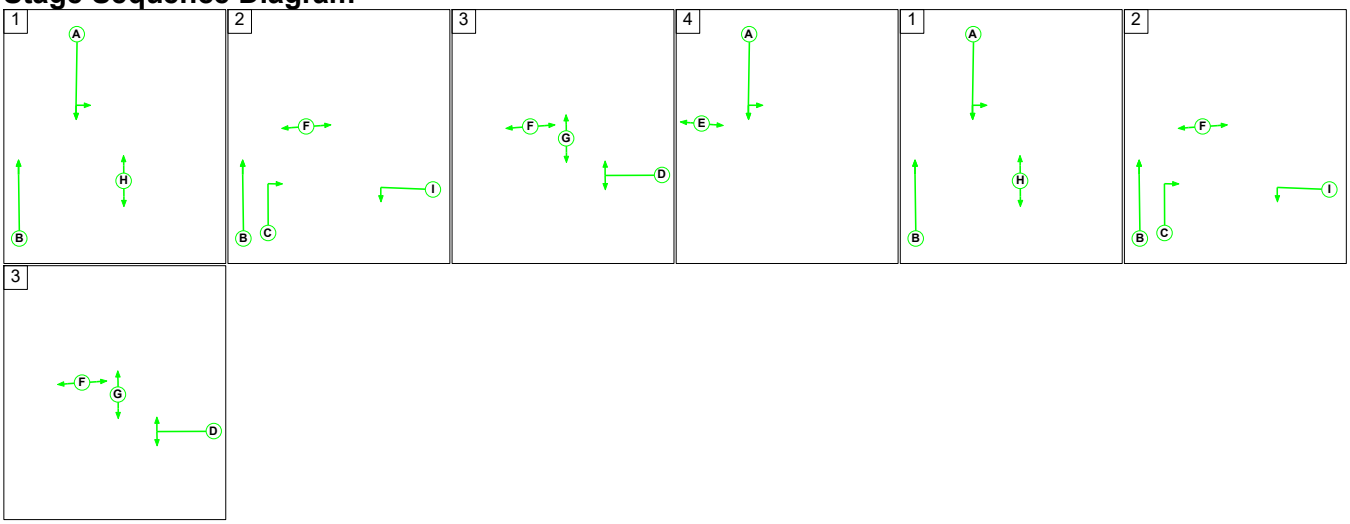
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.8**	**1.1**	**0.0**	**5.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.8**	**1.1**	**0.0**	**5.9**	**-**	**-**	**-**	**-**
1/2+1/1	503	503	-	-	-	1.5	0.4	-	1.9	13.7	7.1	0.4	7.5
1/3	454	454	-	-	-	1.4	0.3	-	1.7	13.7	6.3	0.3	6.6
2/2+2/1	2	2	-	-	-	0.0	0.0	-	0.0	40.4	0.0	0.0	0.0
3/1	380	380	-	-	-	0.8	0.2	-	1.0	9.9	5.4	0.2	5.6
3/2+3/3	430	430	-	-	-	1.0	0.2	-	1.2	10.1	6.2	0.2	6.4
4/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	3	3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 114.5 Total Delay for Signalled Lanes (pcuHr): 5.90 Cycle Time (s): 180
PRC Over All Lanes (%): 114.5 Total Delay Over All Lanes(pcuHr): 5.90

Full Input Data And Results

Scenario 7: '23EY 07:00-08:00' (FG7: '23EY 07:00-08:00', Plan 2: 'Network Control Plan 2')

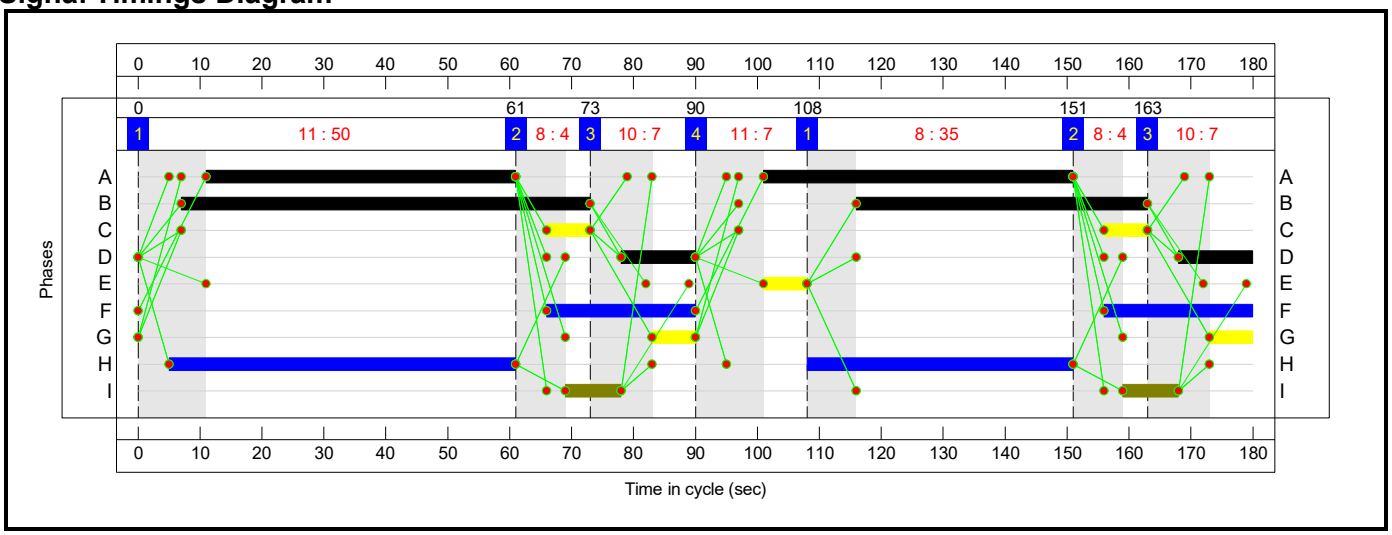
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

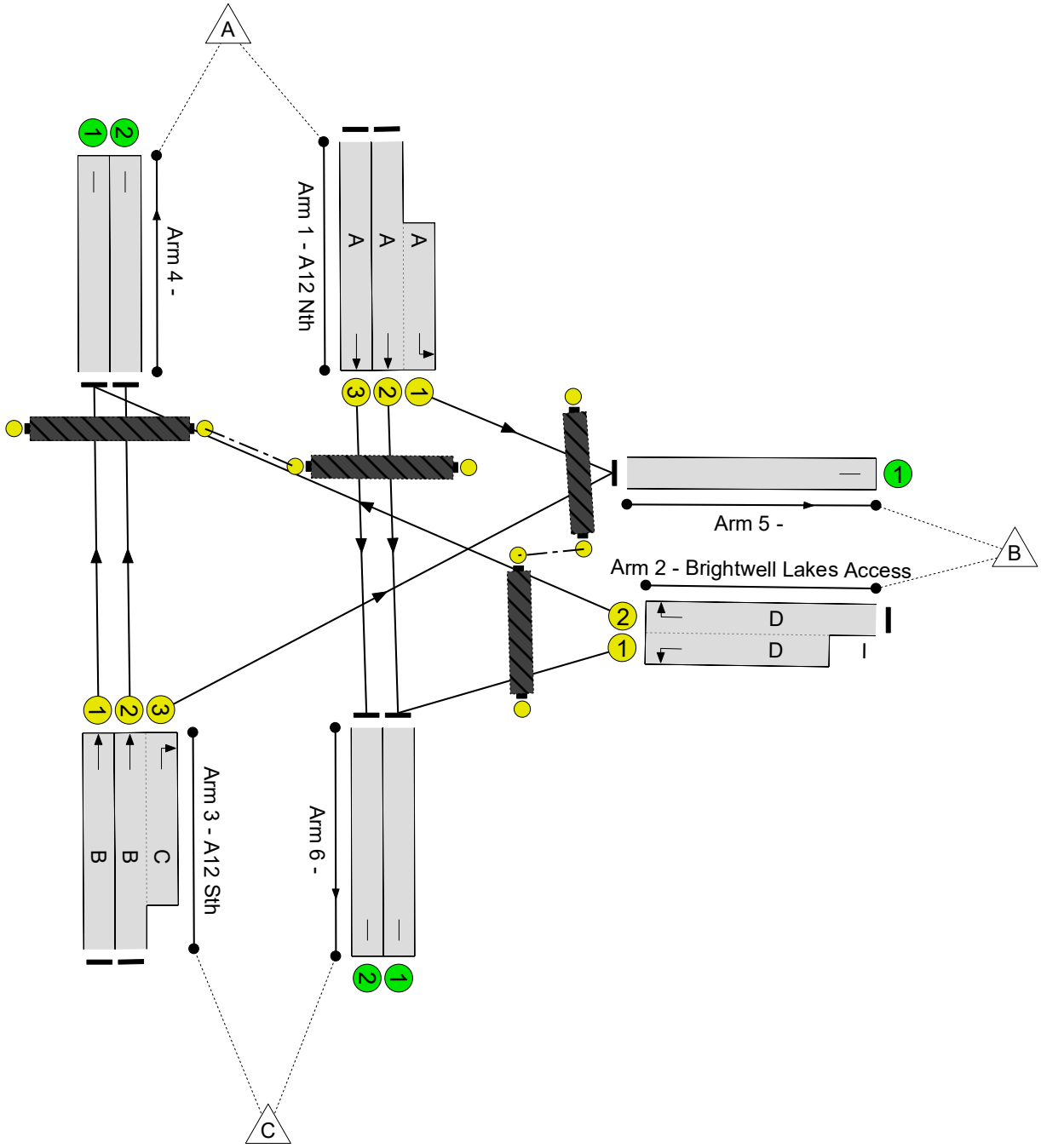


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 21.2 %
Total Traffic Delay: 18.7 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.2%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	890	2120:1980	1199+0	74.2 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	821	1980	1122	73.2%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	8	1786:1965	258+0	3.1 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	909	1980	1265	71.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	990	2120:1906	1354+3	72.9 : 72.9%
4/1		U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	890	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	821	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

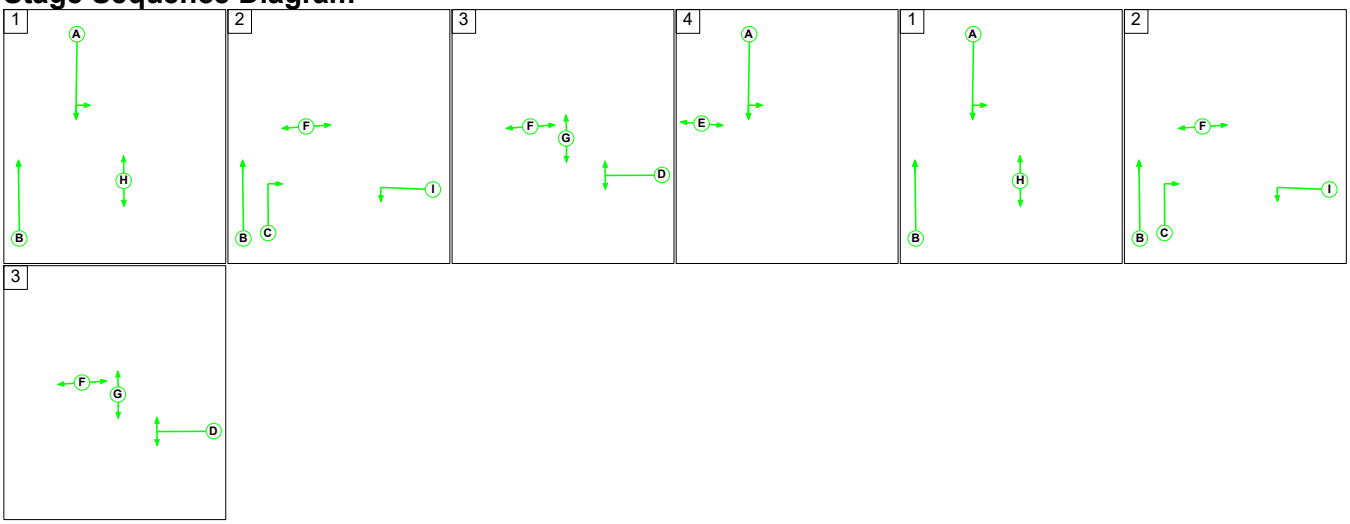
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**13.2**	**5.4**	**0.0**	**18.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**13.2**	**5.4**	**0.0**	**18.7**	**-**	**-**	**-**	**-**
1/2+1/1	890	890	-	-	-	3.6	1.4	-	5.0	20.4	16.6	1.4	18.0
1/3	821	821	-	-	-	3.3	1.4	-	4.6	20.4	15.1	1.4	16.4
2/2+2/1	8	8	-	-	-	0.1	0.0	-	0.1	40.6	0.2	0.0	0.2
3/1	909	909	-	-	-	3.0	1.3	-	4.2	16.8	19.4	1.3	20.7
3/2+3/3	990	990	-	-	-	3.3	1.3	-	4.6	16.8	21.4	1.3	22.7
4/1	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	821	821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 21.2 Total Delay for Signalled Lanes (pcuHr): 18.65 Cycle Time (s): 180
PRC Over All Lanes (%): 21.2 Total Delay Over All Lanes(pcuHr): 18.65

Full Input Data And Results

Scenario 8: '23EY 08:00-09:00' (FG8: '23EY 08:00-09:00', Plan 2: 'Network Control Plan 2')

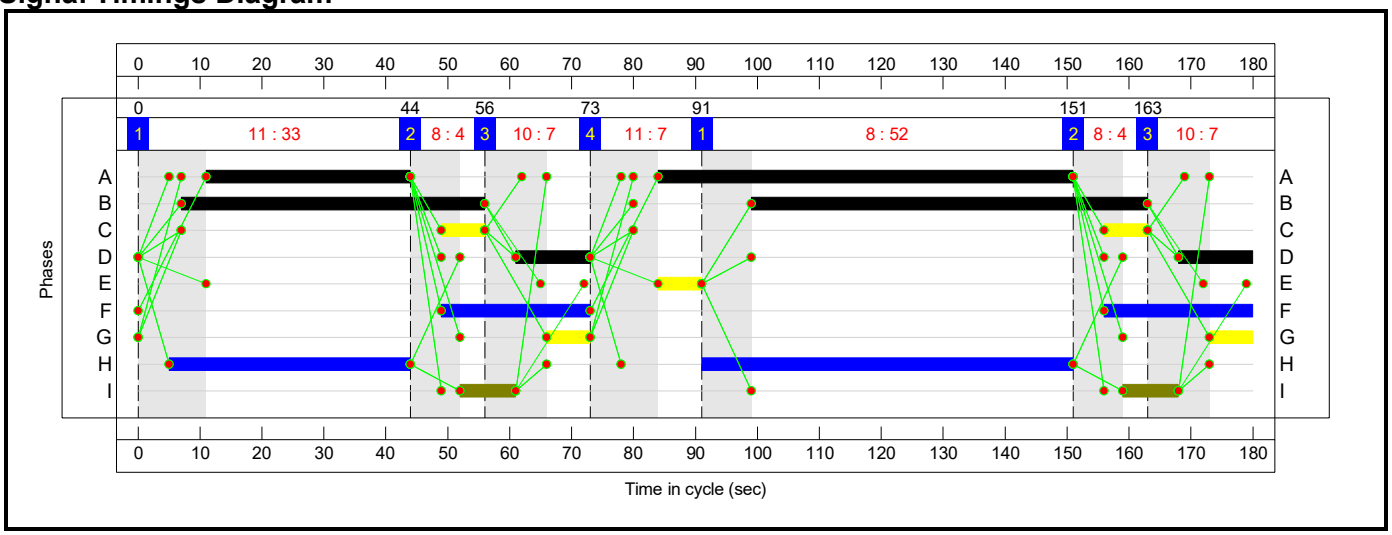
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	33	4	7	7	52	4	7
Change Point	0	44	56	73	91	151	163

Signal Timings Diagram

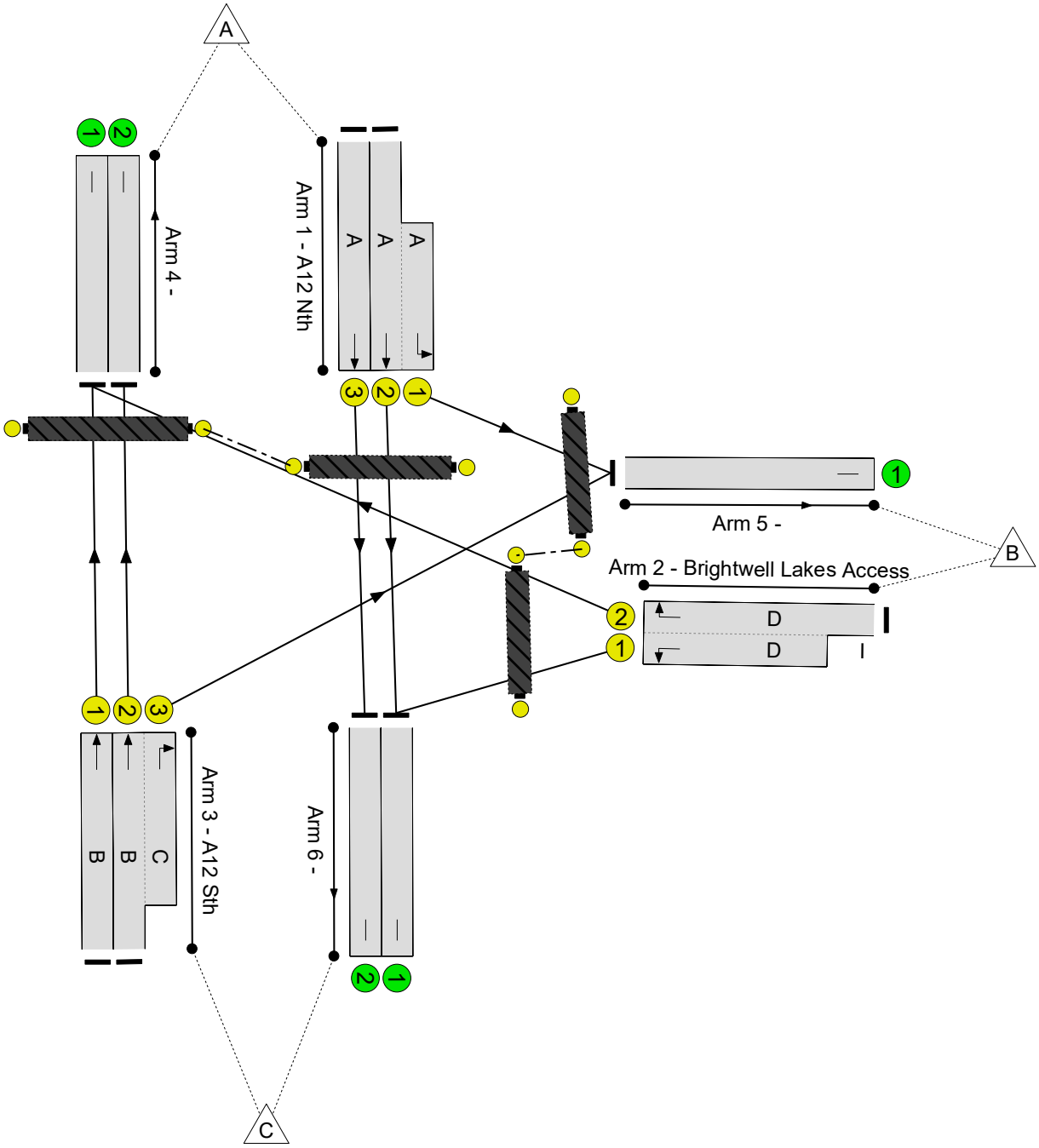


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -5.1 %
Total Traffic Delay: 37.5 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.6%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	971	2120:1980	1199+0	81.0 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	900	1980	1122	80.2%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	21	1786:1965	258+0	8.1 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1191	1980	1265	94.2%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1282	2120:1906	1354+1	94.6 : 94.6%
4/1		U	N/A	N/A	-		-	-	-	1212	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1281	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

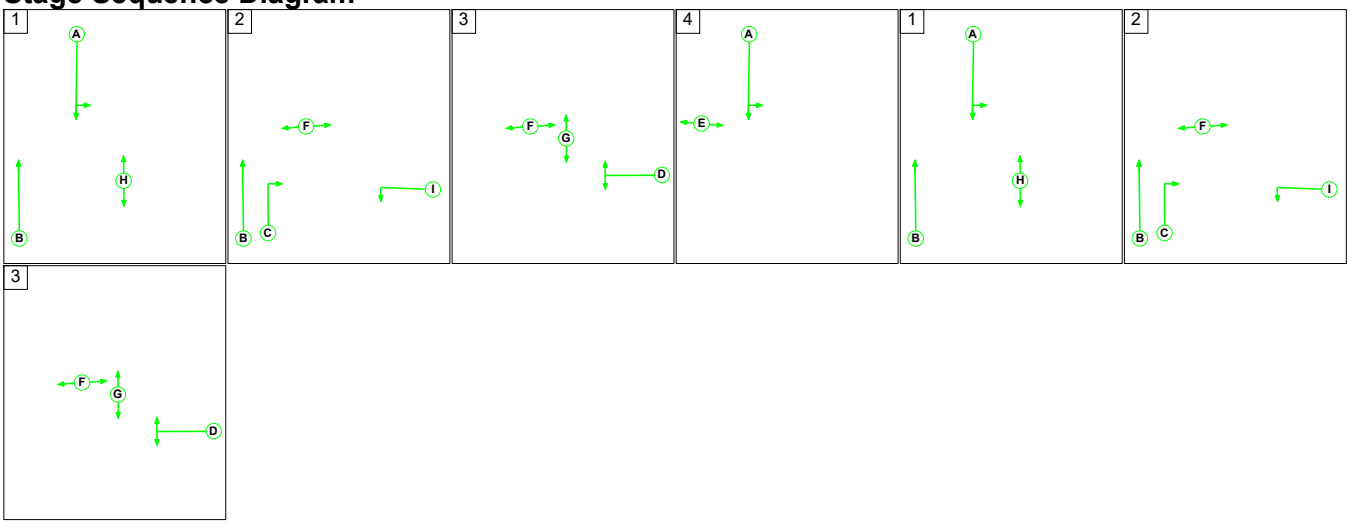
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.3**	**18.2**	**0.0**	**37.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.3**	**18.2**	**0.0**	**37.5**	**-**	**-**	**-**	**-**
1/2+1/1	971	971	-	-	-	4.2	2.1	-	6.3	23.4	19.4	2.1	21.5
1/3	900	900	-	-	-	3.9	2.0	-	5.9	23.5	17.8	2.0	19.7
2/2+2/1	21	21	-	-	-	0.2	0.0	-	0.2	42.6	0.6	0.0	0.6
3/1	1191	1191	-	-	-	5.3	6.8	-	12.1	36.5	34.7	6.8	41.5
3/2+3/3	1282	1282	-	-	-	5.7	7.3	-	13.0	36.6	37.7	7.3	45.0
4/1	1212	1212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1281	1281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	971	971	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	900	900	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -5.1 Total Delay for Signalled Lanes (pcuHr): 37.53 Cycle Time (s): 180
PRC Over All Lanes (%): -5.1 Total Delay Over All Lanes(pcuHr): 37.53

Full Input Data And Results

Scenario 9: '23EY 15:00-16:00' (FG9: '23EY 15:00-16:00', Plan 2: 'Network Control Plan 2')

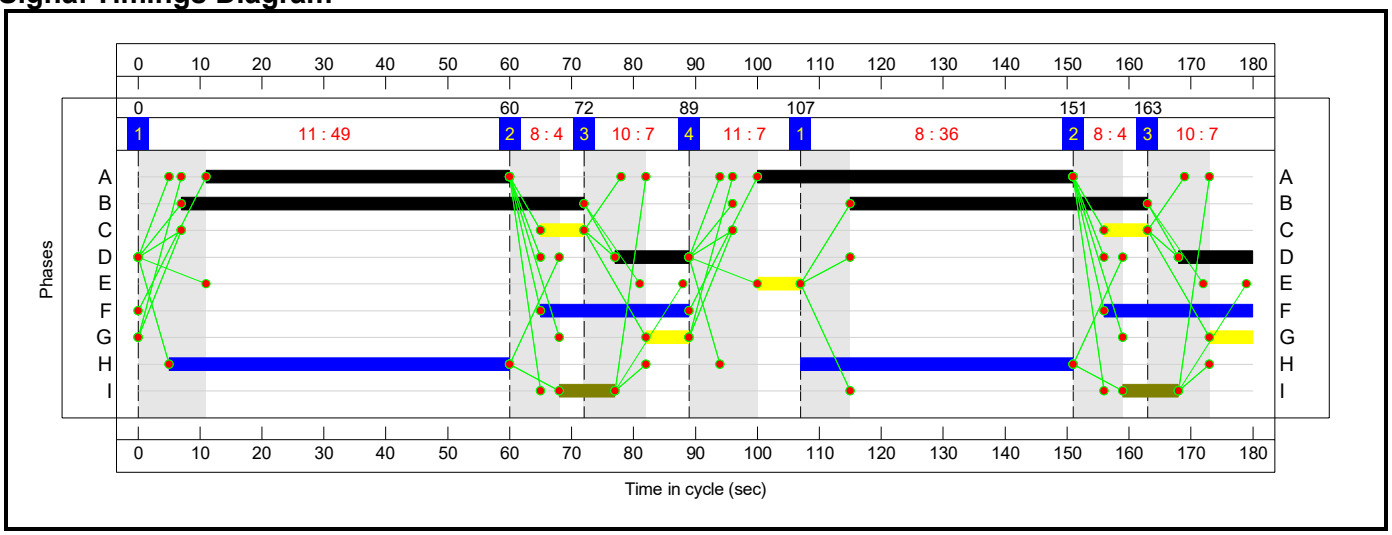
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

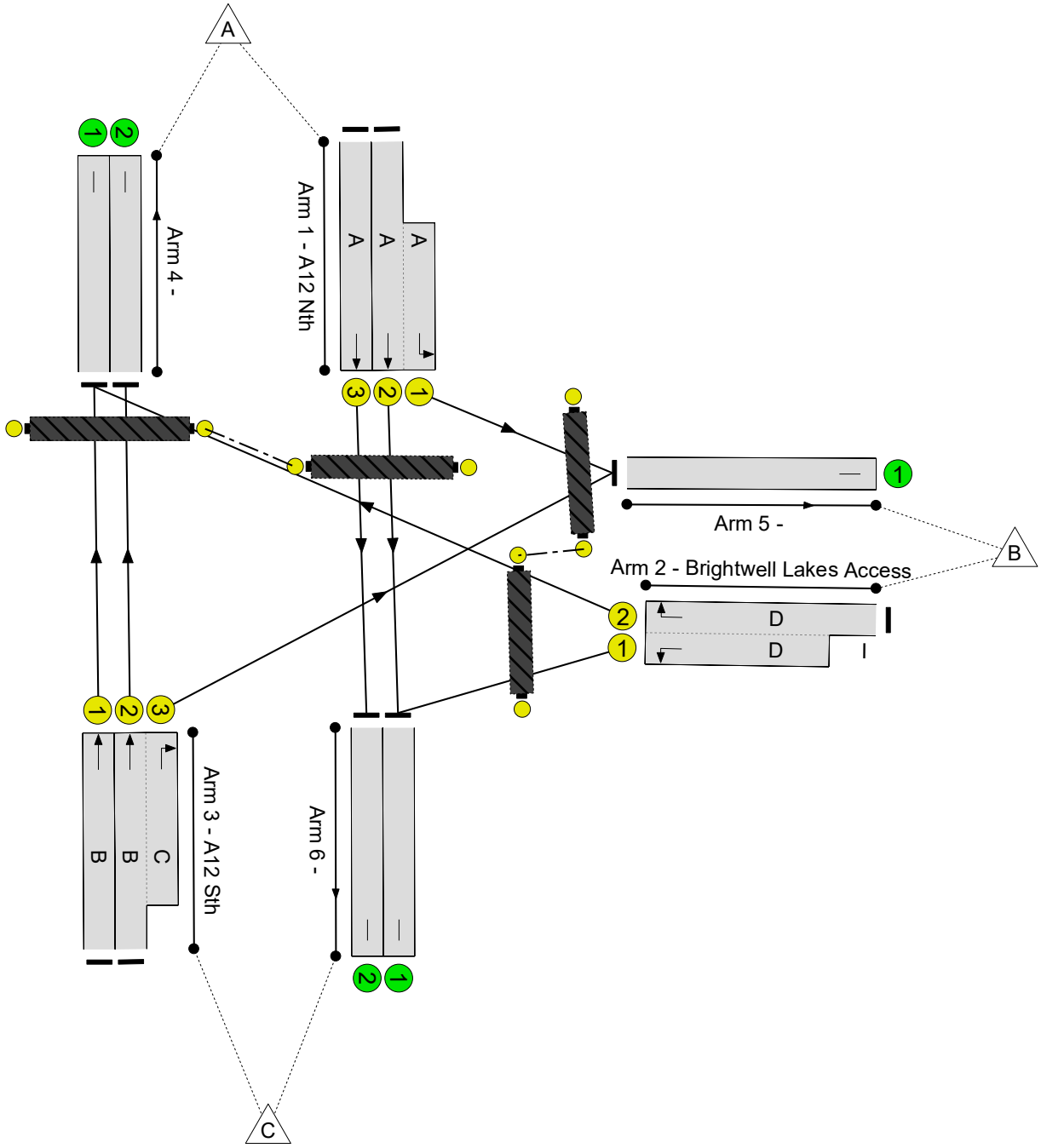


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 8.5 %
Total Traffic Delay: 22.2 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**82.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**82.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	995	2120:1819	1190+10	82.9 : 82.9%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	921	1980	1122	82.1%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	22	1786:1965	258+0	8.5 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	906	1980	1265	71.6%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	996	2120:1906	1354+12	72.9 : 72.9%
4/1		U	N/A	N/A	-		-	-	-	928	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	987	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	17	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	987	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	921	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.0**	**7.2**	**0.0**	**22.2**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**15.0**	**7.2**	**0.0**	**22.2**	**-**	**-**	**-**	**-**
1/2+1/1	995	995	-	-	-	4.4	2.4	-	6.8	24.5	20.1	2.4	22.5
1/3	921	921	-	-	-	4.0	2.2	-	6.3	24.6	18.4	2.2	20.7
2/2+2/1	22	22	-	-	-	0.2	0.0	-	0.3	41.0	0.5	0.0	0.5
3/1	906	906	-	-	-	3.0	1.3	-	4.2	16.7	19.4	1.3	20.6
3/2+3/3	996	996	-	-	-	3.4	1.3	-	4.7	17.0	21.4	1.3	22.7
4/1	928	928	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	987	987	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	17	17	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	987	987	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	921	921	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 8.5
PRC Over All Lanes (%): 8.5

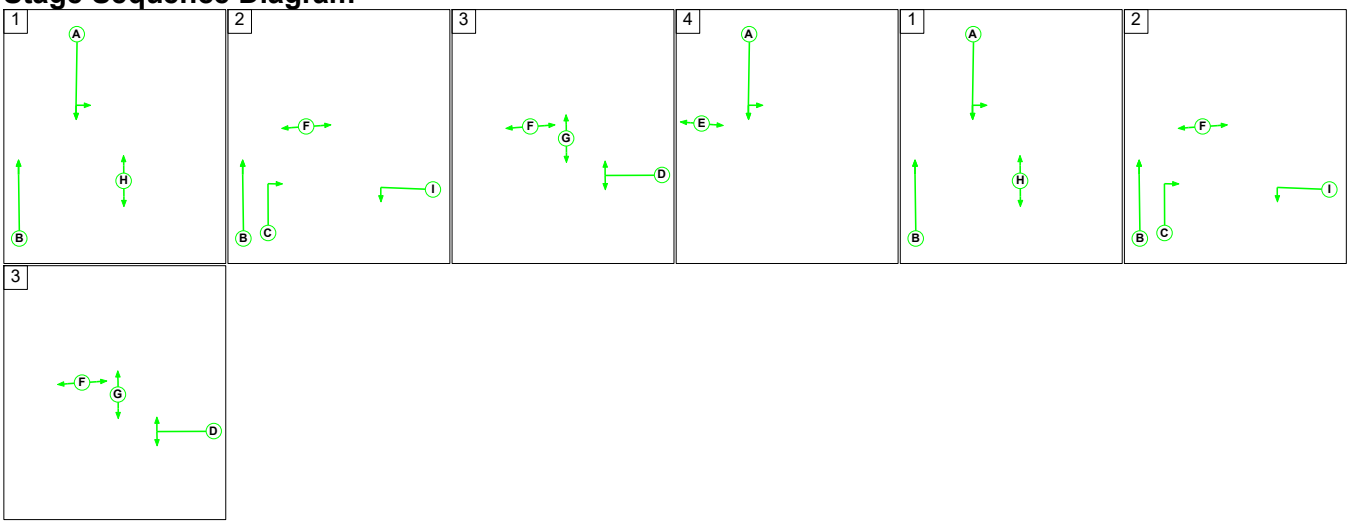
Total Delay for Signalled Lanes (pcuHr): 22.21
Total Delay Over All Lanes(pcuHr): 22.21

Cycle Time (s): 180

Full Input Data And Results

Scenario 10: '23EY 17:00-18:00' (FG10: '23EY 17:00-18:00', Plan 2: 'Network Control Plan 2')

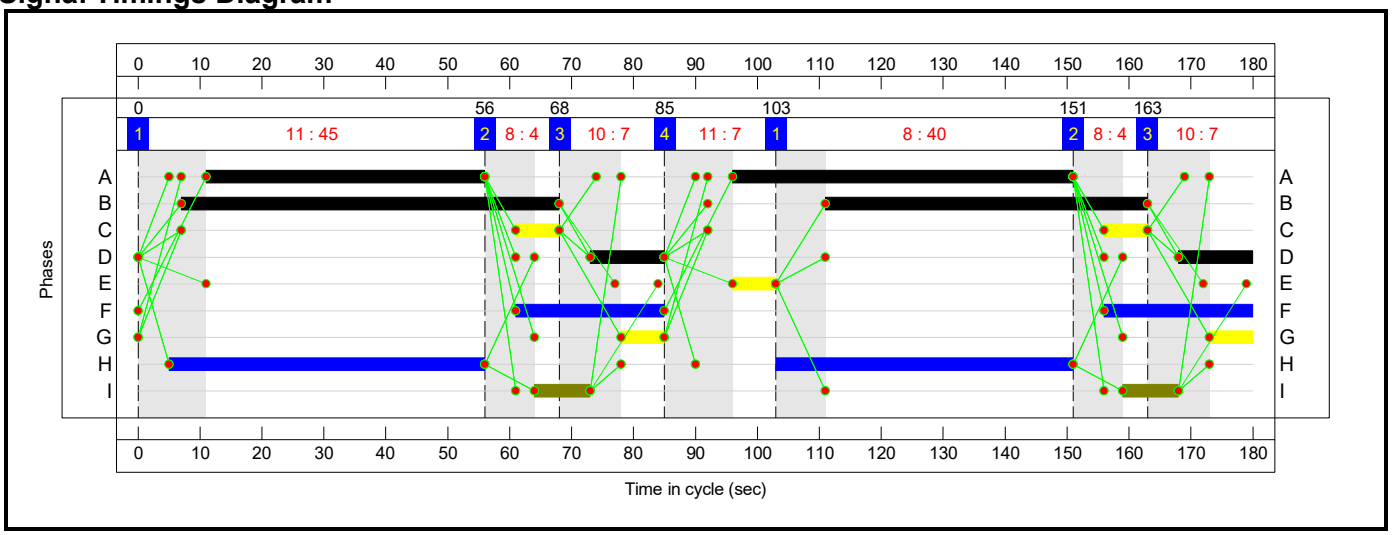
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	45	4	7	7	40	4	7
Change Point	0	56	68	85	103	151	163

Signal Timings Diagram

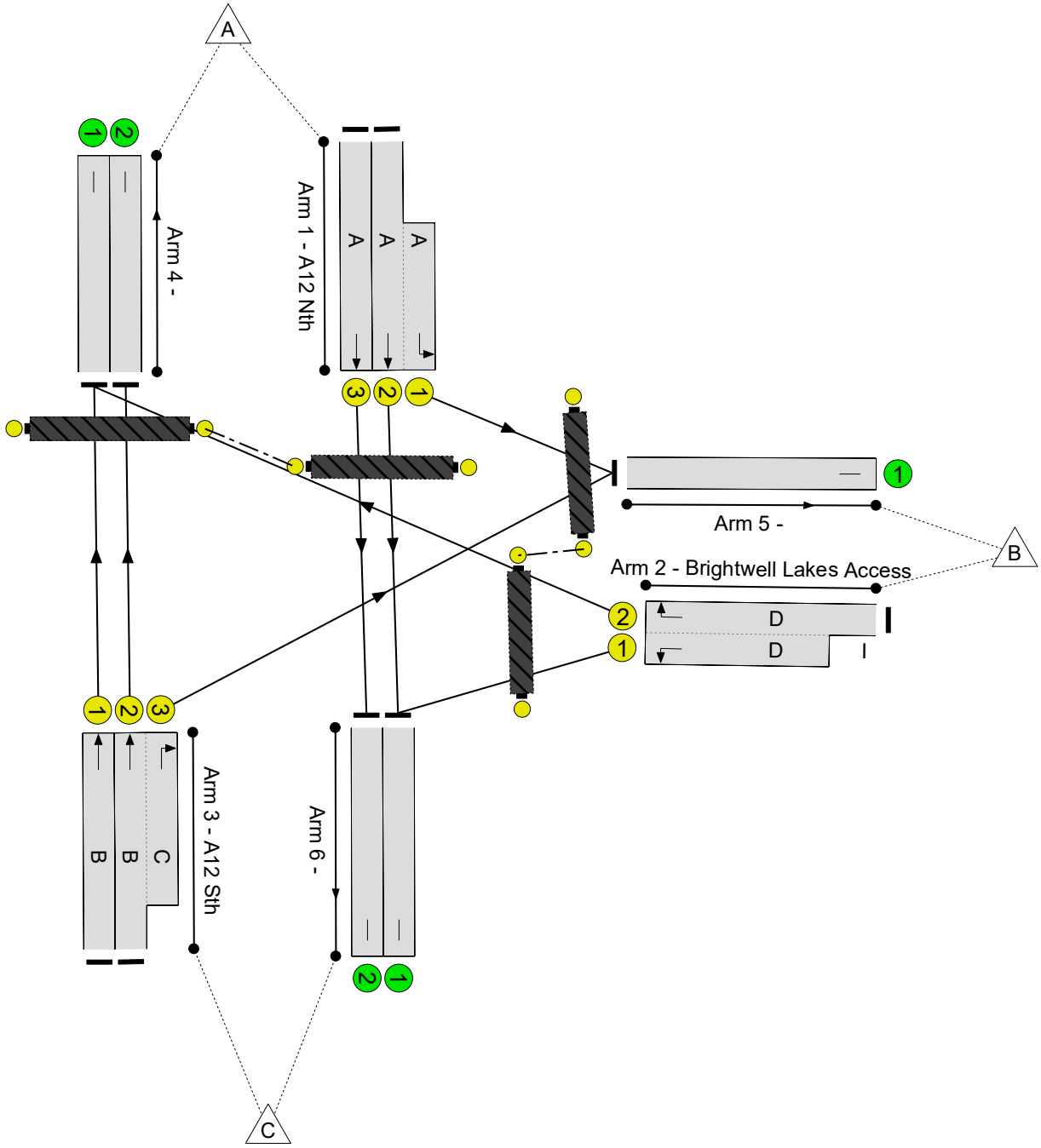


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 8.4 %
Total Traffic Delay: 21.5 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	996	2120:1819	1190+10	83.0 : 83.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	922	1980	1122	82.2%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	14	1786:1965	258+0	5.4 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	876	1980	1265	69.2%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	965	2120:1906	1354+16	70.4 : 70.4%
4/1		U	N/A	N/A	-		-	-	-	890	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	954	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	19	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	922	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

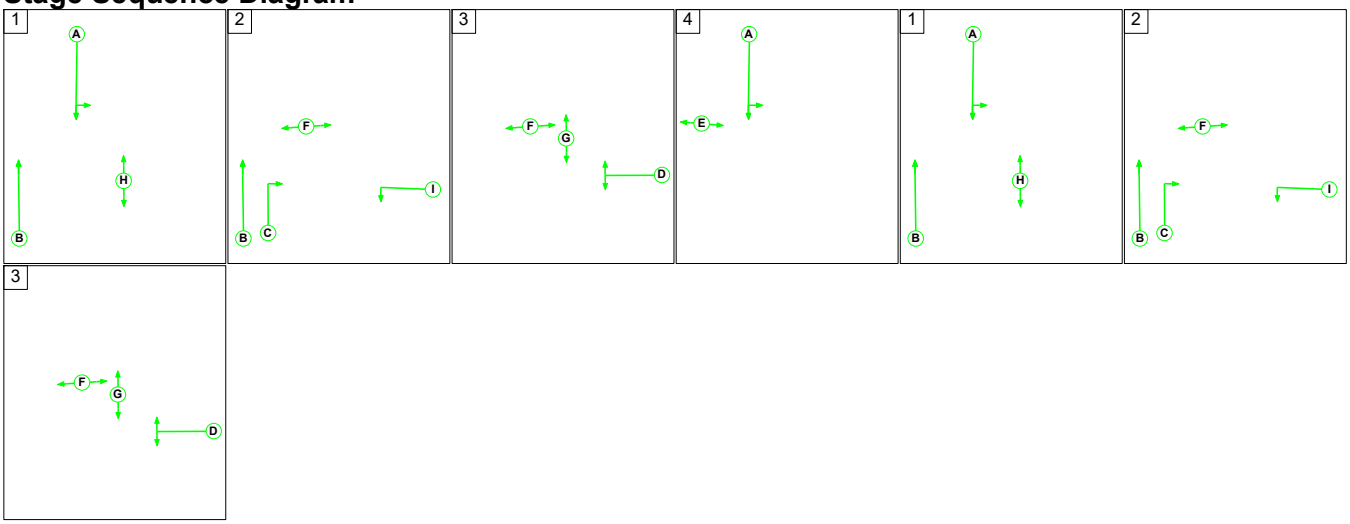
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.6**	**7.0**	**0.0**	**21.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**14.6**	**7.0**	**0.0**	**21.5**	**-**	**-**	**-**	**-**
1/2+1/1	996	996	-	-	-	4.4	2.4	-	6.8	24.6	20.1	2.4	22.5
1/3	922	922	-	-	-	4.1	2.3	-	6.3	24.6	18.4	2.3	20.7
2/2+2/1	14	14	-	-	-	0.1	0.0	-	0.2	40.9	0.3	0.0	0.3
3/1	876	876	-	-	-	2.8	1.1	-	3.9	16.0	18.2	1.1	19.4
3/2+3/3	965	965	-	-	-	3.2	1.2	-	4.4	16.3	20.1	1.2	21.3
4/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	954	954	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	19	19	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	922	922	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 8.4 Total Delay for Signalled Lanes (pcuHr): 21.53 Cycle Time (s): 180
PRC Over All Lanes (%): 8.4 Total Delay Over All Lanes(pcuHr): 21.53

Full Input Data And Results

Scenario 11: '28RC 06:00-07:00' (FG11: '28RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

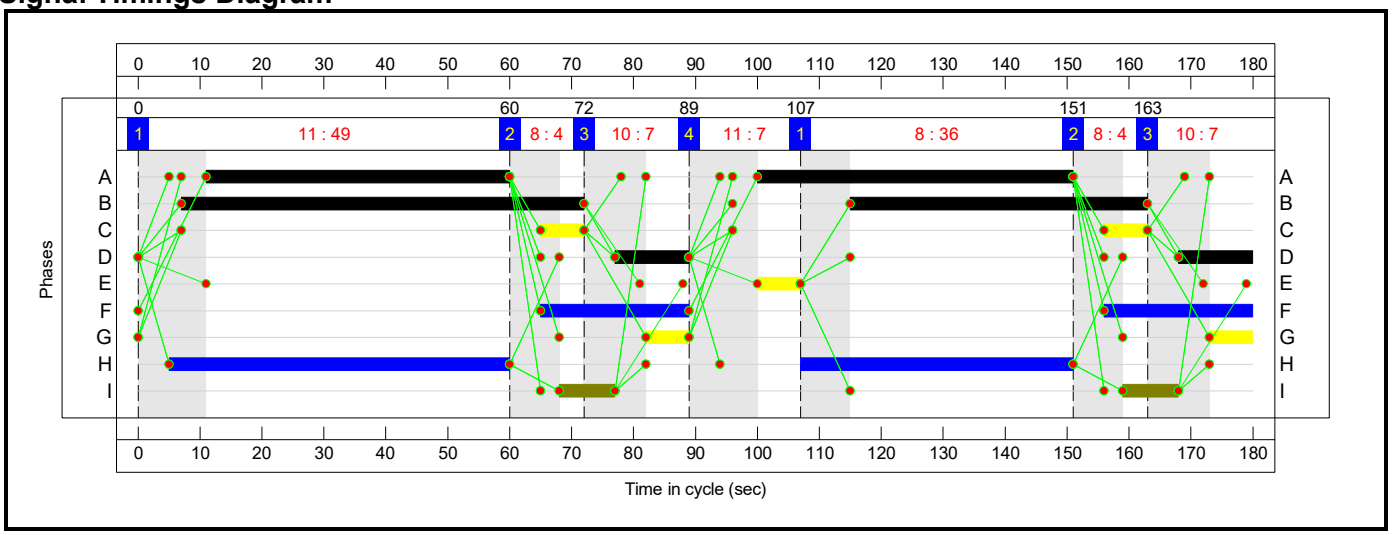
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

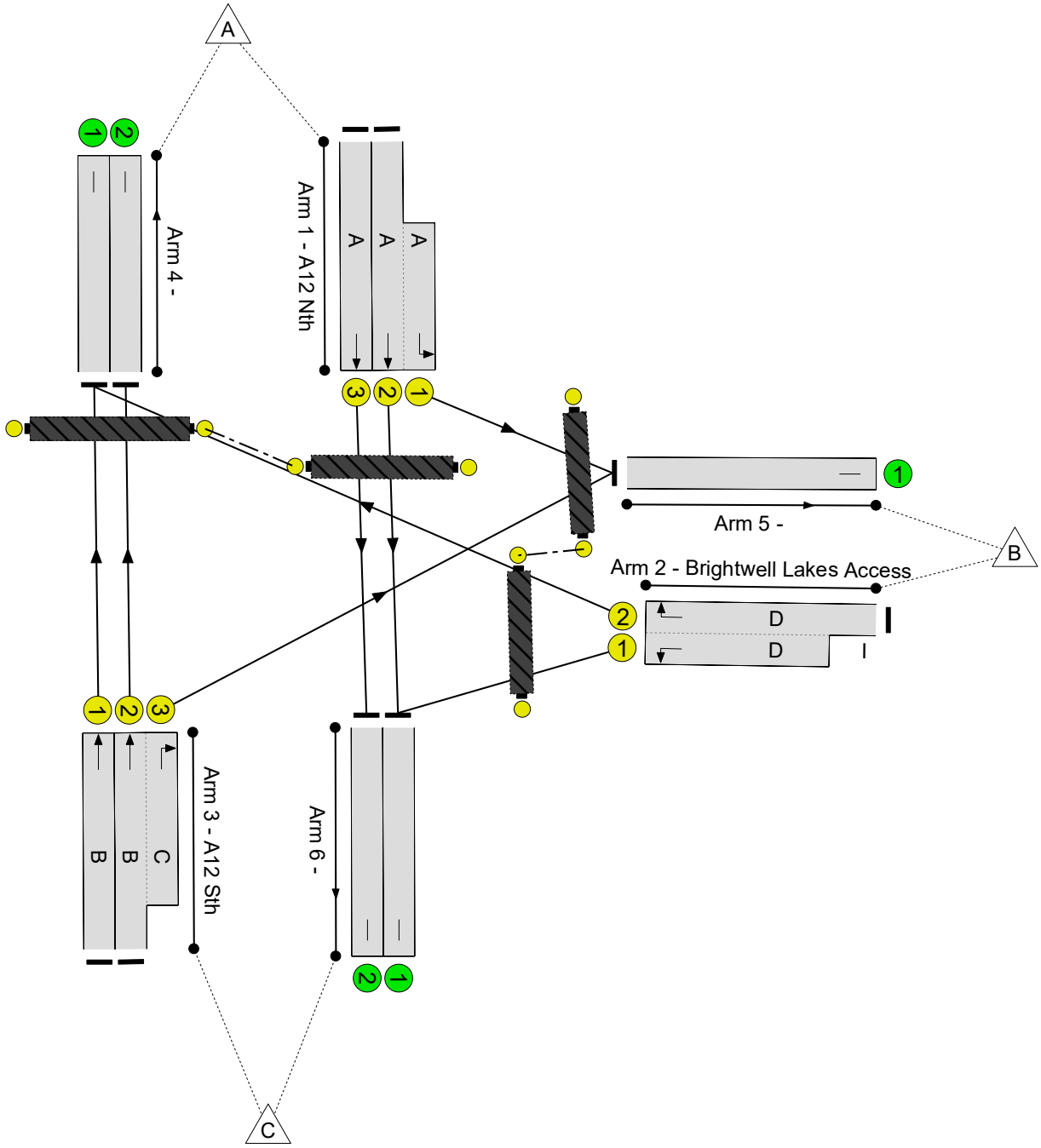


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 113.7 %
Total Traffic Delay: 5.9 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.1%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	505	2120:1819	1194+5	42.1 : 42.1%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	455	1980	1122	40.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	2	1786:1965	258+0	0.8 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	379	1980	1265	30.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	429	2120:1906	1354+6	31.5 : 31.5%
4/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	455	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

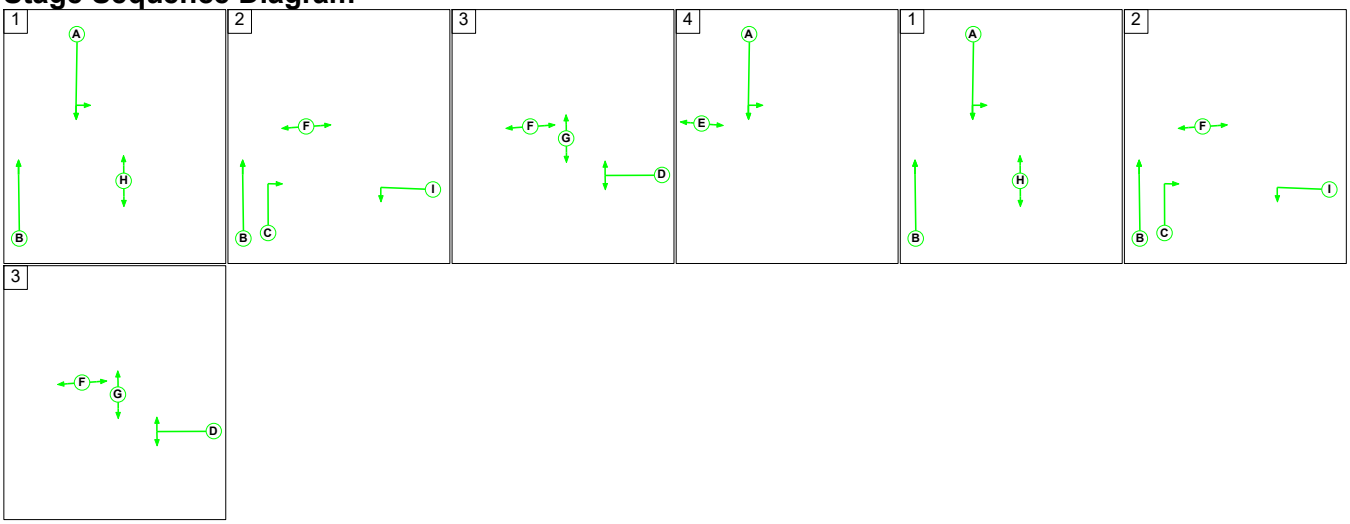
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.8**	**1.2**	**0.0**	**5.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.8**	**1.2**	**0.0**	**5.9**	**-**	**-**	**-**	**-**
1/2+1/1	505	505	-	-	-	1.6	0.4	-	1.9	13.7	7.1	0.4	7.5
1/3	455	455	-	-	-	1.4	0.3	-	1.7	13.7	6.3	0.3	6.7
2/2+2/1	2	2	-	-	-	0.0	0.0	-	0.0	40.4	0.0	0.0	0.0
3/1	379	379	-	-	-	0.8	0.2	-	1.0	9.9	5.4	0.2	5.6
3/2+3/3	429	429	-	-	-	1.0	0.2	-	1.2	10.1	6.2	0.2	6.4
4/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 113.7 Total Delay for Signalled Lanes (pcuHr): 5.91 Cycle Time (s): 180
PRC Over All Lanes (%): 113.7 Total Delay Over All Lanes(pcuHr): 5.91

Full Input Data And Results

Scenario 12: '28RC 07:00-08:00' (FG12: '28RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

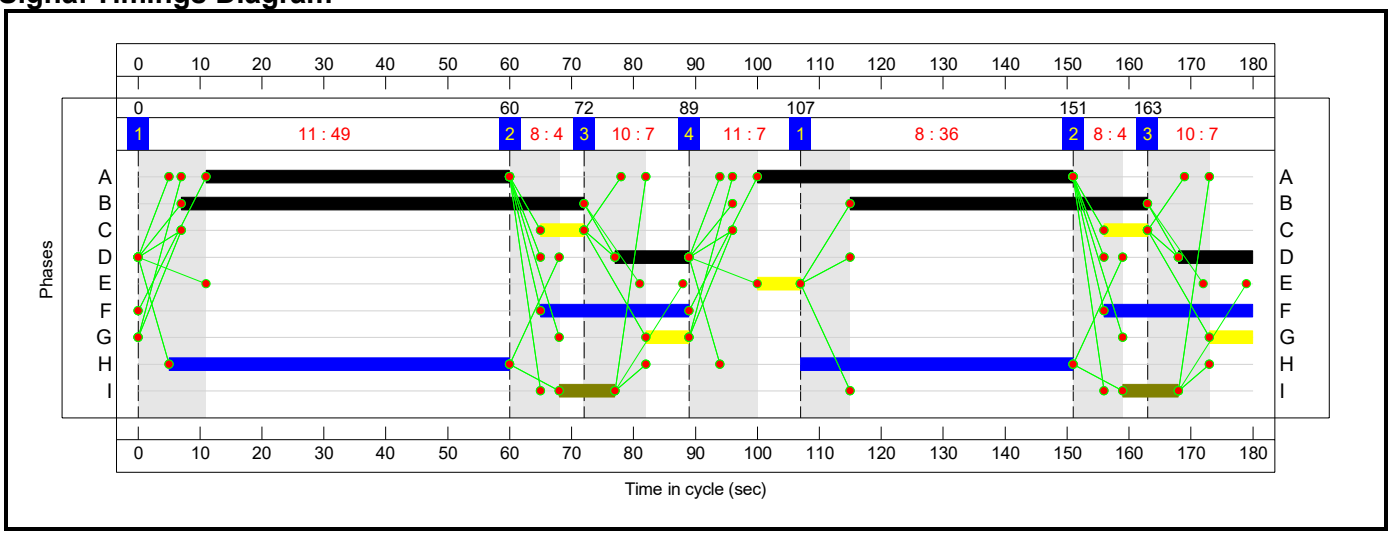
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

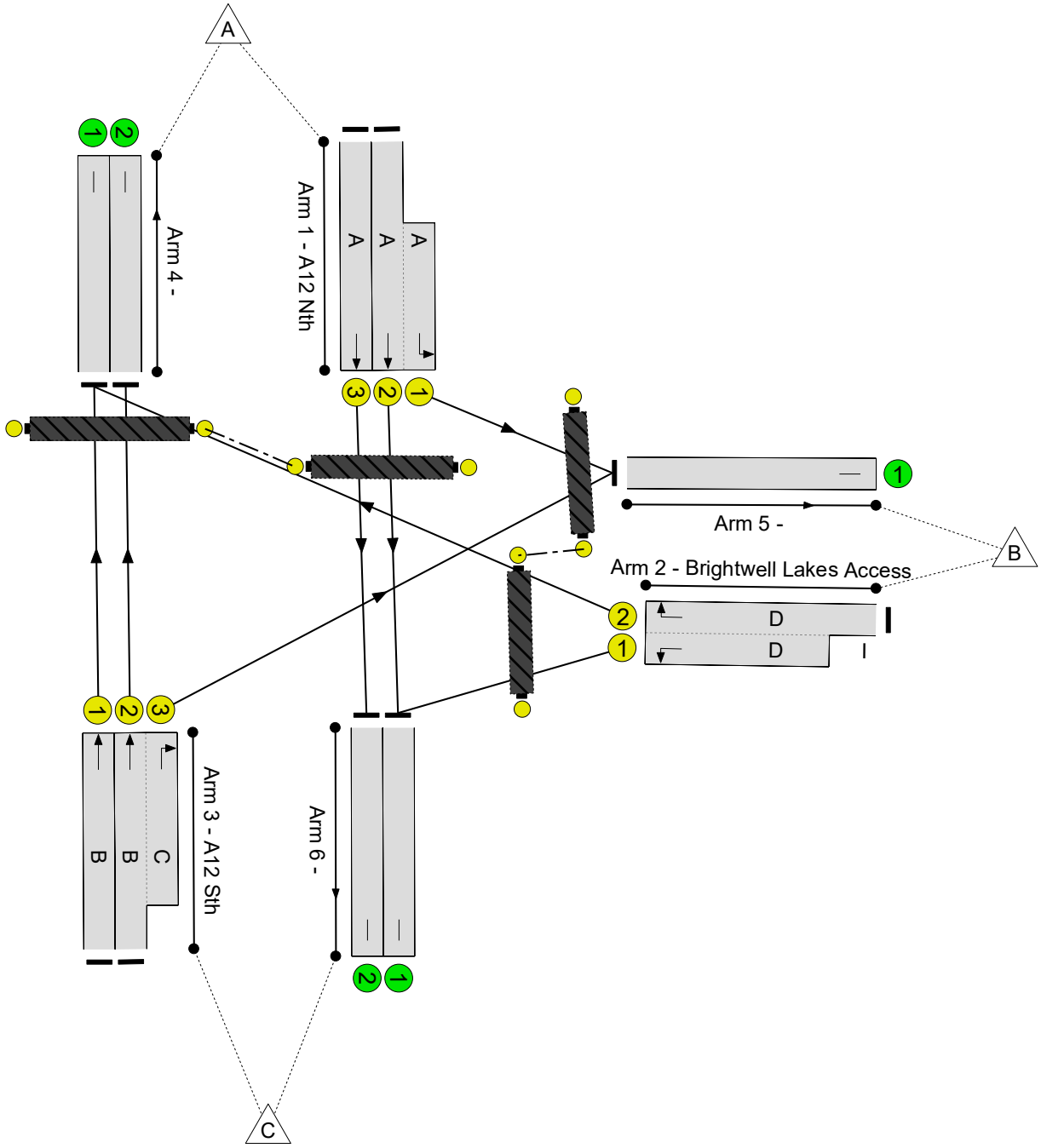


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 21.8 %
Total Traffic Delay: 19.7 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	887	2120:1819	1187+14	73.9 : 73.9%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	816	1980	1122	72.7%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	113	1786:1762	258+349	18.6 : 18.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	915	1980	1265	72.3%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1006	2120:1906	1354+15	73.5 : 73.5%
4/1		U	N/A	N/A	-		-	-	-	963	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	21	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	942	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	816	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

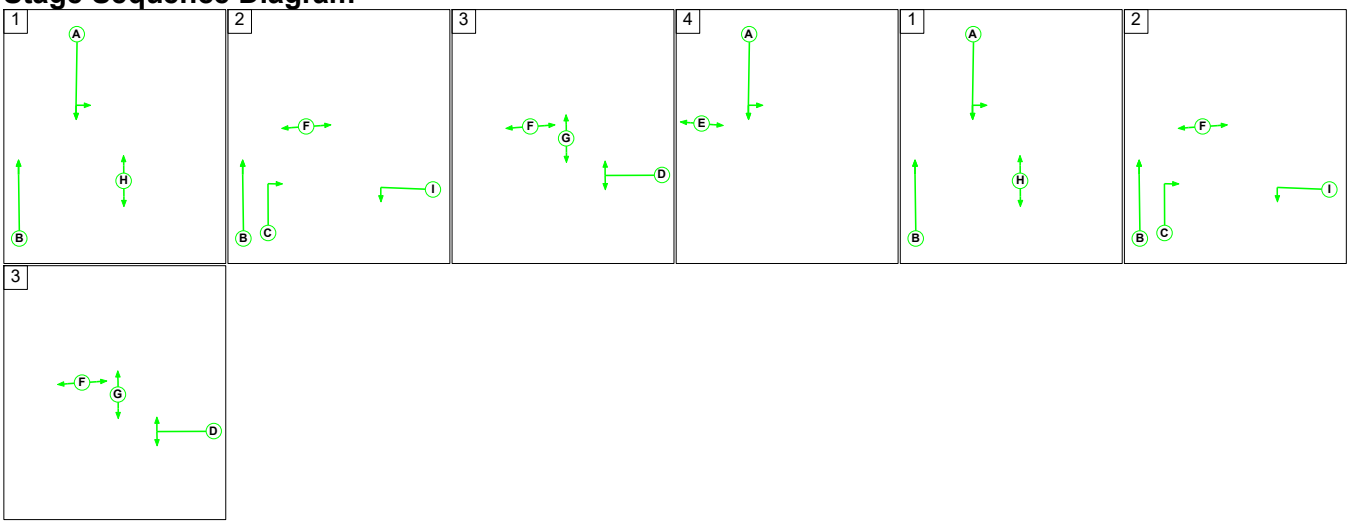
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.2**	**5.5**	**0.0**	**19.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**14.2**	**5.5**	**0.0**	**19.7**	**-**	**-**	**-**	**-**
1/2+1/1	887	887	-	-	-	3.6	1.4	-	5.0	20.2	16.4	1.4	17.8
1/3	816	816	-	-	-	3.3	1.3	-	4.6	20.2	15.0	1.3	16.3
2/2+2/1	113	113	-	-	-	0.9	0.1	-	1.0	33.4	1.3	0.1	1.4
3/1	915	915	-	-	-	3.0	1.3	-	4.3	16.9	19.8	1.3	21.1
3/2+3/3	1006	1006	-	-	-	3.4	1.4	-	4.8	17.2	21.8	1.4	23.2
4/1	963	963	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	21	21	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	942	942	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	816	816	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 21.8 Total Delay for Signalled Lanes (pcuHr): 19.72 Cycle Time (s): 180
PRC Over All Lanes (%): 21.8 Total Delay Over All Lanes(pcuHr): 19.72

Full Input Data And Results

Scenario 13: '28RC 08:00-09:00' (FG13: '28RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

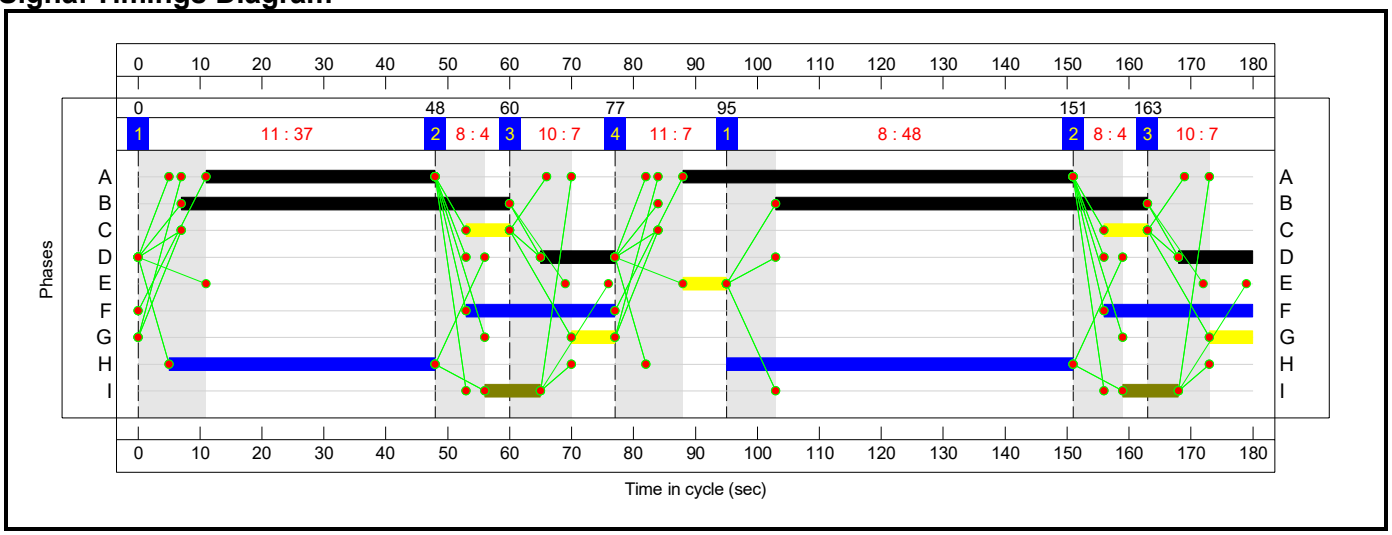
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	37	4	7	7	48	4	7
Change Point	0	48	60	77	95	151	163

Signal Timings Diagram

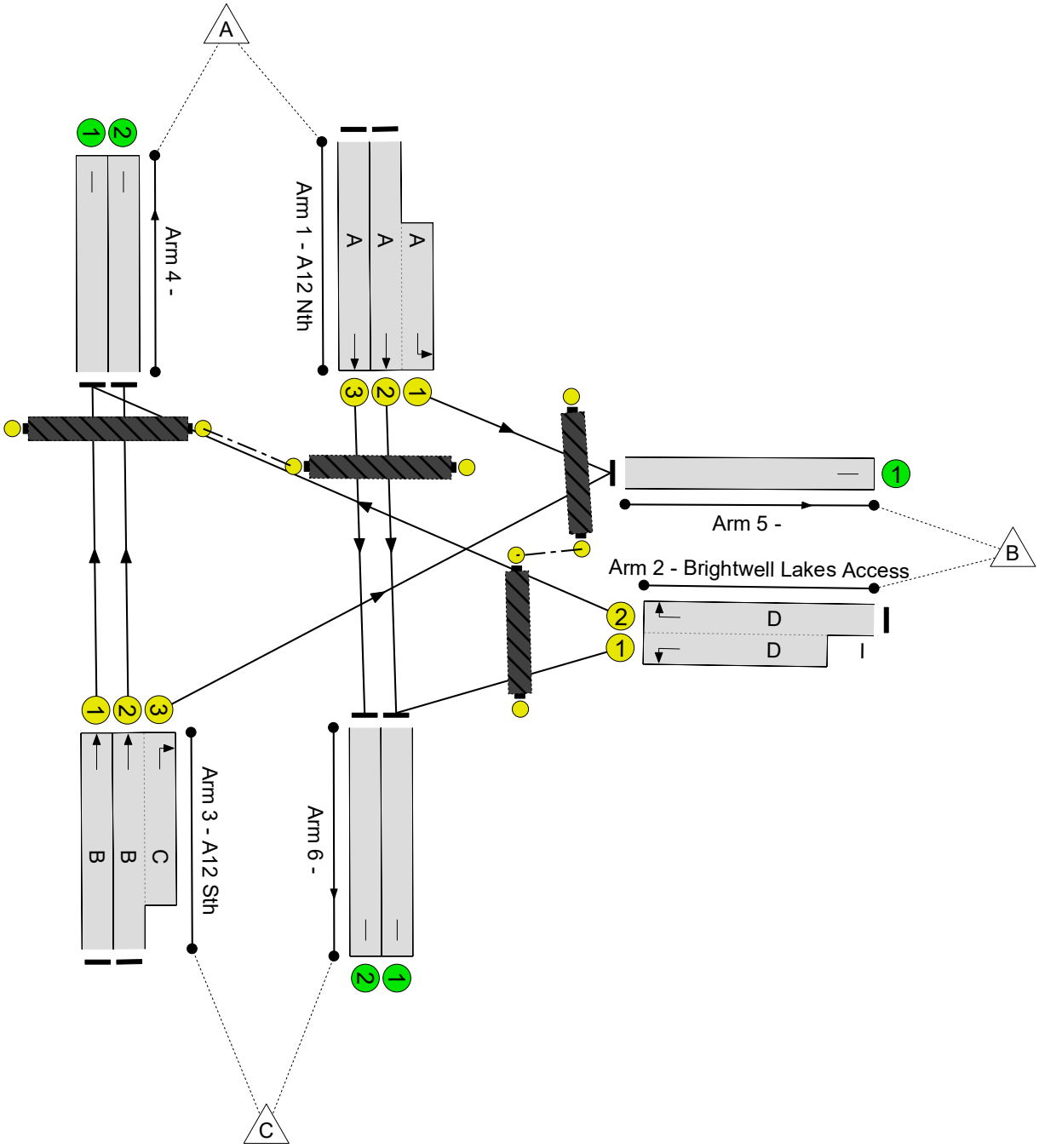


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -5.7 %
Total Traffic Delay: 43.3 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.1%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1014	2120:1819	1177+25	84.4 : 84.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	936	1980	1122	83.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	158	1786:1762	258+21	56.6 : 56.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1198	1980	1265	94.7%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1314	2120:1906	1352+29	95.1 : 95.1%
4/1		U	N/A	N/A	-		-	-	-	1344	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1286	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	49	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1005	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	936	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

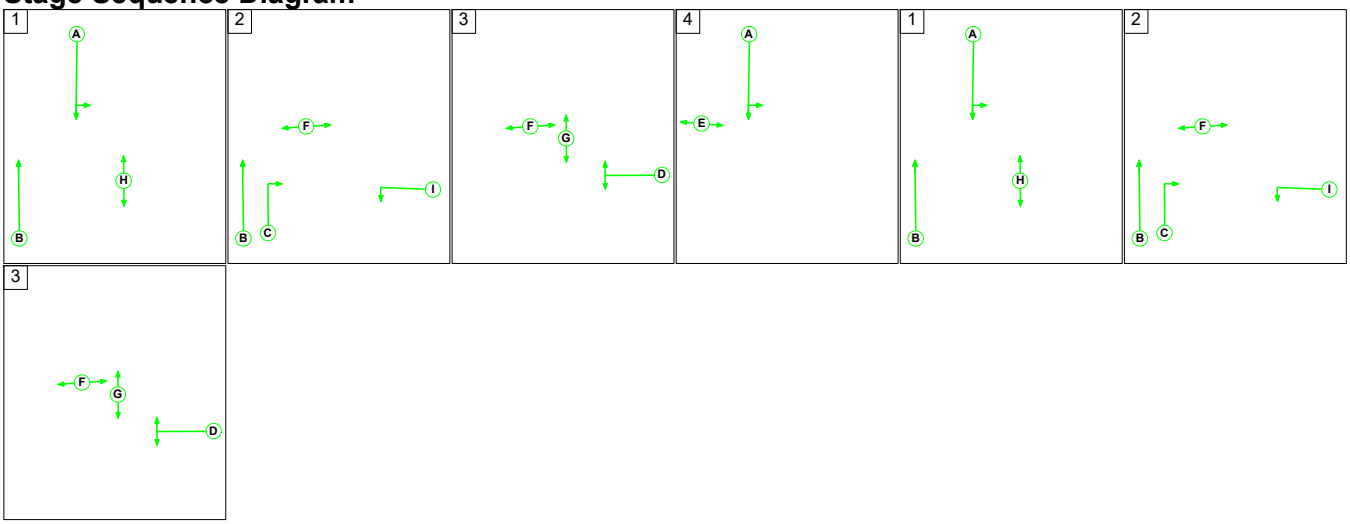
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.3**	**20.9**	**0.0**	**43.3**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**22.3**	**20.9**	**0.0**	**43.3**	**-**	**-**	**-**	**-**
1/2+1/1	1014	1014	-	-	-	4.5	2.6	-	7.2	25.4	20.7	2.6	23.3
1/3	936	936	-	-	-	4.2	2.5	-	6.6	25.5	19.0	2.5	21.4
2/2+2/1	158	158	-	-	-	1.6	0.6	-	2.2	50.8	4.0	0.6	4.6
3/1	1198	1198	-	-	-	5.6	7.3	-	12.9	38.9	34.3	7.3	41.6
3/2+3/3	1314	1314	-	-	-	6.4	7.9	-	14.3	39.2	38.5	7.9	46.4
4/1	1344	1344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1286	1286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	49	49	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1005	1005	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	936	936	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -5.7 Total Delay for Signalled Lanes (pcuHr): 43.25 Cycle Time (s): 180
PRC Over All Lanes (%): -5.7 Total Delay Over All Lanes(pcuHr): 43.25

Full Input Data And Results

Scenario 14: '28RC 15:00-16:00' (FG14: '28RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

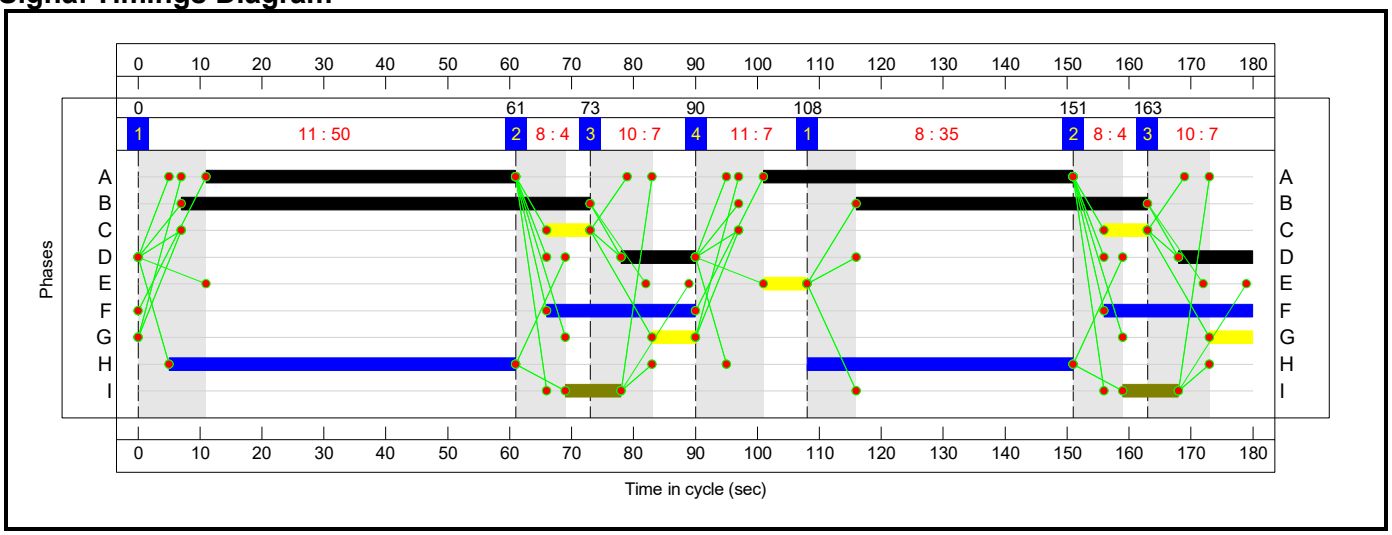
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

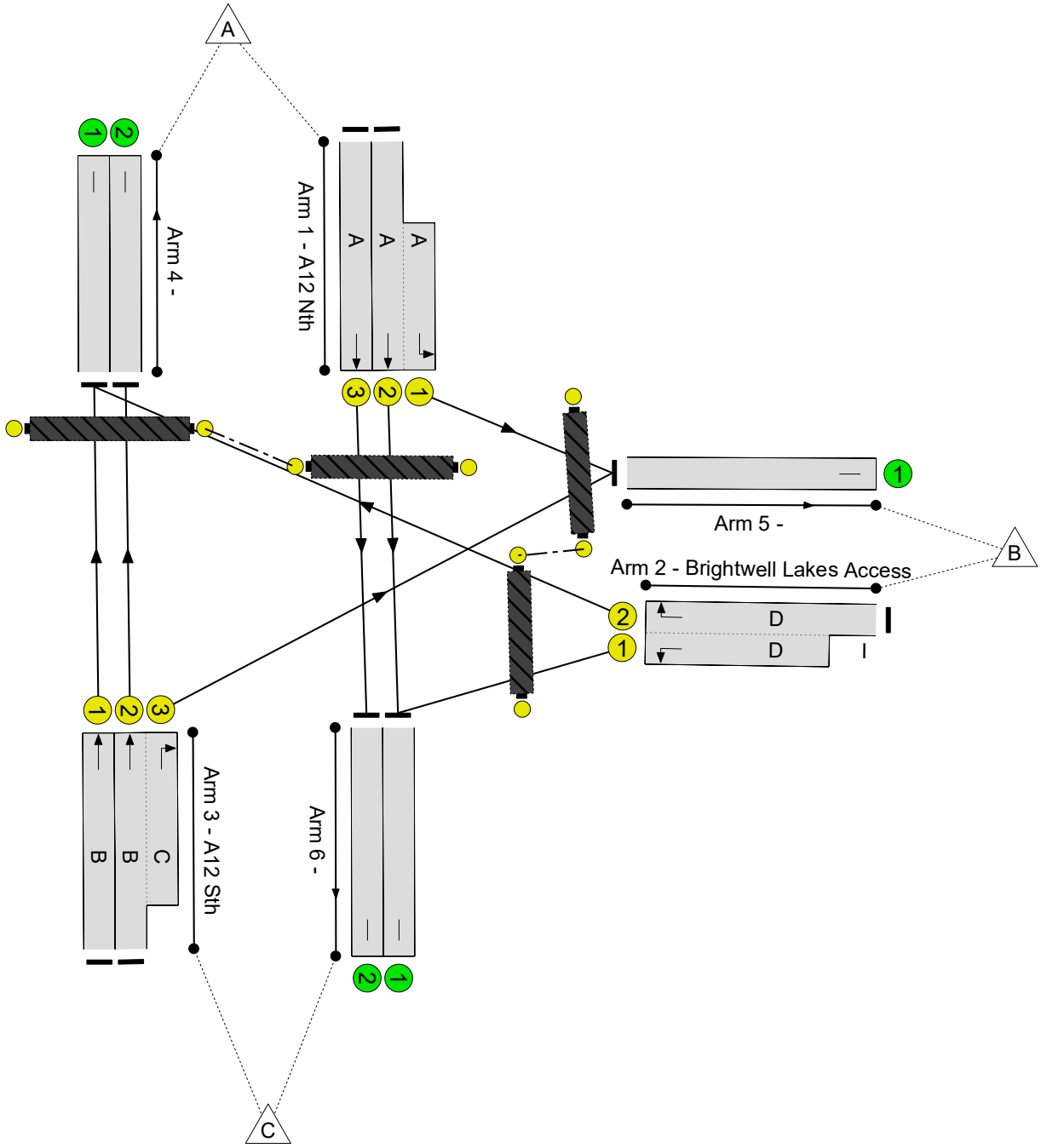


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 2.0 %
Total Traffic Delay: 26.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.2%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1066	2120:1819	1130+78	88.2 : 88.2%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	977	1980	1122	87.1%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	96	1786:1762	258+48	31.4 : 31.4%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	906	1980	1265	71.6%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1044	2120:1906	1341+76	73.7 : 73.7%
4/1		U	N/A	N/A	-		-	-	-	987	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	125	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1012	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	977	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.1**	**9.7**	**0.0**	**26.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**17.1**	**9.7**	**0.0**	**26.8**	**-**	**-**	**-**	**-**
1/2+1/1	1066	1066	-	-	-	4.9	3.6	-	8.4	28.5	22.3	3.6	25.9
1/3	977	977	-	-	-	4.5	3.2	-	7.8	28.6	20.6	3.2	23.9
2/2+2/1	96	96	-	-	-	0.9	0.2	-	1.1	41.8	1.8	0.2	2.0
3/1	906	906	-	-	-	3.0	1.3	-	4.2	16.7	19.4	1.3	20.6
3/2+3/3	1044	1044	-	-	-	3.9	1.4	-	5.3	18.1	21.4	1.4	22.8
4/1	987	987	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	125	125	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1012	1012	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	977	977	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

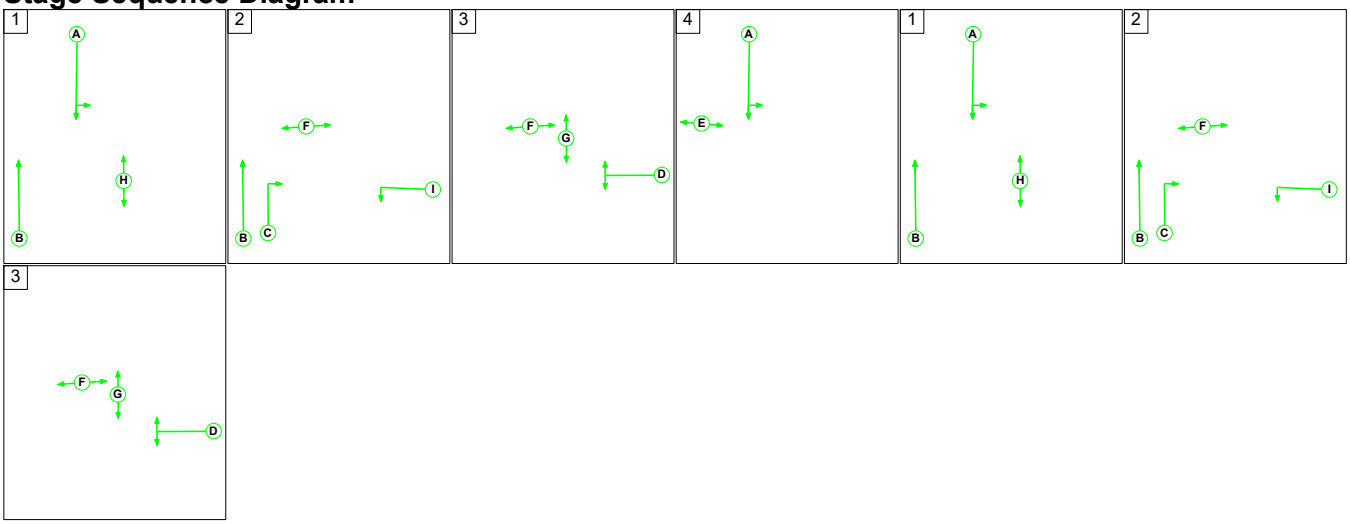
C1 PRC for Signalled Lanes (%): 2.0 Total Delay for Signalled Lanes (pcuHr): 26.78 Cycle Time (s): 180

PRC Over All Lanes (%): 2.0 Total Delay Over All Lanes(pcuHr): 26.78

Full Input Data And Results

Scenario 15: '28RC 17:00-18:00' (FG15: '28RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

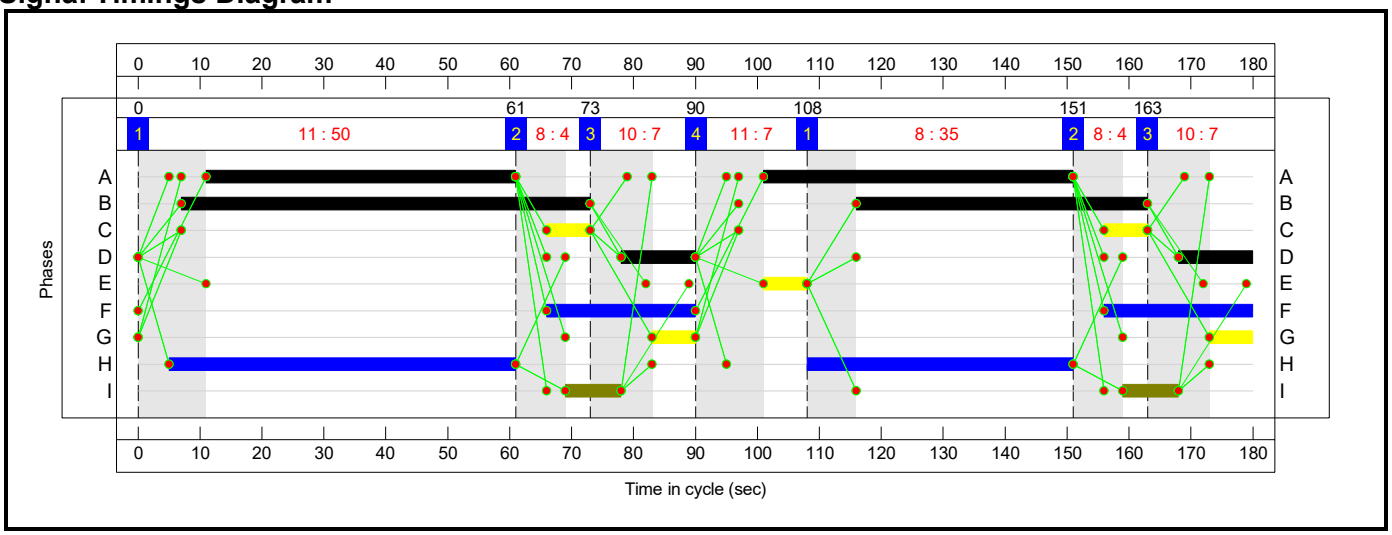
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

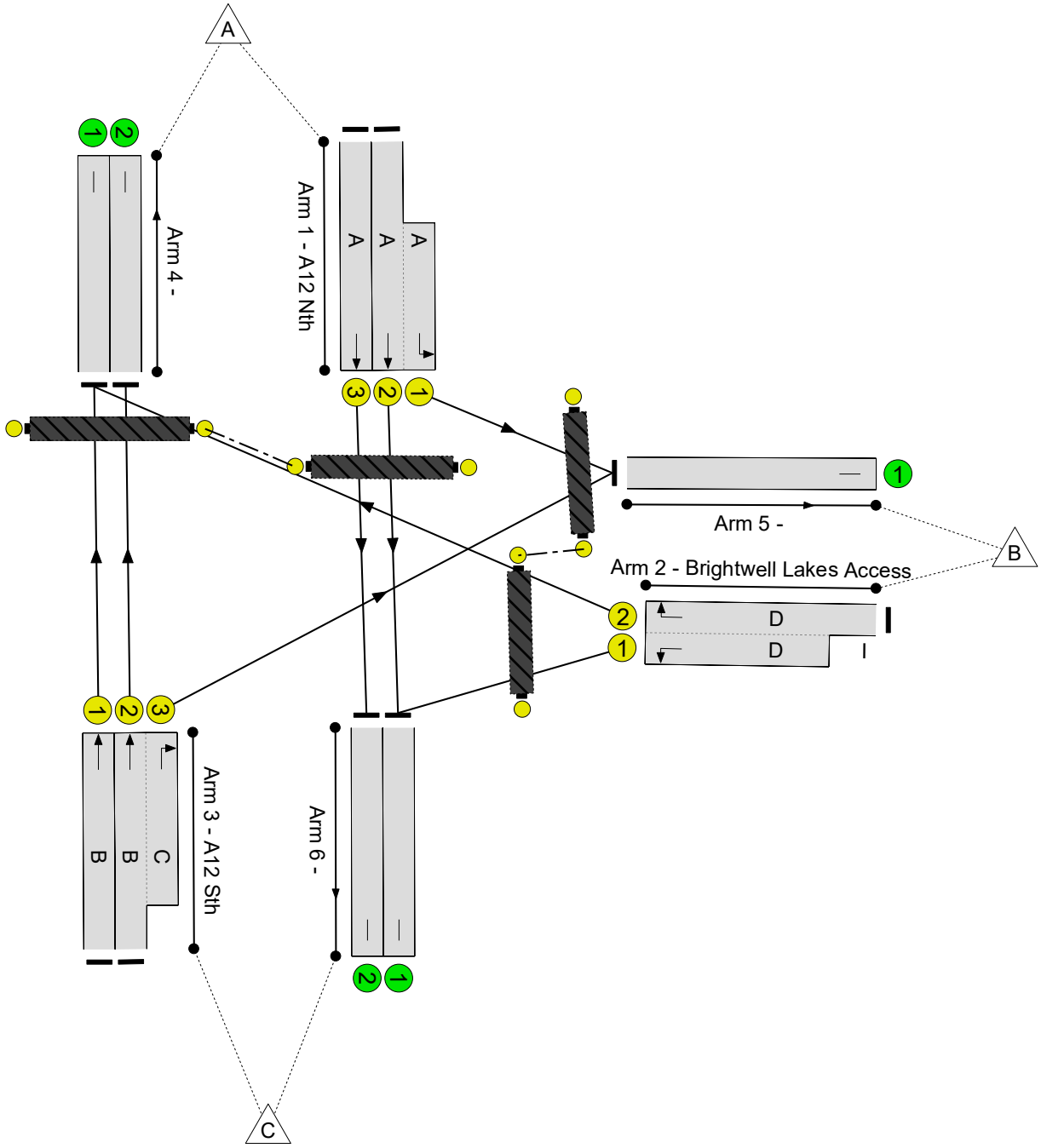


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 1.4 %
Total Traffic Delay: 27.0 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.8%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1071	2120:1819	1141+65	88.8 : 88.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	985	1980	1122	87.8%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	96	1786:1762	258+81	28.3 : 28.3%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	883	1980	1265	69.8%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1042	2120:1906	1334+106	72.3 : 72.3%
4/1		U	N/A	N/A	-		-	-	-	956	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	965	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	135	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1036	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	985	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

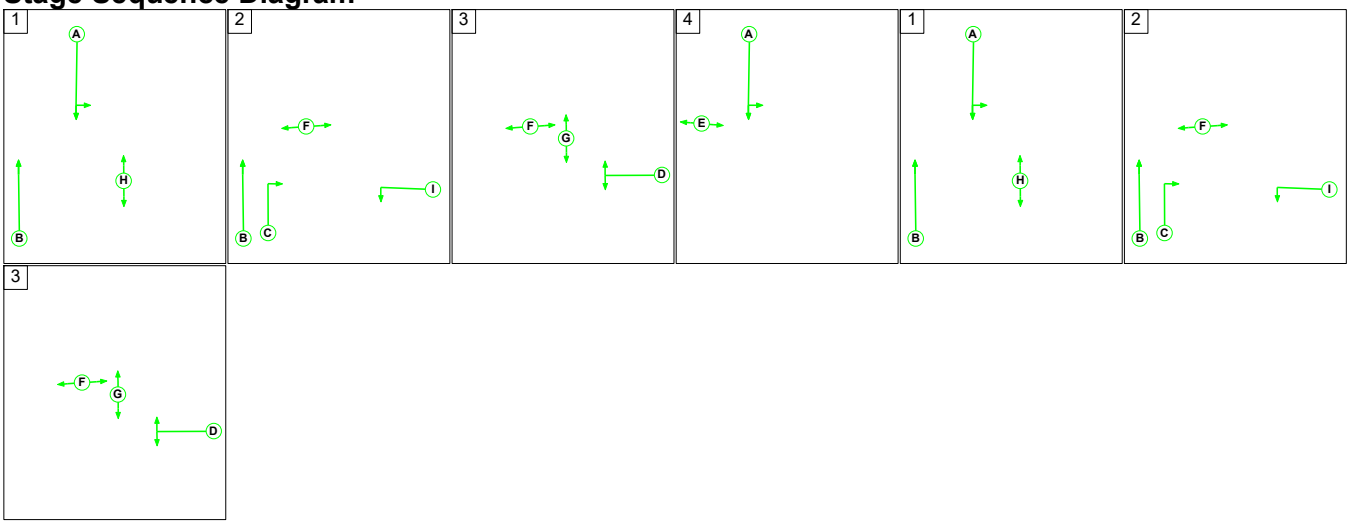
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.2**	**9.8**	**0.0**	**27.0**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**17.2**	**9.8**	**0.0**	**27.0**	**-**	**-**	**-**	**-**
1/2+1/1	1071	1071	-	-	-	5.0	3.7	-	8.7	29.2	22.8	3.7	26.5
1/3	985	985	-	-	-	4.6	3.4	-	8.0	29.3	21.1	3.4	24.5
2/2+2/1	96	96	-	-	-	0.9	0.2	-	1.1	39.8	1.6	0.2	1.8
3/1	883	883	-	-	-	2.8	1.1	-	4.0	16.2	18.4	1.1	19.5
3/2+3/3	1042	1042	-	-	-	4.0	1.3	-	5.3	18.2	20.6	1.3	21.9
4/1	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	965	965	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1036	1036	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	985	985	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 1.4 Total Delay for Signalled Lanes (pcuHr): 27.02 Cycle Time (s): 180
PRC Over All Lanes (%): 1.4 Total Delay Over All Lanes(pcuHr): 27.02

Full Input Data And Results

Scenario 16: '28PC 06:00-07:00' (FG16: '28PC 06:00-07:00', Plan 2: 'Network Control Plan 2')

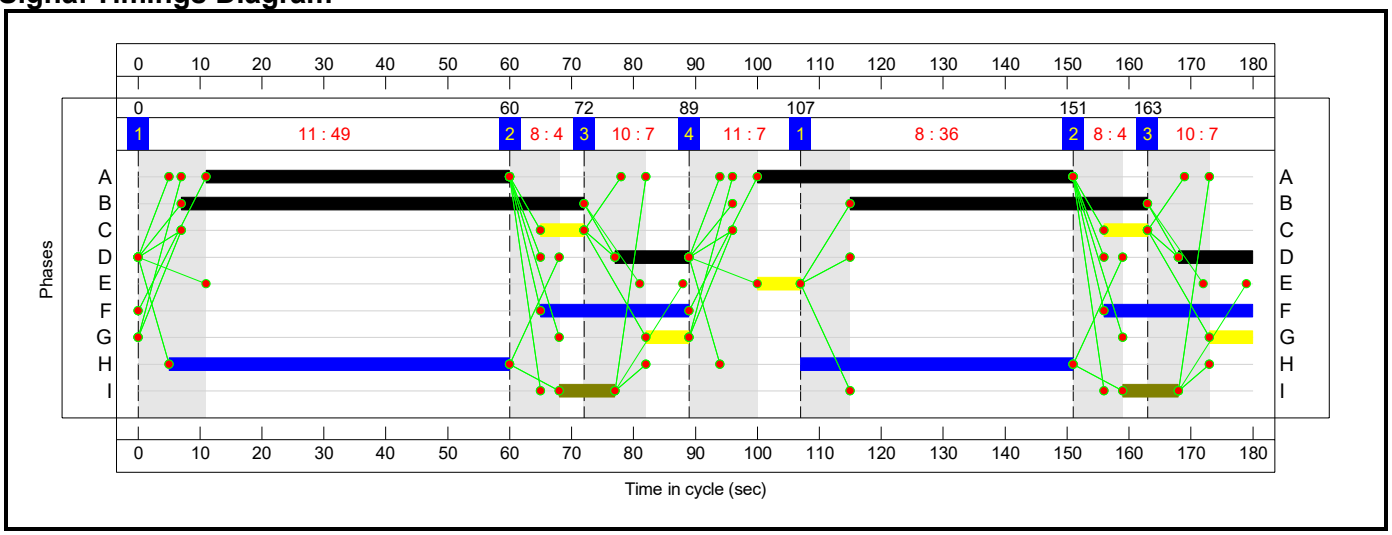
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

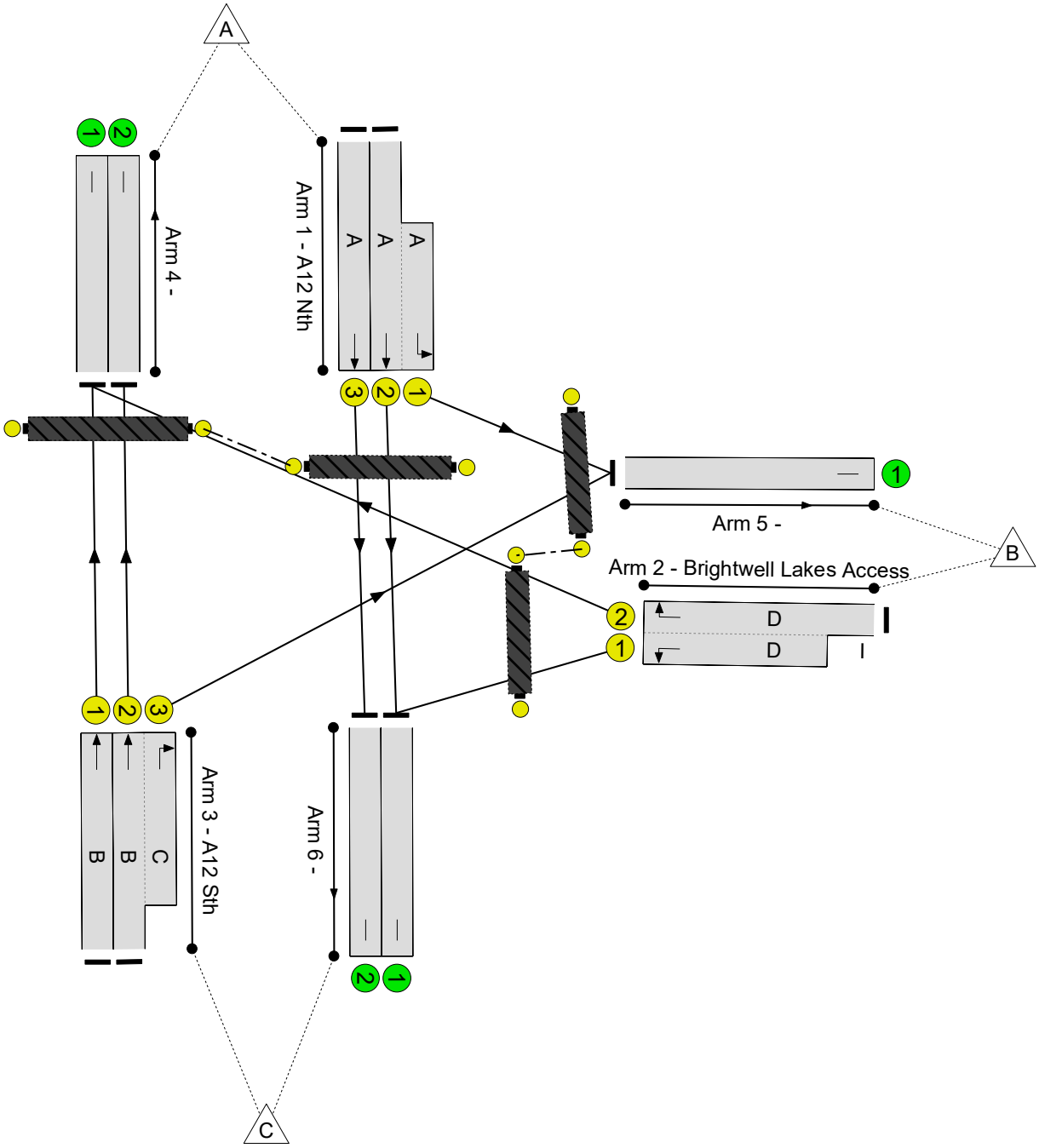


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 113.3 %
Total Traffic Delay: 5.9 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.2%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	506	2120:1819	1194+5	42.2 : 42.2%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	457	1980	1122	40.7%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	2	1786:1965	258+0	0.8 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	378	1980	1265	29.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	432	2120:1906	1354+13	31.6 : 31.6%
4/1		U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	6	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	457	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

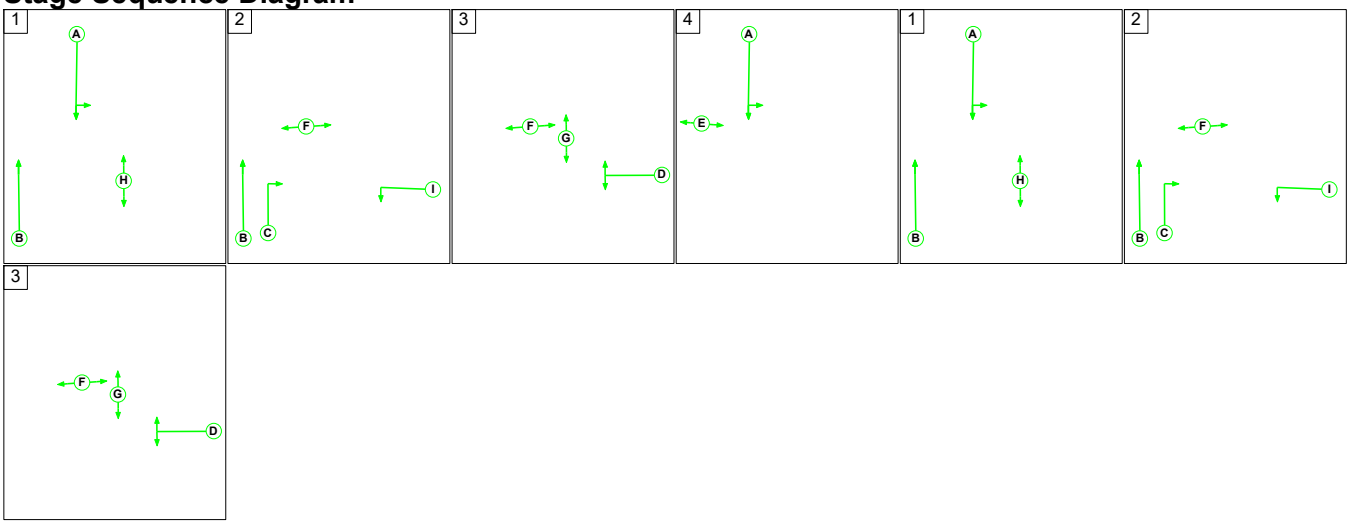
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.8**	**1.2**	**0.0**	**5.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.8**	**1.2**	**0.0**	**5.9**	**-**	**-**	**-**	**-**
1/2+1/1	506	506	-	-	-	1.6	0.4	-	1.9	13.7	7.3	0.4	7.6
1/3	457	457	-	-	-	1.4	0.3	-	1.7	13.7	6.3	0.3	6.7
2/2+2/1	2	2	-	-	-	0.0	0.0	-	0.0	40.4	0.0	0.0	0.0
3/1	378	378	-	-	-	0.8	0.2	-	1.0	9.9	5.4	0.2	5.6
3/2+3/3	432	432	-	-	-	1.0	0.2	-	1.2	10.2	6.2	0.2	6.4
4/1	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 113.3 Total Delay for Signalled Lanes (pcuHr): 5.95 Cycle Time (s): 180
PRC Over All Lanes (%): 113.3 Total Delay Over All Lanes(pcuHr): 5.95

Full Input Data And Results

Scenario 17: '28PC 07:00-08:00' (FG17: '28PC 07:00-08:00', Plan 2: 'Network Control Plan 2')

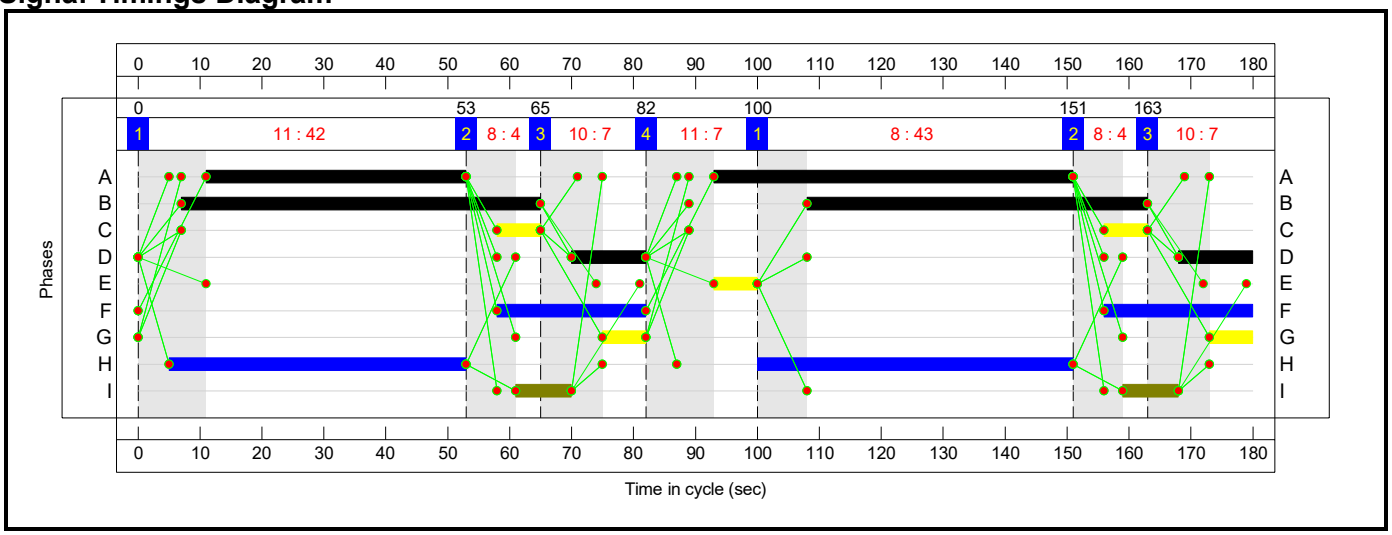
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	42	4	7	7	43	4	7
Change Point	0	53	65	82	100	151	163

Signal Timings Diagram

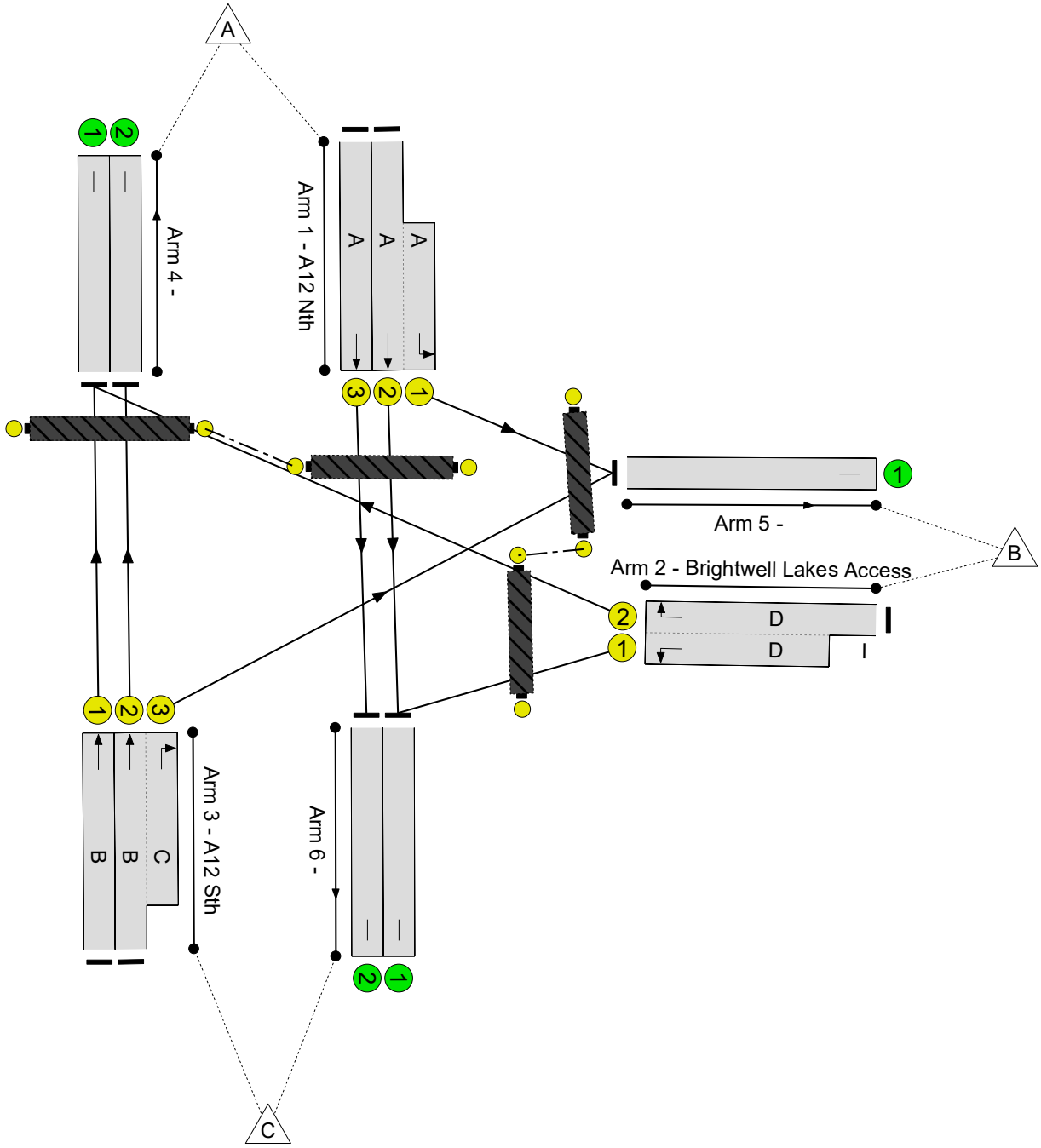


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 22.5 %
Total Traffic Delay: 19.5 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.5%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	878	2120:1819	1186+14	73.2 : 73.2%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	808	1980	1122	72.0%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	107	1786:1762	258+317	18.6 : 18.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	915	1980	1265	72.3%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1008	2120:1906	1354+18	73.5 : 73.5%
4/1		U	N/A	N/A	-		-	-	-	963	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	927	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	808	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

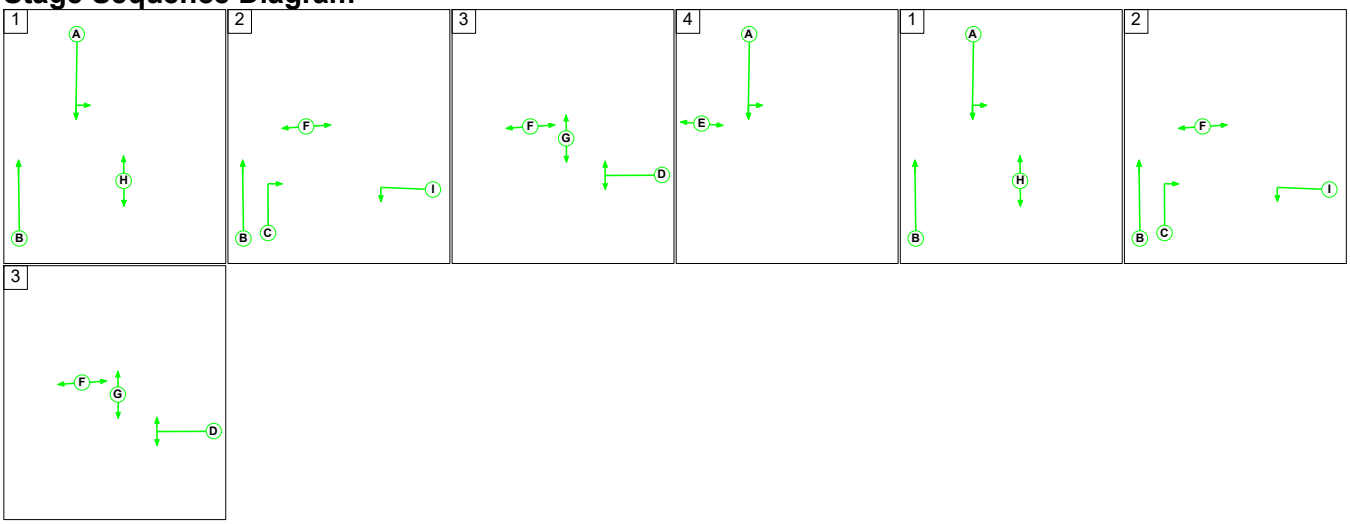
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.1**	**5.4**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**14.1**	**5.4**	**0.0**	**19.5**	**-**	**-**	**-**	**-**
1/2+1/1	878	878	-	-	-	3.5	1.4	-	4.9	19.9	16.0	1.4	17.4
1/3	808	808	-	-	-	3.2	1.3	-	4.5	20.0	14.6	1.3	15.9
2/2+2/1	107	107	-	-	-	0.9	0.1	-	1.0	34.1	1.3	0.1	1.4
3/1	915	915	-	-	-	3.0	1.3	-	4.3	16.9	19.8	1.3	21.1
3/2+3/3	1008	1008	-	-	-	3.5	1.4	-	4.8	17.2	21.8	1.4	23.2
4/1	963	963	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	927	927	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 22.5 Total Delay for Signalled Lanes (pcuHr): 19.49 Cycle Time (s): 180
PRC Over All Lanes (%): 22.5 Total Delay Over All Lanes(pcuHr): 19.49

Full Input Data And Results

Scenario 18: '28PC 08:00-09:00' (FG18: '28PC 08:00-09:00', Plan 2: 'Network Control Plan 2')

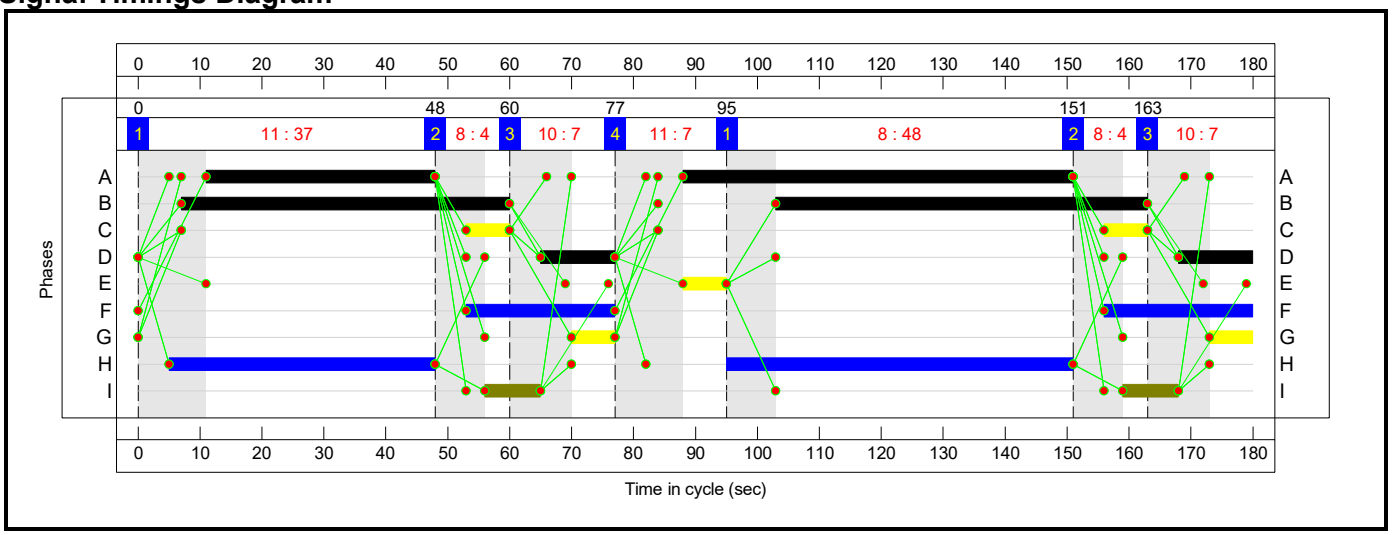
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	37	4	7	7	48	4	7
Change Point	0	48	60	77	95	151	163

Signal Timings Diagram

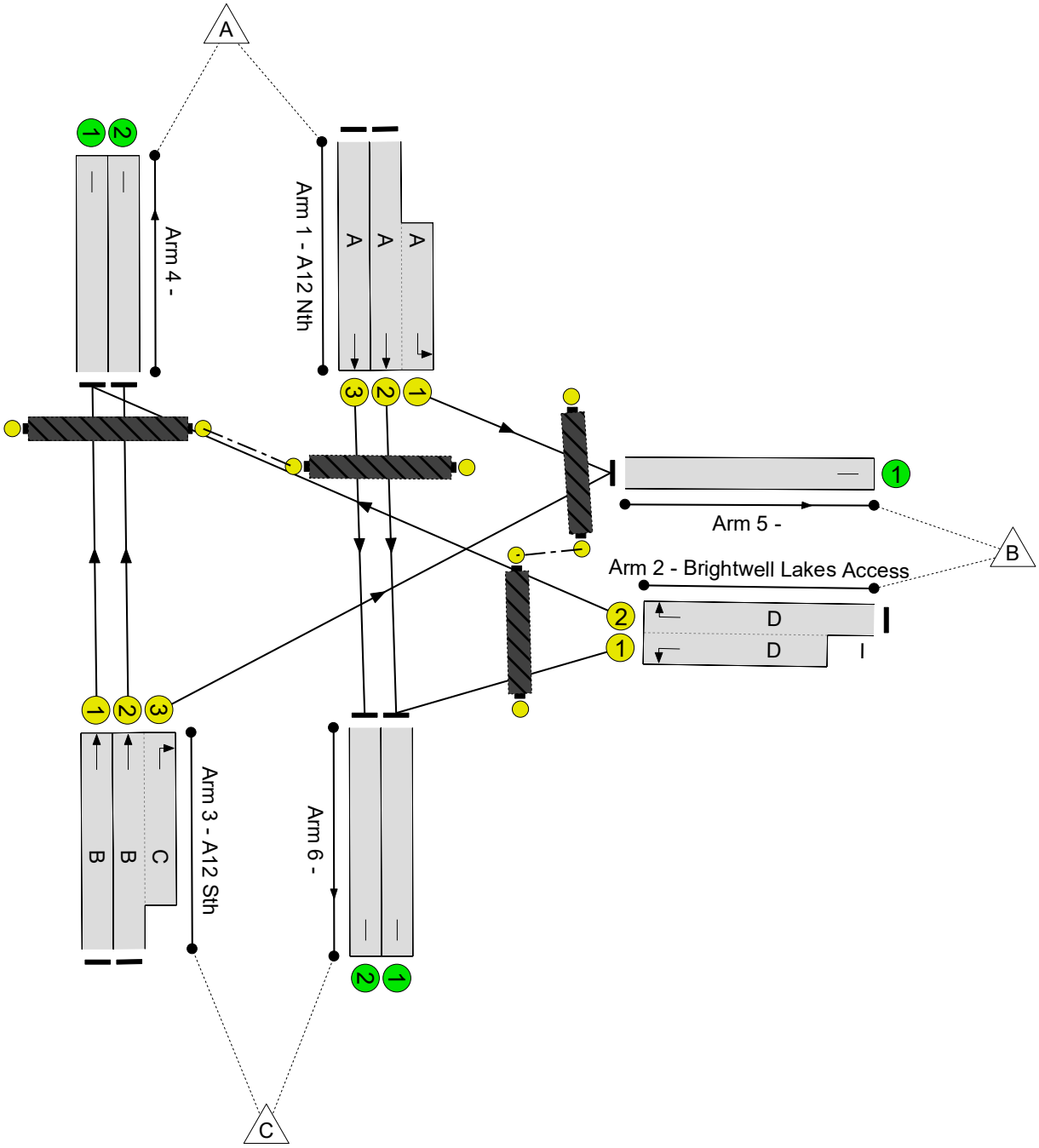


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -5.8 %
Total Traffic Delay: 43.2 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.2%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1007	2120:1819	1176+25	83.8 : 83.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	930	1980	1122	82.9%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	161	1786:1762	258+32	55.4 : 55.4%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1199	1980	1265	94.8%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1316	2120:1906	1352+30	95.2 : 95.2%
4/1		U	N/A	N/A	-		-	-	-	1342	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1287	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	50	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	930	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

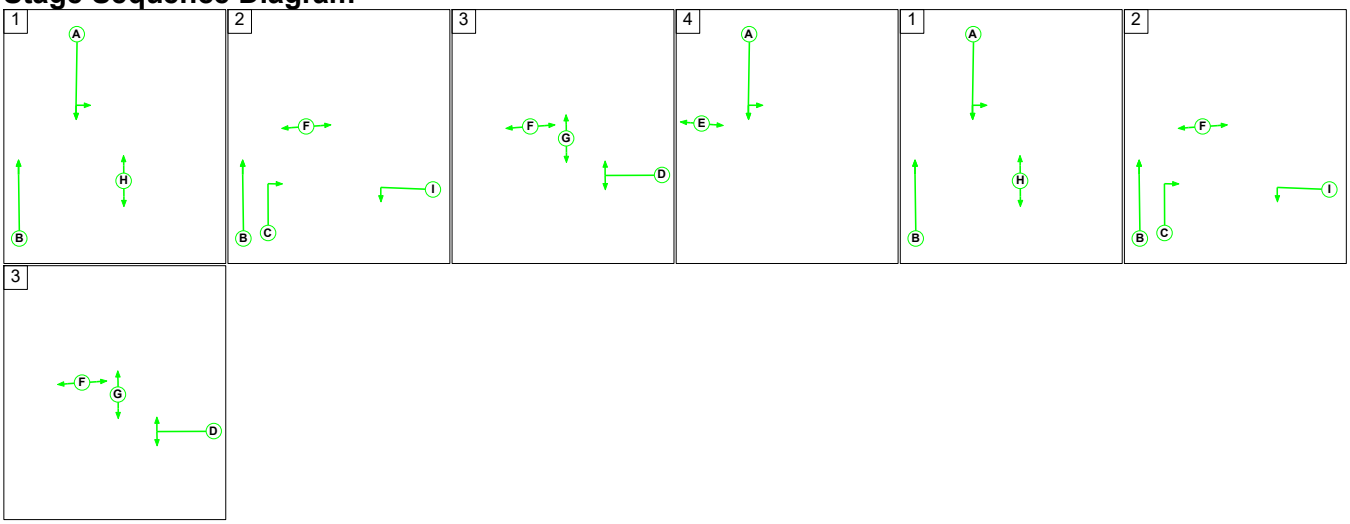
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**22.3**	**20.9**	**0.0**	**43.2**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**22.3**	**20.9**	**0.0**	**43.2**	**-**	**-**	**-**	**-**
1/2+1/1	1007	1007	-	-	-	4.5	2.5	-	7.0	25.0	20.6	2.5	23.1
1/3	930	930	-	-	-	4.1	2.4	-	6.5	25.1	18.9	2.4	21.2
2/2+2/1	161	161	-	-	-	1.6	0.6	-	2.2	49.5	3.9	0.6	4.5
3/1	1199	1199	-	-	-	5.6	7.4	-	13.0	39.2	34.3	7.4	41.7
3/2+3/3	1316	1316	-	-	-	6.5	8.0	-	14.4	39.5	38.9	8.0	46.9
4/1	1342	1342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1287	1287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	930	930	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -5.8 Total Delay for Signalled Lanes (pcuHr): 43.18 Cycle Time (s): 180
PRC Over All Lanes (%): -5.8 Total Delay Over All Lanes(pcuHr): 43.18

Full Input Data And Results

Scenario 19: '28PC 15:00-16:00' (FG19: '28PC 15:00-16:00', Plan 2: 'Network Control Plan 2')

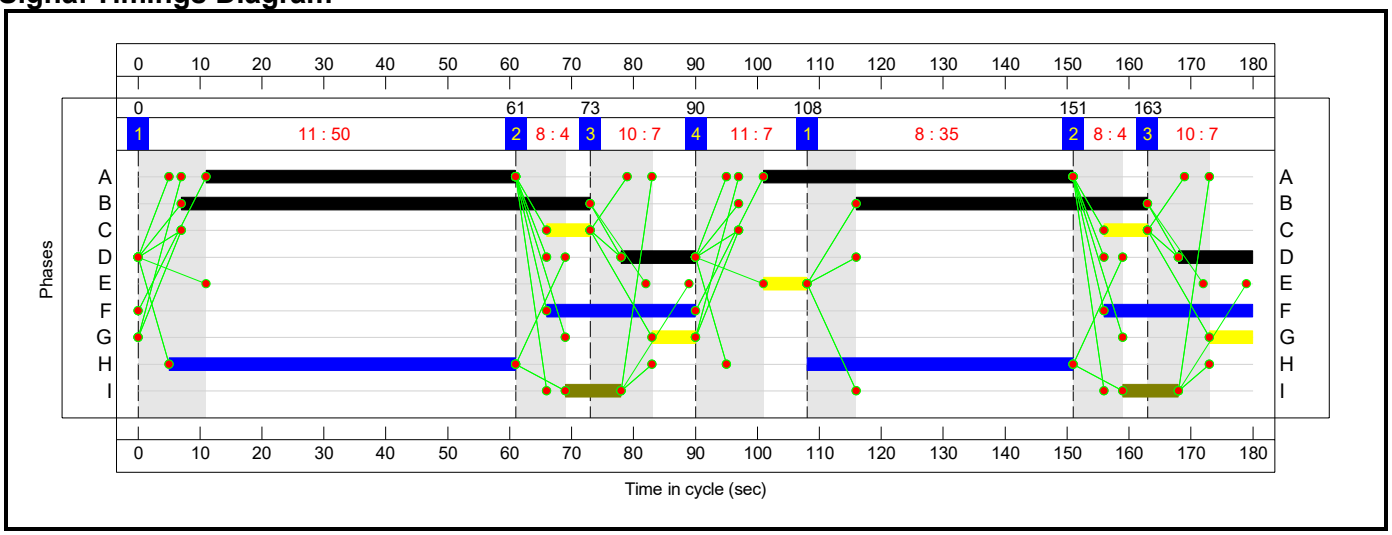
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

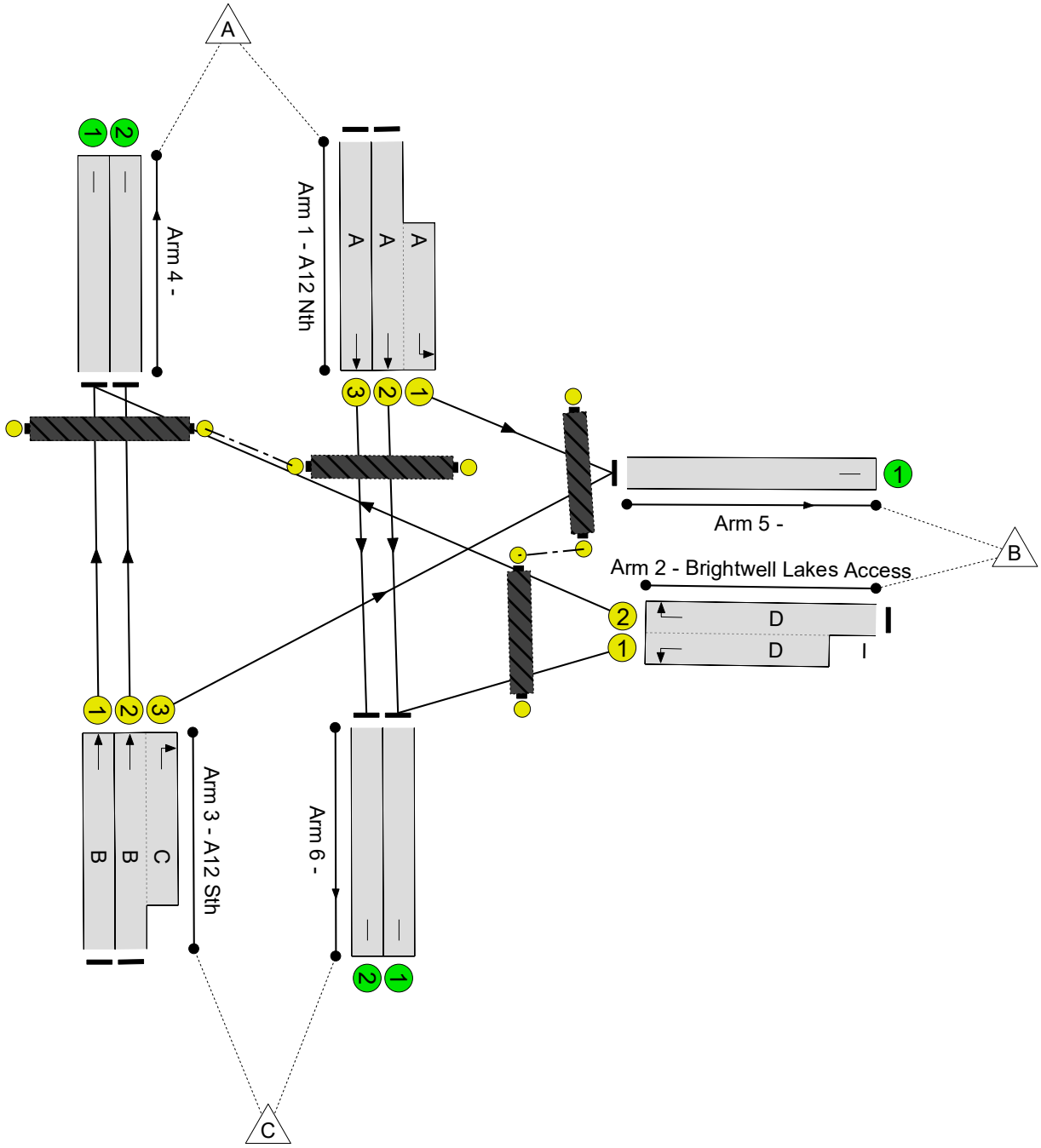


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 3.4 %
Total Traffic Delay: 25.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.0%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1051	2120:1819	1132+76	87.0 : 87.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	963	1980	1122	85.8%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	79	1786:1762	258+14	29.1 : 29.1%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	909	1980	1265	71.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1047	2120:1906	1341+76	73.9 : 73.9%
4/1		U	N/A	N/A	-		-	-	-	984	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	991	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	122	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	989	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	963	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

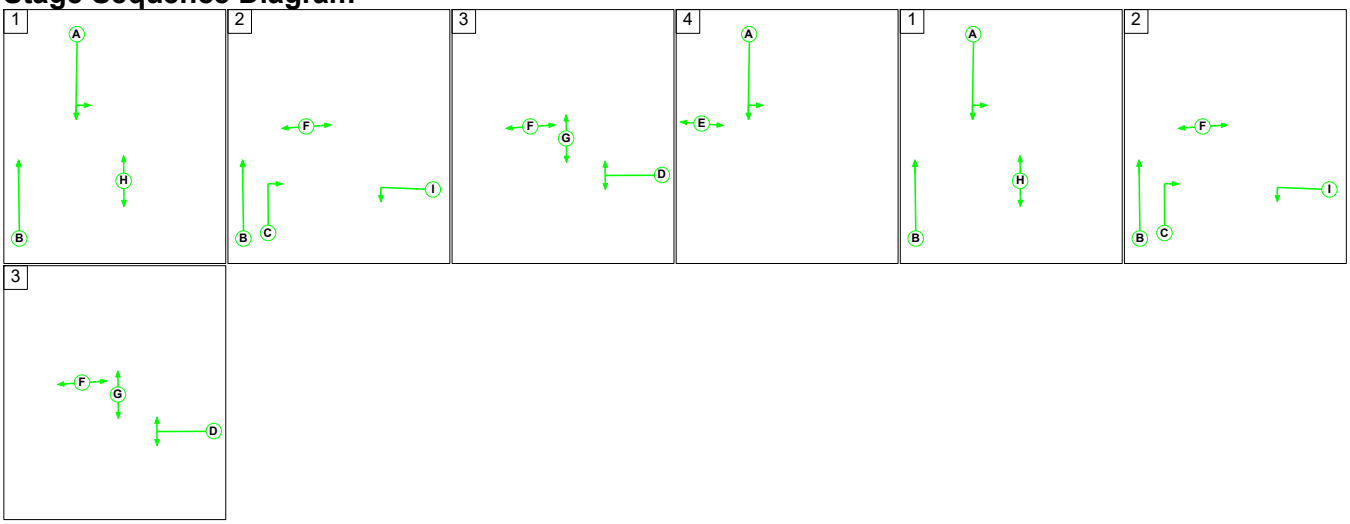
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**16.8**	**9.0**	**0.0**	**25.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**16.8**	**9.0**	**0.0**	**25.8**	**-**	**-**	**-**	**-**
1/2+1/1	1051	1051	-	-	-	4.7	3.2	-	8.0	27.3	21.7	3.2	24.9
1/3	963	963	-	-	-	4.4	2.9	-	7.3	27.4	20.1	2.9	23.0
2/2+2/1	79	79	-	-	-	0.7	0.2	-	1.0	43.3	1.7	0.2	1.9
3/1	909	909	-	-	-	3.0	1.3	-	4.2	16.8	19.4	1.3	20.7
3/2+3/3	1047	1047	-	-	-	3.9	1.4	-	5.3	18.2	21.5	1.4	22.9
4/1	984	984	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	122	122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	989	989	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	963	963	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 3.4 Total Delay for Signalled Lanes (pcuHr): 25.77 Cycle Time (s): 180
PRC Over All Lanes (%): 3.4 Total Delay Over All Lanes(pcuHr): 25.77

Full Input Data And Results

Scenario 20: '28PC 17:00-18:00' (FG20: '28PC 17:00-18:00', Plan 2: 'Network Control Plan 2')

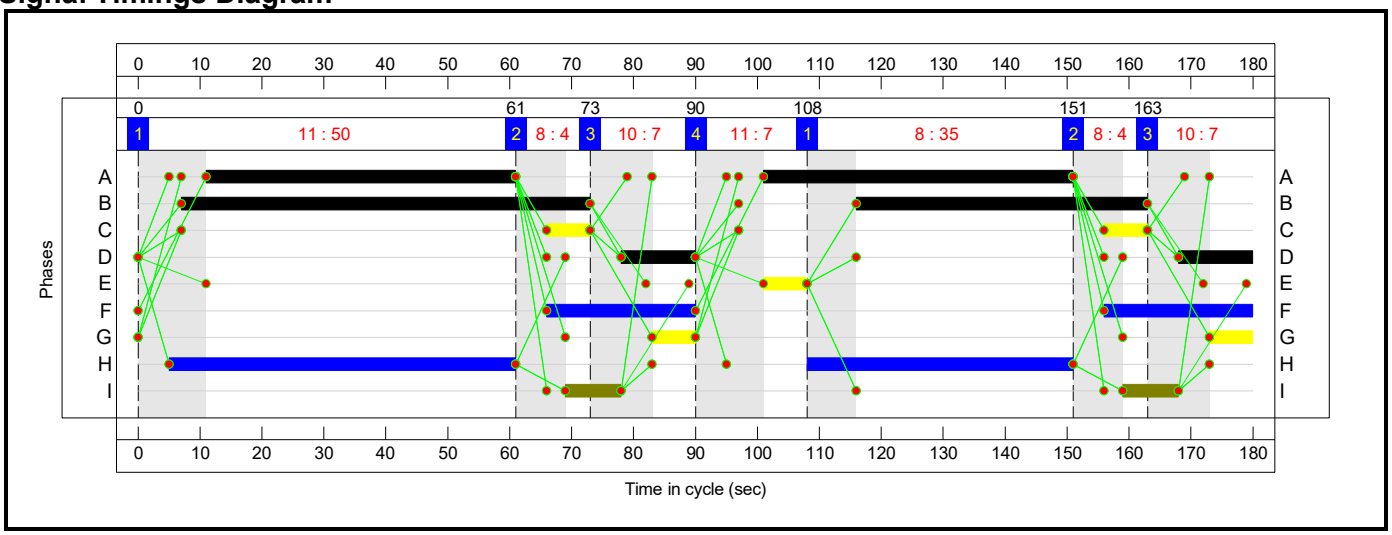
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

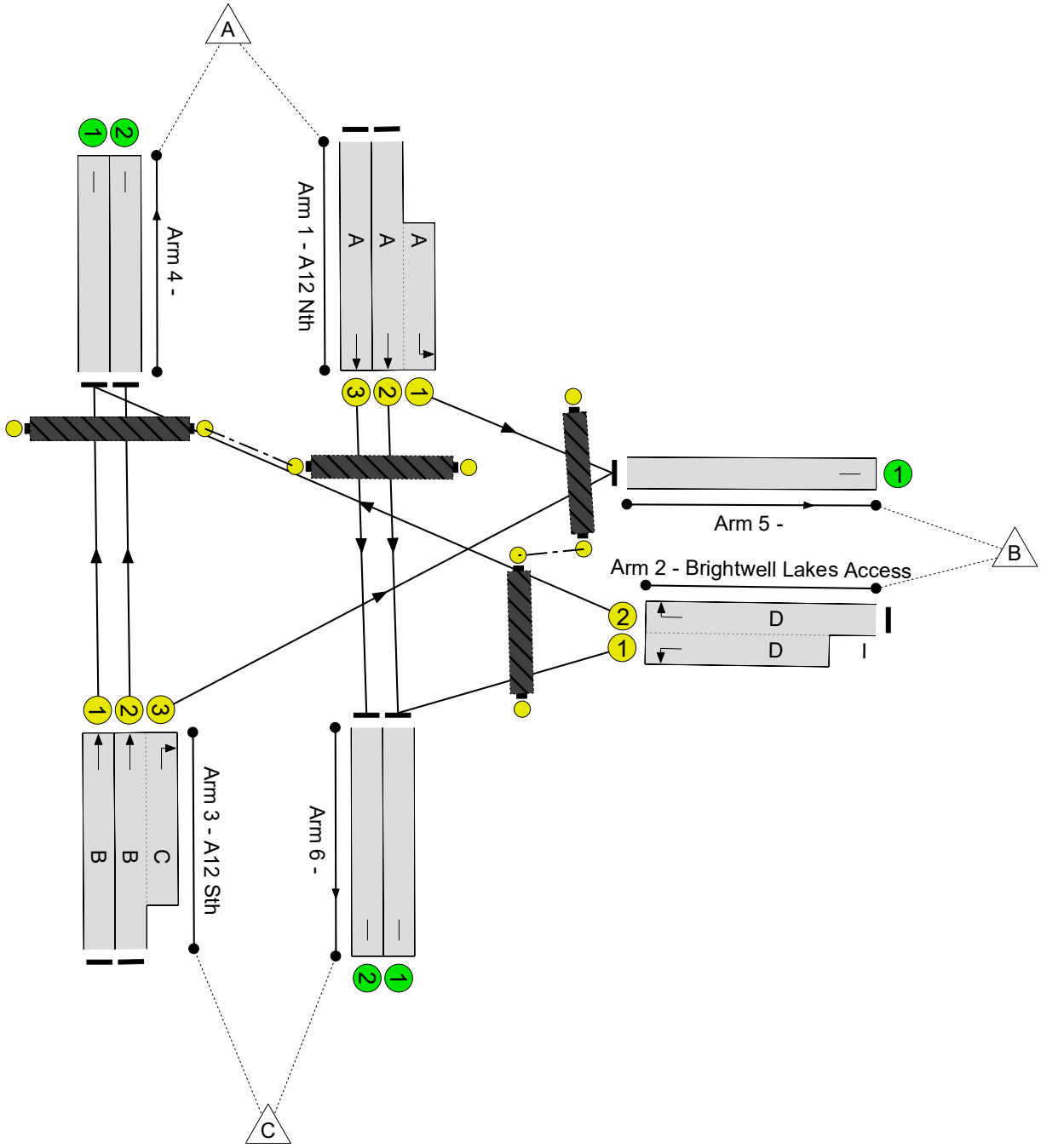


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 4.2 %
Total Traffic Delay: 25.0 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.4%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.4%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1042	2120:1819	1143+64	86.4 : 86.4%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	957	1980	1122	85.3%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	64	1786:1762	258+4	24.4 : 24.4%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	887	1980	1265	70.1%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1048	2120:1906	1334+107	72.7 : 72.7%
4/1		U	N/A	N/A	-		-	-	-	950	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	970	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	133	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	957	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**16.5**	**8.5**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**16.5**	**8.5**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
1/2+1/1	1042	1042	-	-	-	4.7	3.1	-	7.7	26.8	21.6	3.1	24.7
1/3	957	957	-	-	-	4.3	2.8	-	7.2	26.9	19.9	2.8	22.7
2/2+2/1	64	64	-	-	-	0.6	0.2	-	0.8	43.1	1.4	0.2	1.5
3/1	887	887	-	-	-	2.8	1.2	-	4.0	16.3	18.7	1.2	19.9
3/2+3/3	1048	1048	-	-	-	4.0	1.3	-	5.3	18.3	20.7	1.3	22.1
4/1	950	950	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	133	133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	957	957	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 4.2
PRC Over All Lanes (%): 4.2

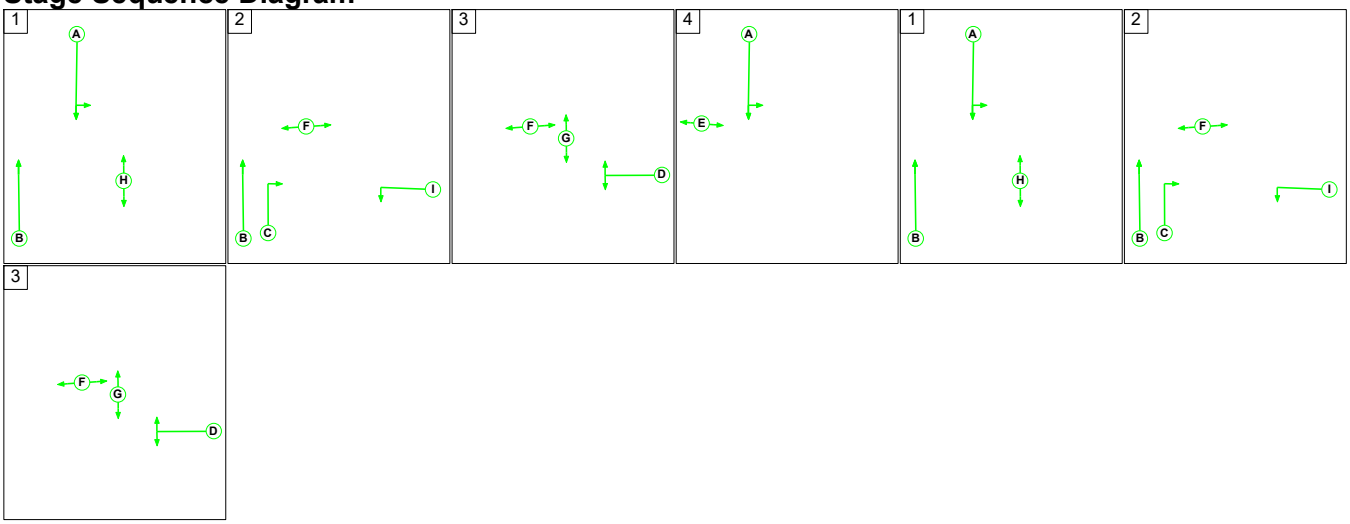
Total Delay for Signalled Lanes (pcuHr): 25.01
Total Delay Over All Lanes(pcuHr): 25.01

Cycle Time (s): 180

Full Input Data And Results

Scenario 21: '34RC 06:00-07:00' (FG21: '34RC 06:00-07:00', Plan 2: 'Network Control Plan 2')

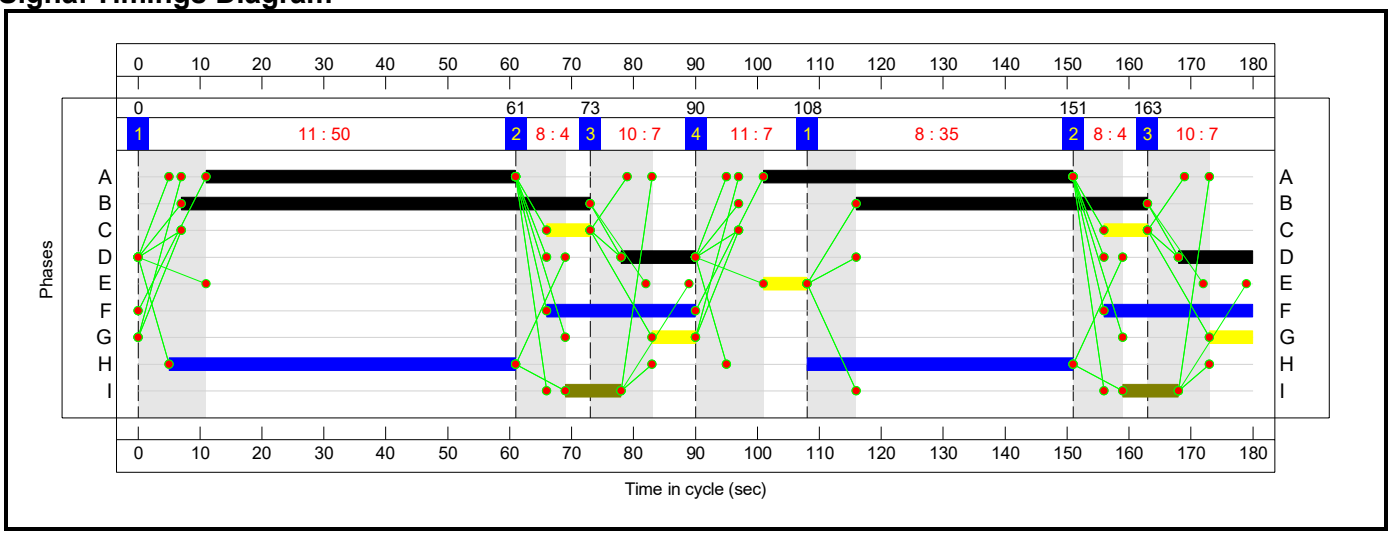
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

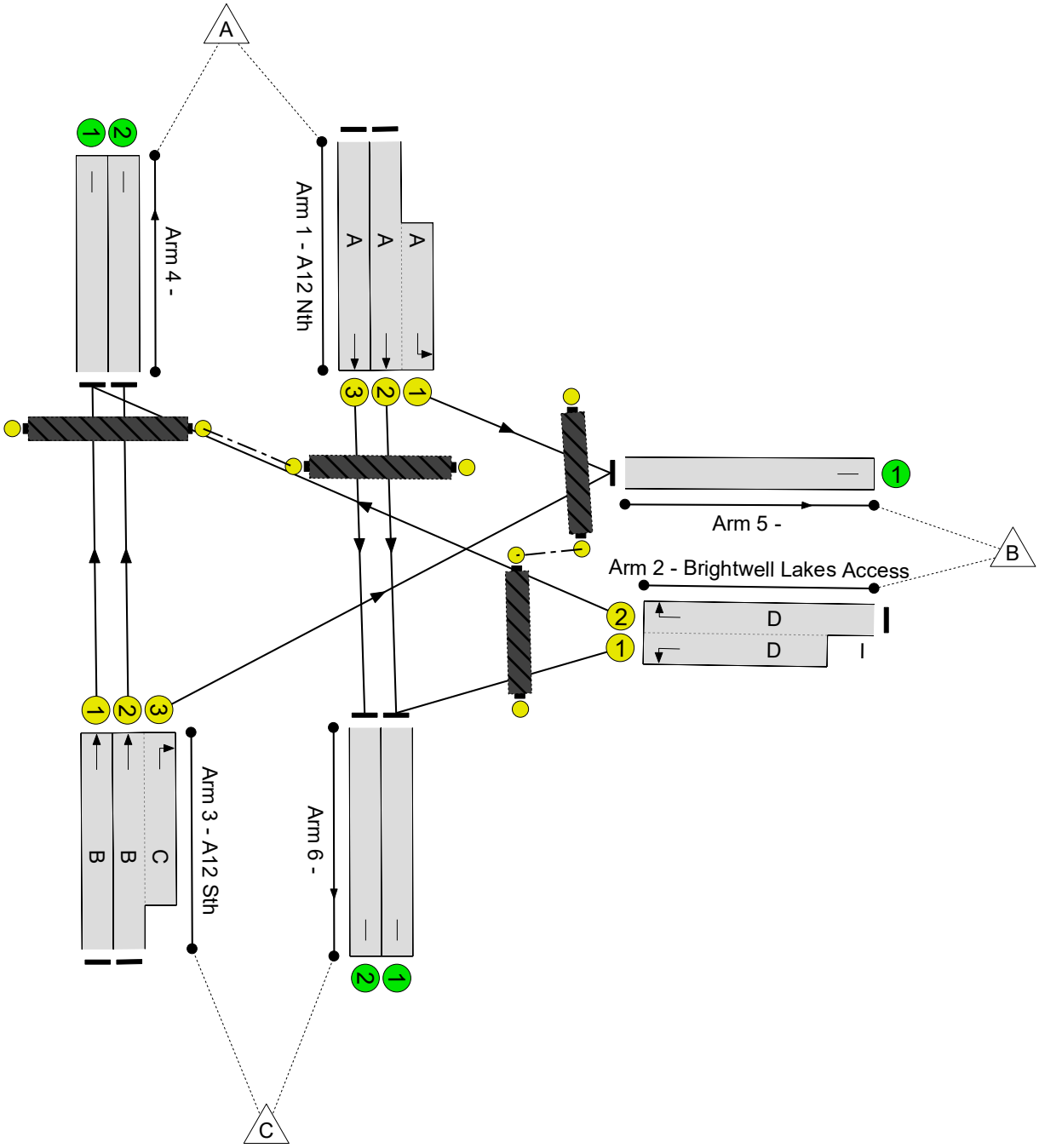


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 108.4 %
Total Traffic Delay: 6.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.2%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	518	2120:1819	1190+9	43.2 : 43.2%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	467	1980	1122	41.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	4	1786:1965	258+0	1.6 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	380	1980	1265	30.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	430	2120:1906	1354+6	31.6 : 31.6%
4/1		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	6	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

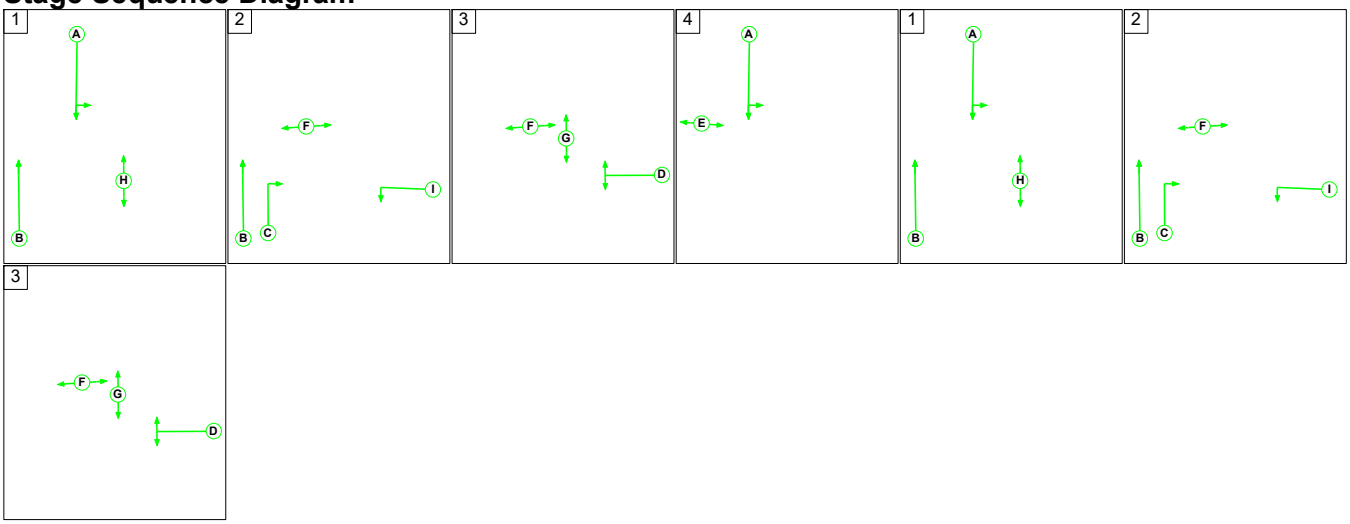
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.9**	**1.2**	**0.0**	**6.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.9**	**1.2**	**0.0**	**6.1**	**-**	**-**	**-**	**-**
1/2+1/1	518	518	-	-	-	1.6	0.4	-	2.0	13.8	7.3	0.4	7.7
1/3	467	467	-	-	-	1.4	0.4	-	1.8	13.8	6.6	0.4	7.0
2/2+2/1	4	4	-	-	-	0.0	0.0	-	0.0	40.4	0.1	0.0	0.1
3/1	380	380	-	-	-	0.8	0.2	-	1.0	9.9	5.4	0.2	5.6
3/2+3/3	430	430	-	-	-	1.0	0.2	-	1.2	10.1	6.2	0.2	6.4
4/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 108.4 Total Delay for Signalled Lanes (pcuHr): 6.07 Cycle Time (s): 180
PRC Over All Lanes (%): 108.4 Total Delay Over All Lanes(pcuHr): 6.07

Full Input Data And Results

Scenario 22: '34RC 07:00-08:00' (FG22: '34RC 07:00-08:00', Plan 2: 'Network Control Plan 2')

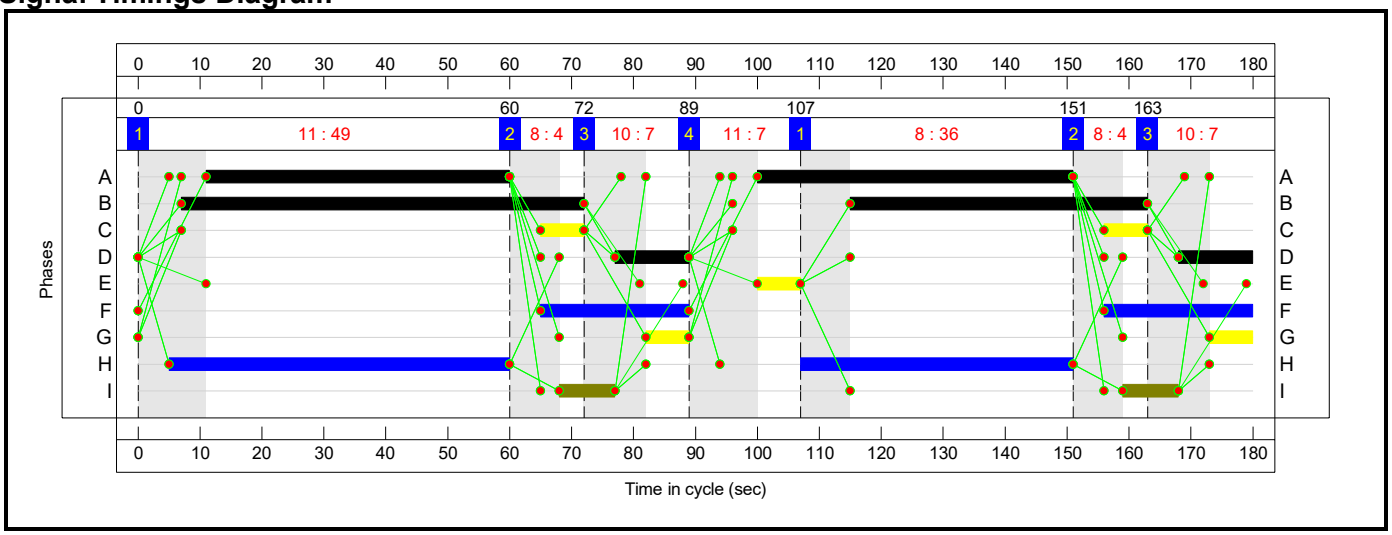
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

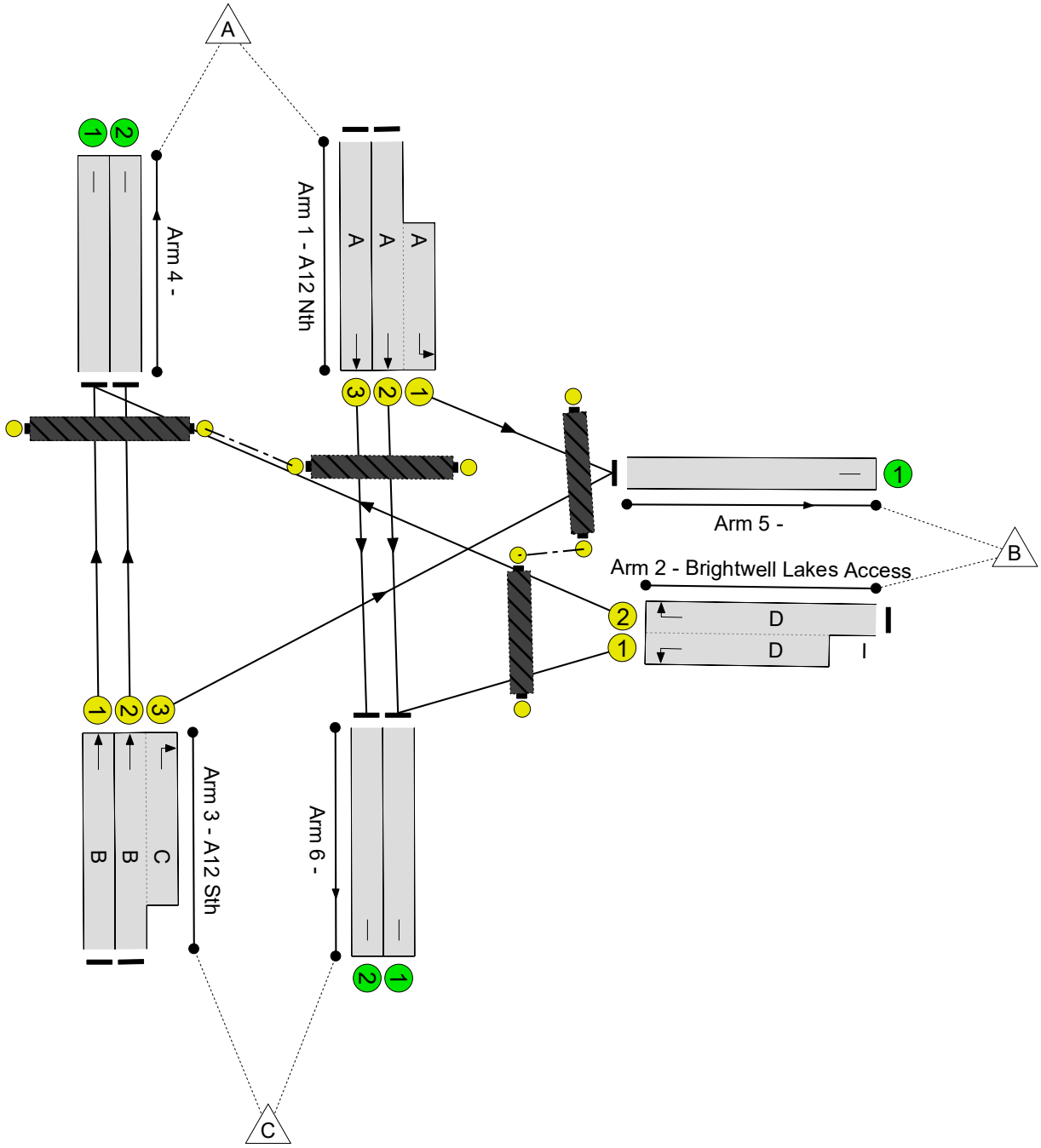


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 18.1 %
Total Traffic Delay: 21.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.2%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	915	2120:1819	1183+17	76.2 : 76.2%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	842	1980	1122	75.0%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	205	1786:1762	236+410	31.7 : 31.7%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	923	1980	1265	73.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1018	2120:1906	1353+19	74.2 : 74.2%
4/1		U	N/A	N/A	-		-	-	-	998	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1032	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	842	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

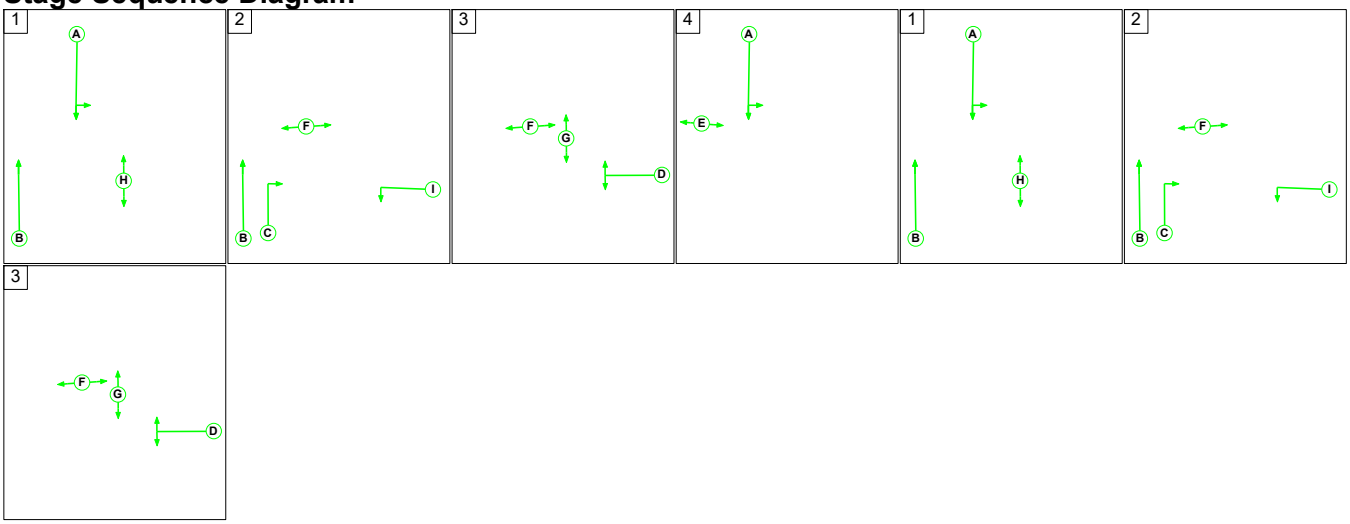
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.5**	**6.1**	**0.0**	**21.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**15.5**	**6.1**	**0.0**	**21.6**	**-**	**-**	**-**	**-**
1/2+1/1	915	915	-	-	-	3.8	1.6	-	5.3	21.0	17.2	1.6	18.8
1/3	842	842	-	-	-	3.4	1.5	-	4.9	21.1	15.7	1.5	17.2
2/2+2/1	205	205	-	-	-	1.7	0.2	-	2.0	34.3	2.7	0.2	2.9
3/1	923	923	-	-	-	3.1	1.3	-	4.4	17.2	20.0	1.3	21.3
3/2+3/3	1018	1018	-	-	-	3.5	1.4	-	4.9	17.5	22.0	1.4	23.5
4/1	998	998	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	842	842	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 18.1 Total Delay for Signalled Lanes (pcuHr): 21.57 Cycle Time (s): 180
PRC Over All Lanes (%): 18.1 Total Delay Over All Lanes(pcuHr): 21.57

Full Input Data And Results

Scenario 23: '34RC 08:00-09:00' (FG23: '34RC 08:00-09:00', Plan 2: 'Network Control Plan 2')

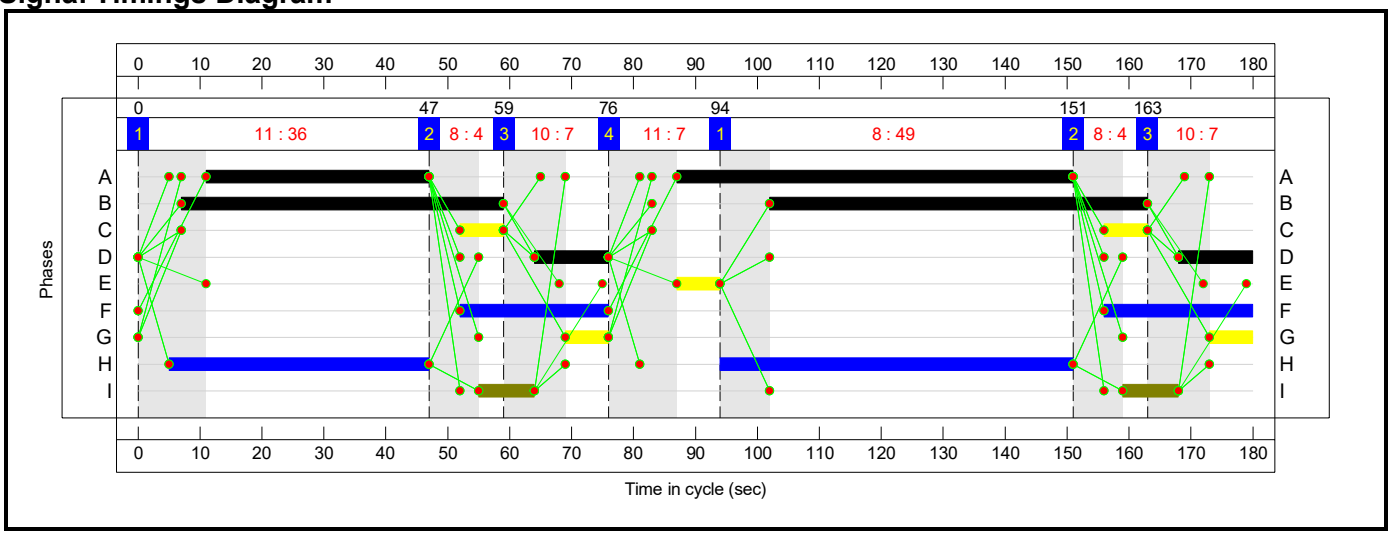
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	36	4	7	7	49	4	7
Change Point	0	47	59	76	94	151	163

Signal Timings Diagram

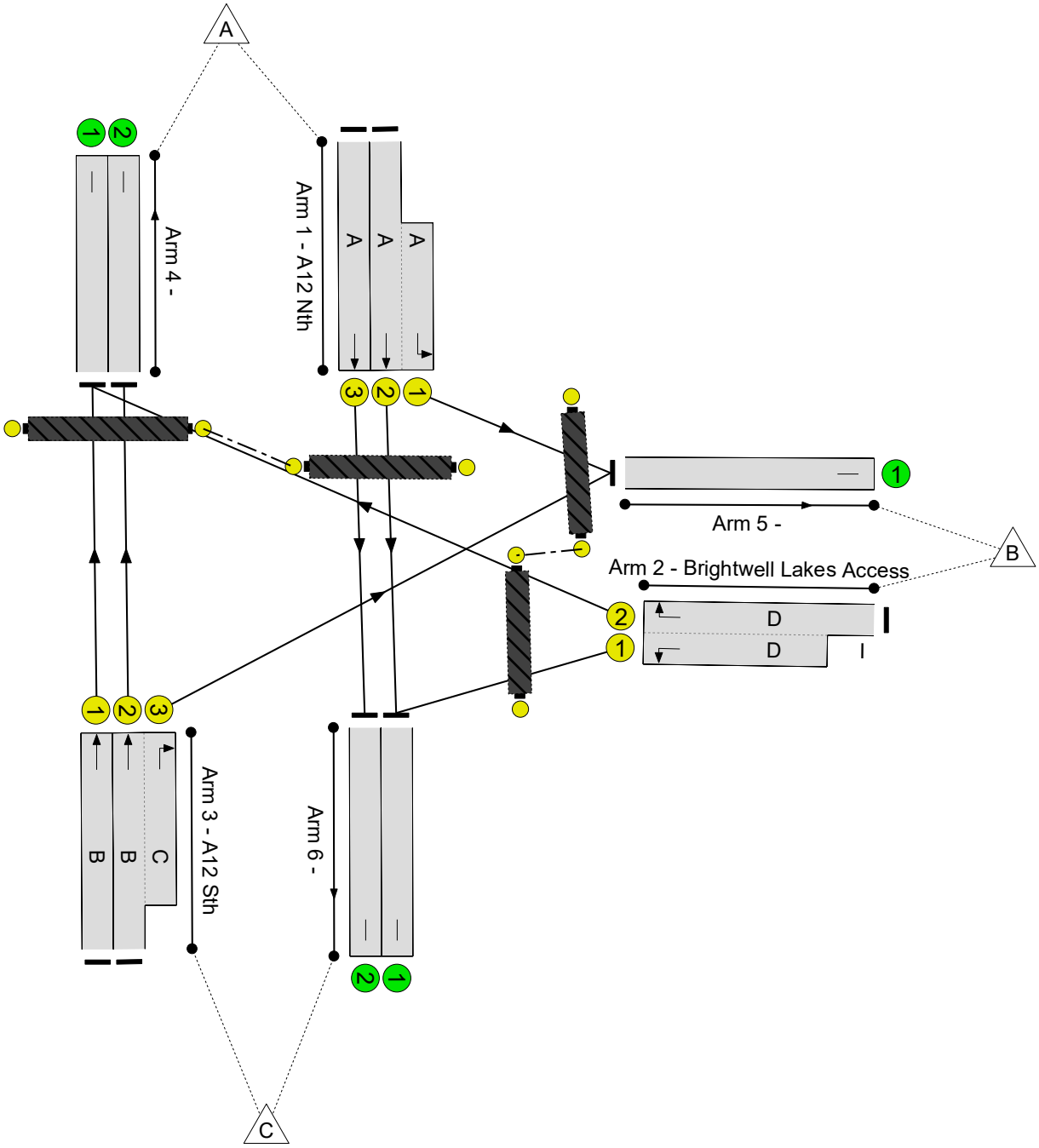


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -7.0 %
Total Traffic Delay: 52.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.3%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1043	2120:1819	1174+28	86.8 : 86.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	963	1980	1122	85.8%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	273	1786:1762	258+47	89.5 : 89.5%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1213	1980	1265	95.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1336	2120:1906	1350+37	96.3 : 96.3%
4/1		U	N/A	N/A	-		-	-	-	1444	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1300	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1061	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	963	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

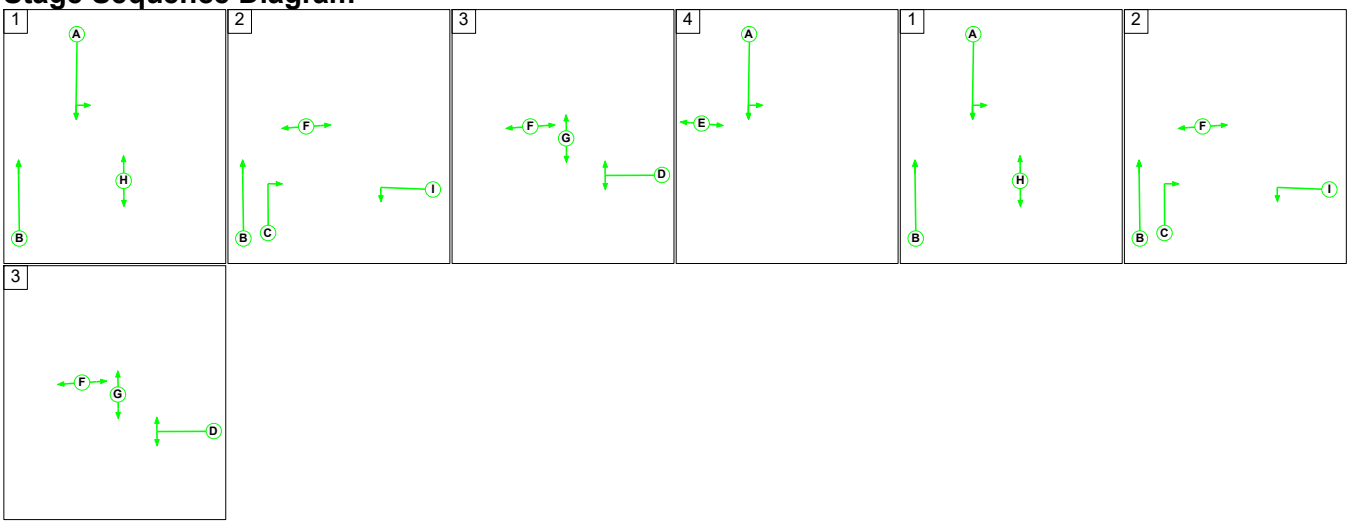
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**24.8**	**27.8**	**0.0**	**52.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**24.8**	**27.8**	**0.0**	**52.6**	**-**	**-**	**-**	**-**
1/2+1/1	1043	1043	-	-	-	4.9	3.2	-	8.0	27.7	22.3	3.2	25.5
1/3	963	963	-	-	-	4.4	2.9	-	7.3	27.4	20.1	2.9	23.0
2/2+2/1	273	273	-	-	-	2.9	3.5	-	6.4	84.8	6.7	3.5	10.2
3/1	1213	1213	-	-	-	5.9	8.7	-	14.6	43.3	35.0	8.7	43.8
3/2+3/3	1336	1336	-	-	-	6.8	9.5	-	16.2	43.8	39.8	9.5	49.3
4/1	1444	1444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1300	1300	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1061	1061	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	963	963	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -7.0 Total Delay for Signalled Lanes (pcuHr): 52.60 Cycle Time (s): 180
PRC Over All Lanes (%): -7.0 Total Delay Over All Lanes(pcuHr): 52.60

Full Input Data And Results

Scenario 24: '34RC 15:00-16:00' (FG24: '34RC 15:00-16:00', Plan 2: 'Network Control Plan 2')

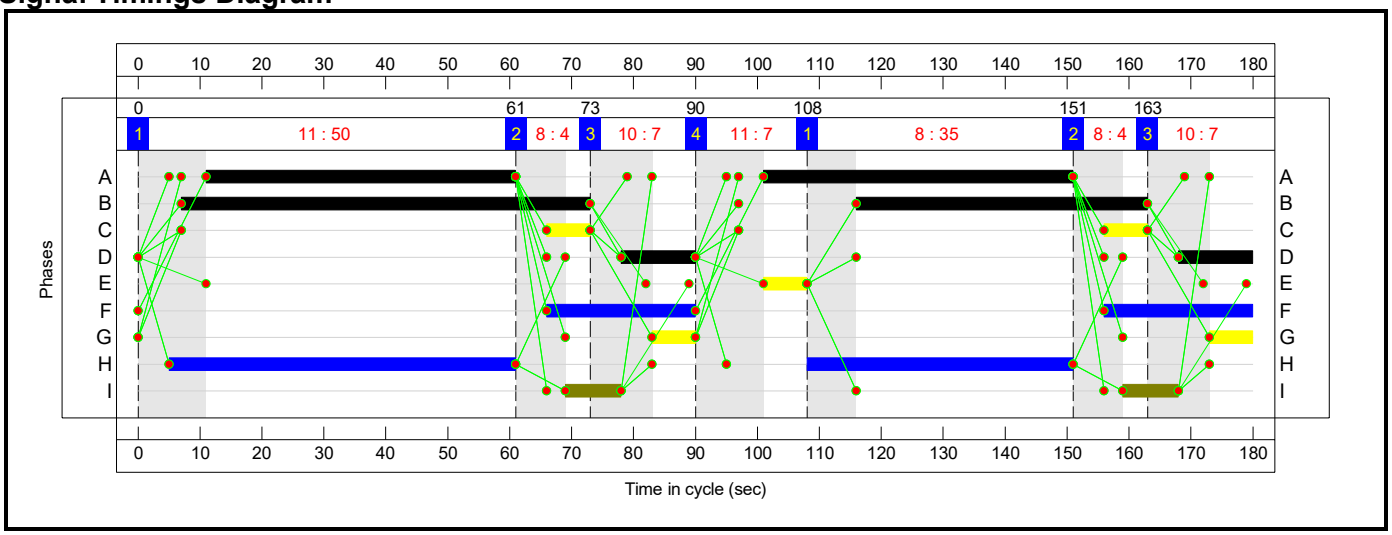
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

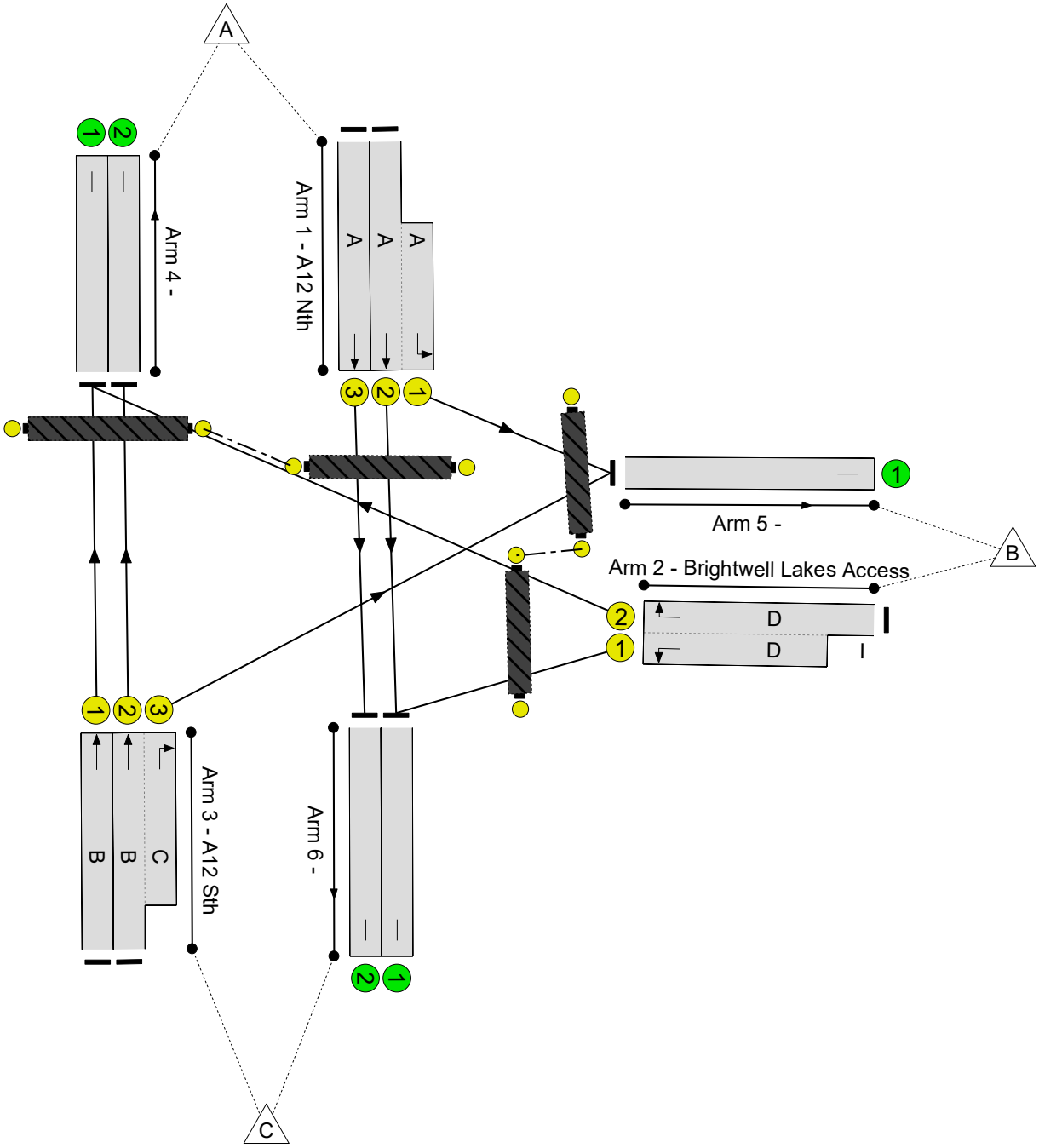


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -2.0 %
Total Traffic Delay: 32.0 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.8%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1115	2120:1819	1097+118	91.8 : 91.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1019	1980	1122	90.8%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	173	1786:1762	258+78	51.6 : 51.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	909	1980	1265	71.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1084	2120:1906	1330+125	74.5 : 74.5%
4/1		U	N/A	N/A	-		-	-	-	1042	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	991	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1047	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1019	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.1**	**12.9**	**0.0**	**32.0**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.1**	**12.9**	**0.0**	**32.0**	**-**	**-**	**-**	**-**
1/2+1/1	1115	1115	-	-	-	5.3	5.1	-	10.3	33.4	24.0	5.1	29.1
1/3	1019	1019	-	-	-	4.9	4.5	-	9.5	33.5	22.6	4.5	27.2
2/2+2/1	173	173	-	-	-	1.6	0.5	-	2.1	44.5	3.1	0.5	3.6
3/1	909	909	-	-	-	3.0	1.3	-	4.2	16.8	19.4	1.3	20.7
3/2+3/3	1084	1084	-	-	-	4.3	1.5	-	5.8	19.1	21.5	1.5	22.9
4/1	1042	1042	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1047	1047	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1019	1019	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): -2.0
PRC Over All Lanes (%): -2.0

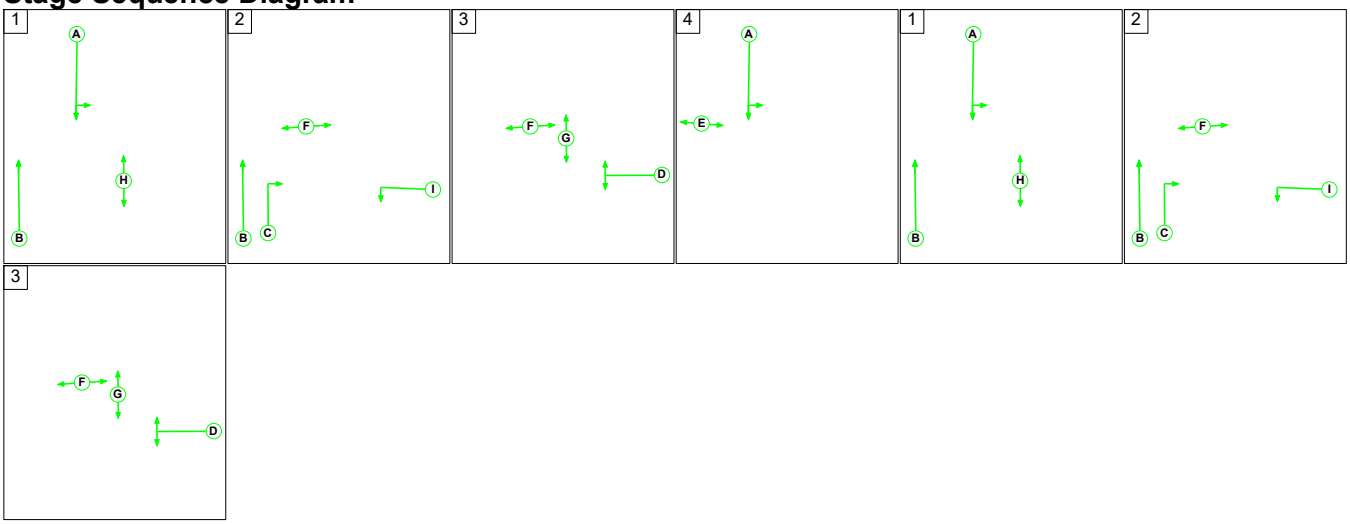
Total Delay for Signalled Lanes (pcuHr): 31.96
Total Delay Over All Lanes(pcuHr): 31.96

Cycle Time (s): 180

Full Input Data And Results

Scenario 25: '34RC 17:00-18:00' (FG25: '34RC 17:00-18:00', Plan 2: 'Network Control Plan 2')

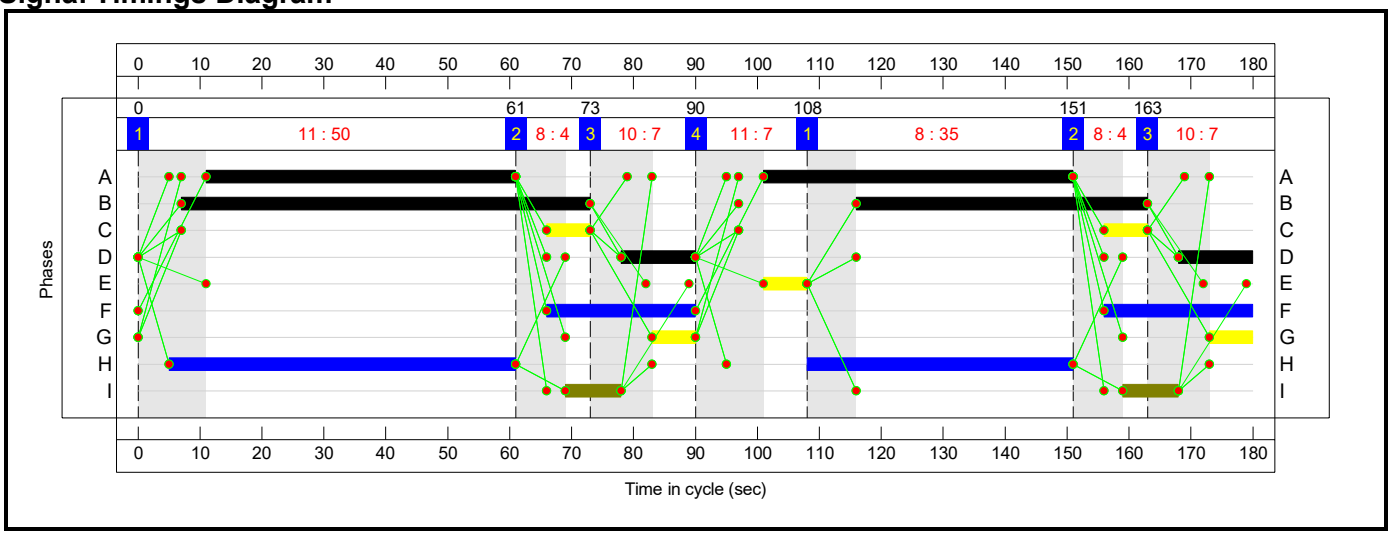
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

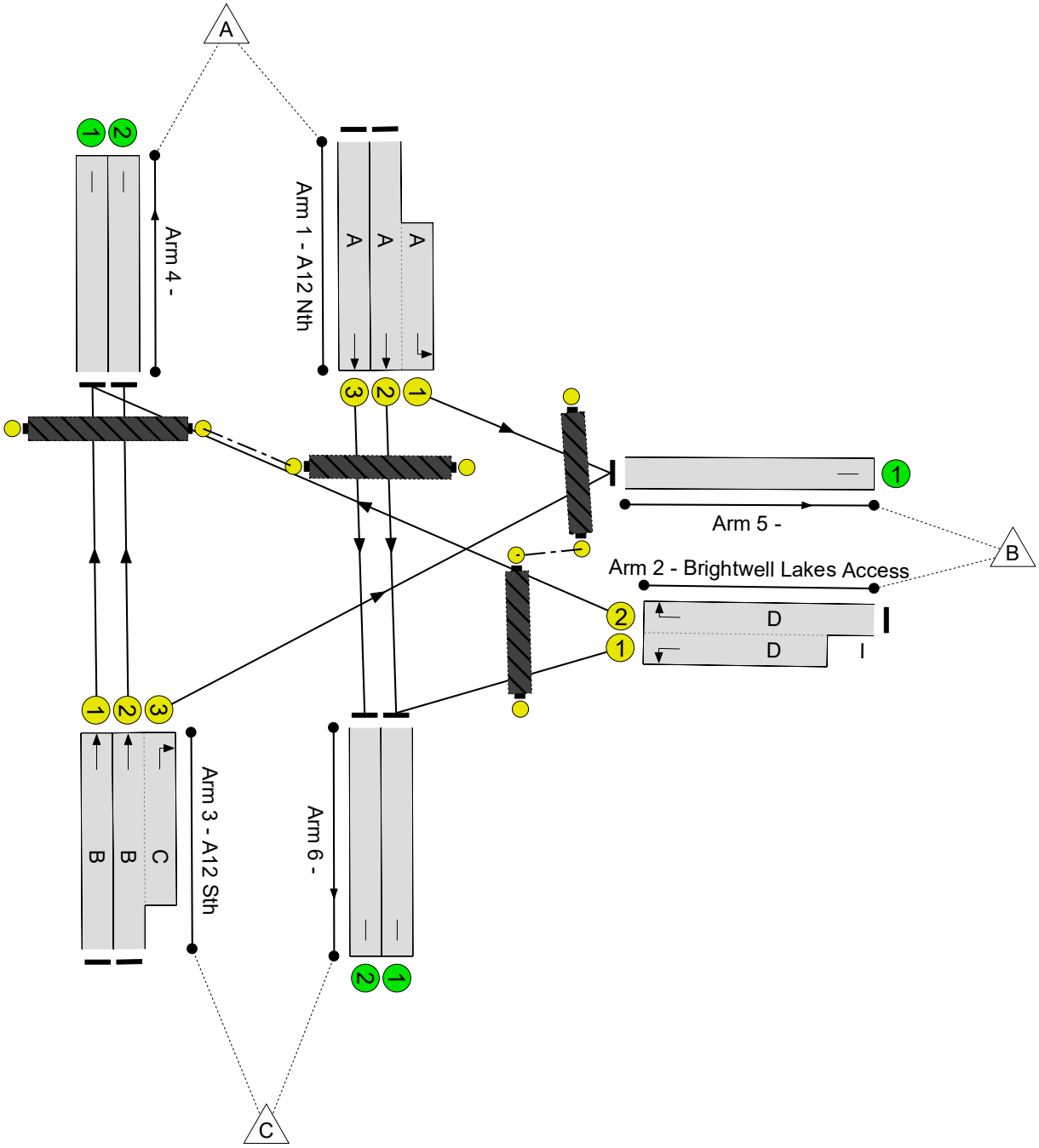


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -2.3 %
Total Traffic Delay: 32.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.1%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1115	2120:1819	1114+97	92.1 : 92.1%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1024	1980	1122	91.3%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	185	1786:1762	258+118	49.2 : 49.2%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	886	1980	1265	70.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1095	2120:1906	1319+169	73.3 : 75.6%
4/1		U	N/A	N/A	-		-	-	-	1013	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	967	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	217	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1084	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1024	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.4**	**13.0**	**0.0**	**32.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.4**	**13.0**	**0.0**	**32.4**	**-**	**-**	**-**	**-**
1/2+1/1	1115	1115	-	-	-	5.3	5.2	-	10.5	34.0	24.5	5.2	29.7
1/3	1024	1024	-	-	-	5.0	4.8	-	9.7	34.2	22.8	4.8	27.5
2/2+2/1	185	185	-	-	-	1.7	0.5	-	2.2	42.1	2.9	0.5	3.4
3/1	886	886	-	-	-	2.8	1.2	-	4.0	16.2	18.7	1.2	19.9
3/2+3/3	1095	1095	-	-	-	4.6	1.4	-	6.0	19.6	20.7	1.4	22.1
4/1	1013	1013	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	967	967	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	217	217	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1084	1084	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1024	1024	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

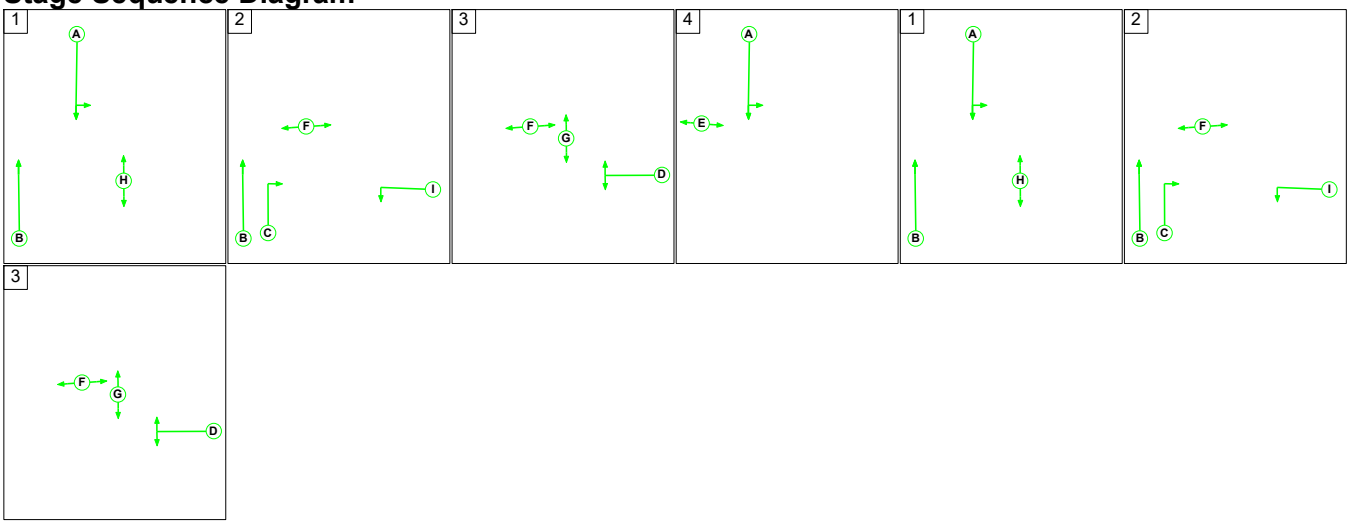
C1 PRC for Signalled Lanes (%): -2.3 Total Delay for Signalled Lanes (pcuHr): 32.40 Cycle Time (s): 180

PRC Over All Lanes (%): -2.3 Total Delay Over All Lanes(pcuHr): 32.40

Full Input Data And Results

Scenario 26: '34OP 06:00-07:00' (FG26: '34OP 06:00-07:00', Plan 2: 'Network Control Plan 2')

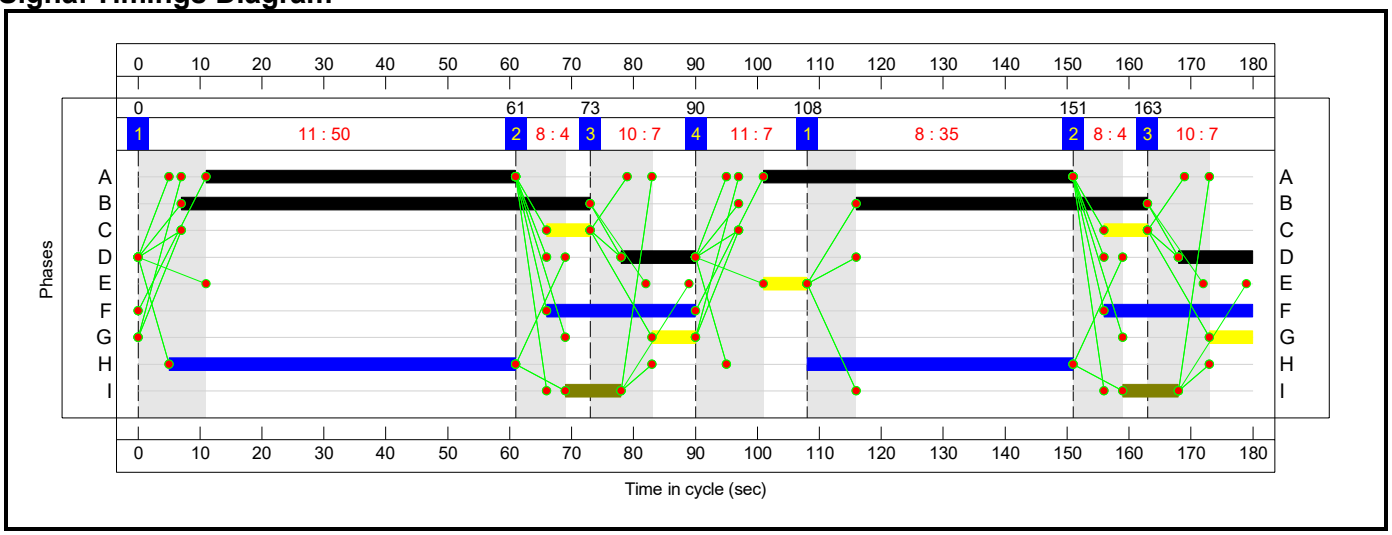
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

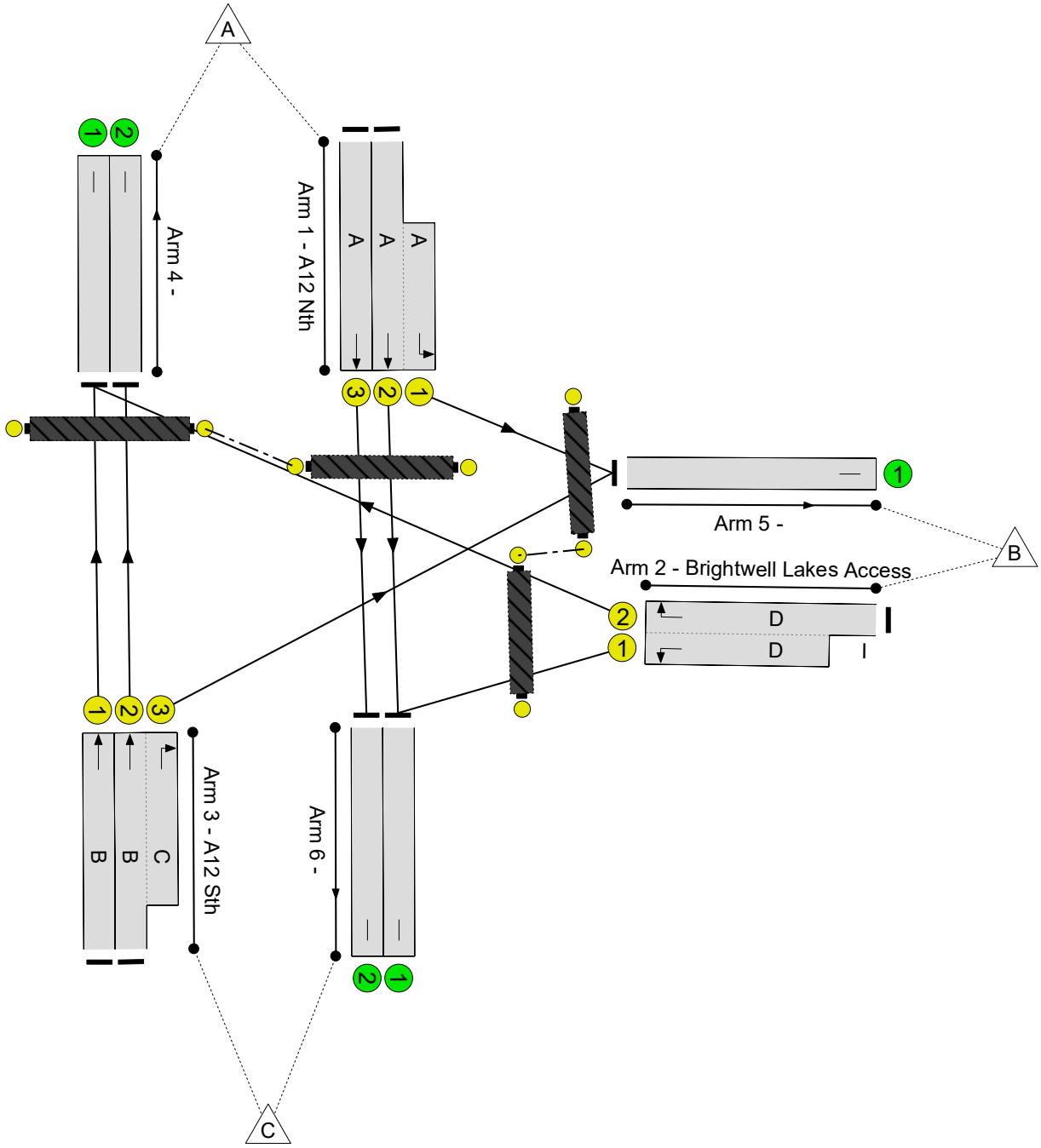


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 108.0 %
Total Traffic Delay: 6.1 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**43.3%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	519	2120:1819	1190+9	43.3 : 43.3%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	467	1980	1122	41.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	4	1786:1965	258+0	1.6 : 0.0%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	380	1980	1265	30.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	430	2120:1906	1354+6	31.6 : 31.6%
4/1		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	6	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	467	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

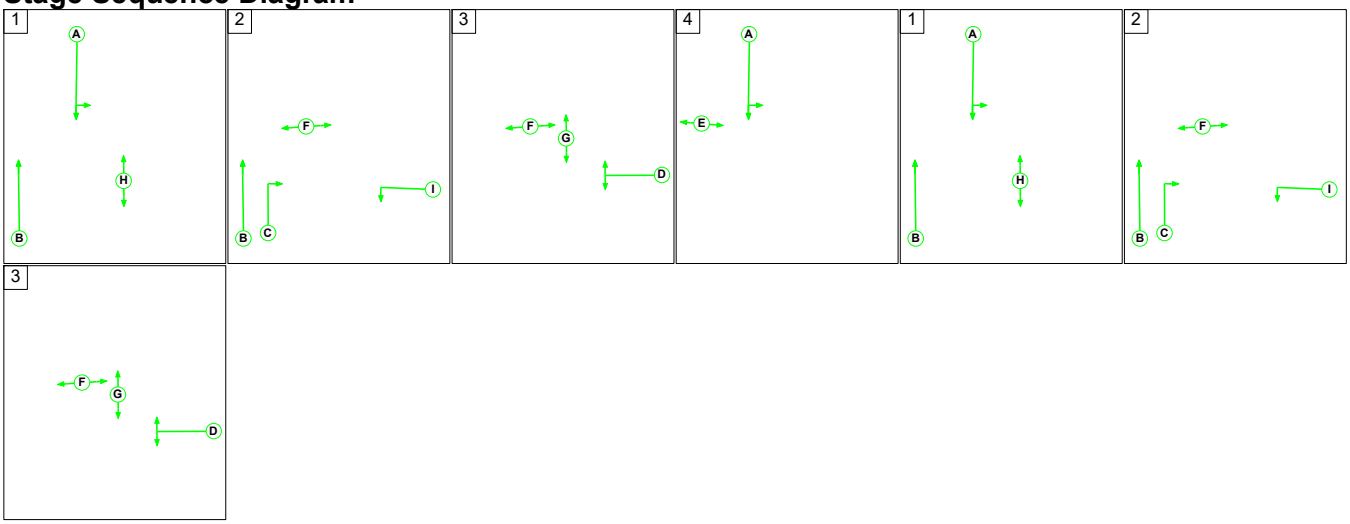
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.9**	**1.2**	**0.0**	**6.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.9**	**1.2**	**0.0**	**6.1**	**-**	**-**	**-**	**-**
1/2+1/1	519	519	-	-	-	1.6	0.4	-	2.0	13.8	7.4	0.4	7.8
1/3	467	467	-	-	-	1.4	0.4	-	1.8	13.8	6.6	0.4	7.0
2/2+2/1	4	4	-	-	-	0.0	0.0	-	0.0	40.4	0.1	0.0	0.1
3/1	380	380	-	-	-	0.8	0.2	-	1.0	9.9	5.4	0.2	5.6
3/2+3/3	430	430	-	-	-	1.0	0.2	-	1.2	10.1	6.2	0.2	6.4
4/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	467	467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 108.0 Total Delay for Signalled Lanes (pcuHr): 6.07 Cycle Time (s): 180
PRC Over All Lanes (%): 108.0 Total Delay Over All Lanes(pcuHr): 6.07

Full Input Data And Results

Scenario 27: '34OP 07:00-08:00' (FG27: '34OP 07:00-08:00', Plan 2: 'Network Control Plan 2')

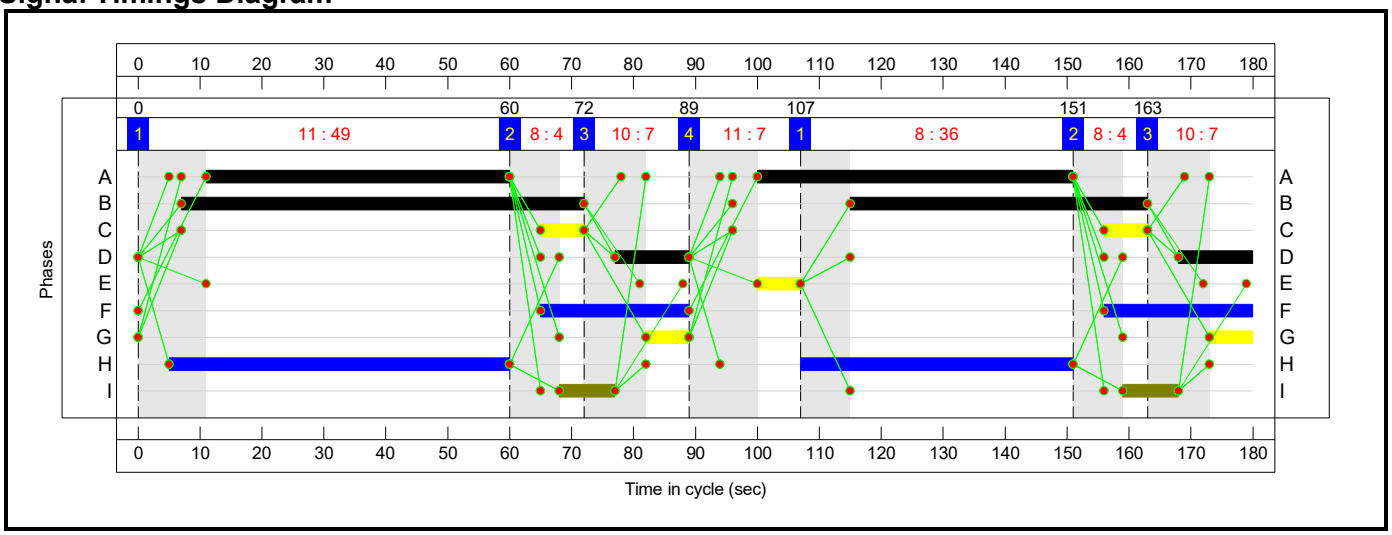
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

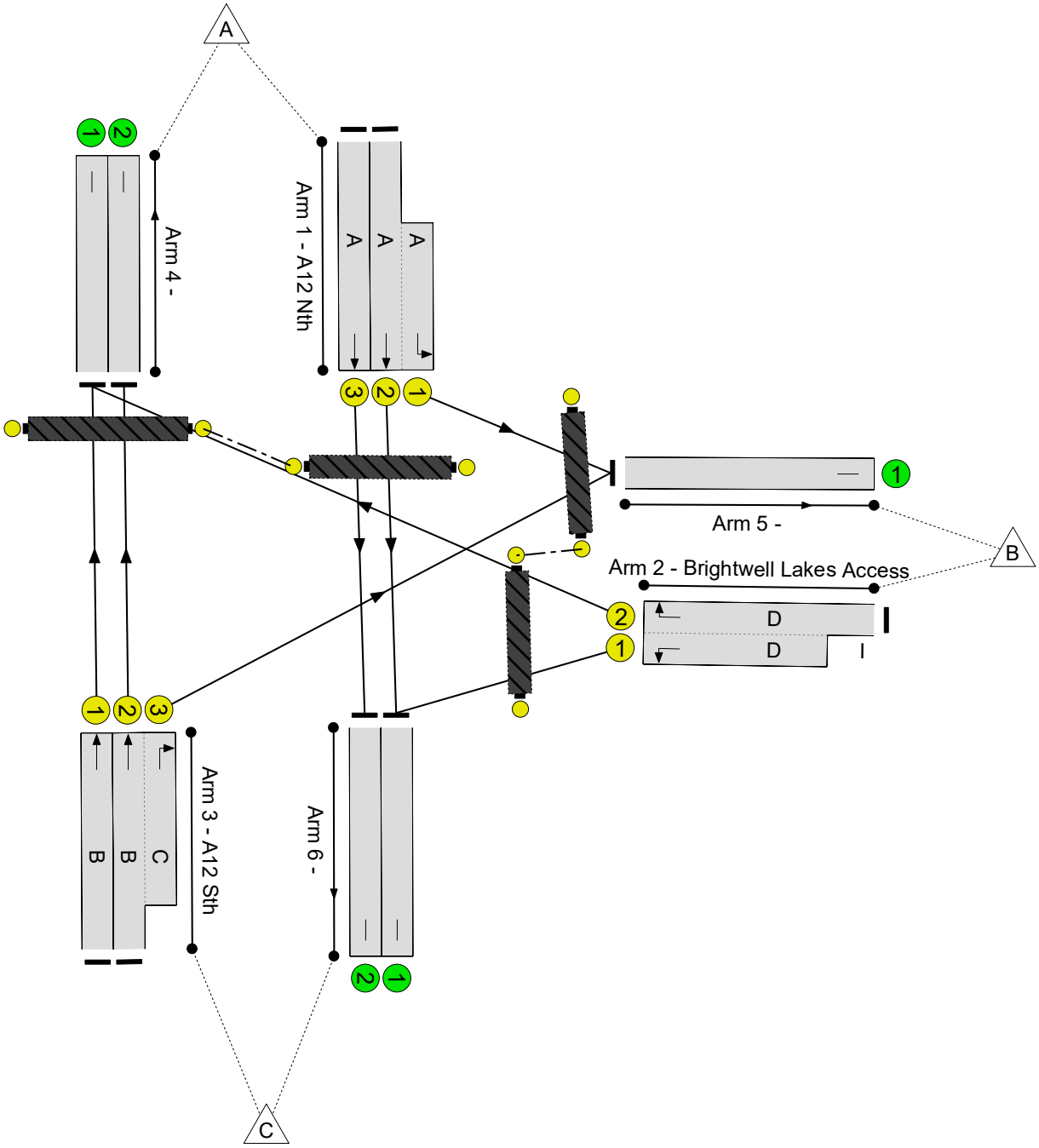


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 17.2 %
Total Traffic Delay: 21.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.8%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	922	2120:1819	1182+18	76.8 : 76.8%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	848	1980	1122	75.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	213	1786:1762	223+411	33.6 : 33.6%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	923	1980	1265	73.0%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1018	2120:1906	1353+19	74.2 : 74.2%
4/1		U	N/A	N/A	-		-	-	-	998	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1046	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	848	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

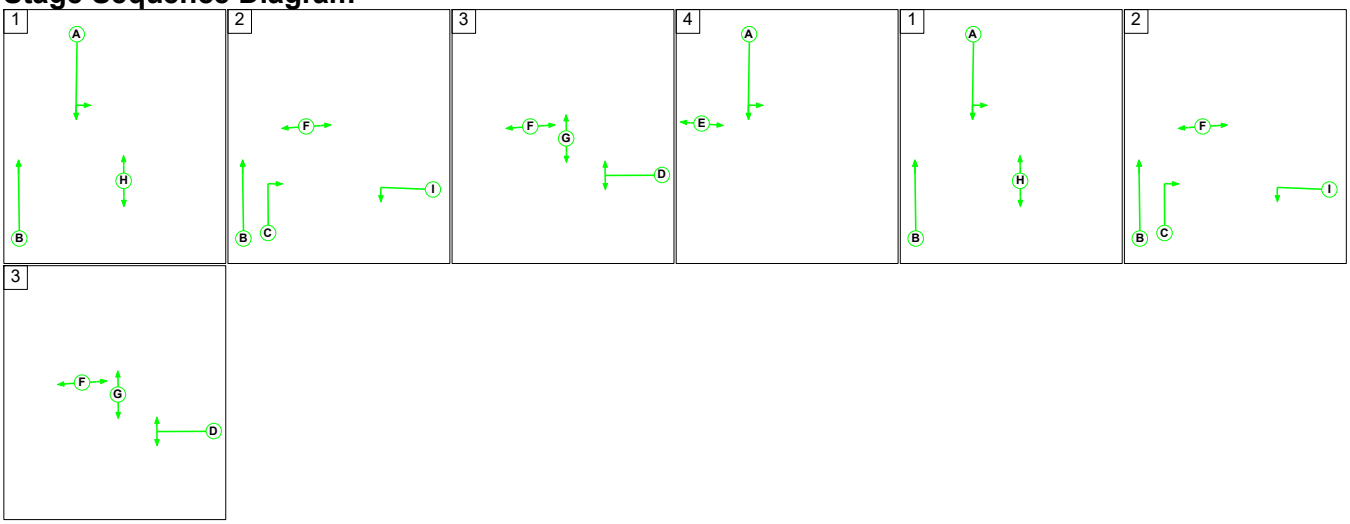
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.7**	**6.2**	**0.0**	**21.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**15.7**	**6.2**	**0.0**	**21.8**	**-**	**-**	**-**	**-**
1/2+1/1	922	922	-	-	-	3.8	1.6	-	5.4	21.3	17.3	1.6	18.9
1/3	848	848	-	-	-	3.5	1.5	-	5.0	21.3	16.0	1.5	17.5
2/2+2/1	213	213	-	-	-	1.8	0.3	-	2.0	34.5	2.8	0.3	3.1
3/1	923	923	-	-	-	3.1	1.3	-	4.4	17.2	20.0	1.3	21.3
3/2+3/3	1018	1018	-	-	-	3.5	1.4	-	4.9	17.5	22.0	1.4	23.5
4/1	998	998	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	28	28	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1046	1046	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 17.2 Total Delay for Signalled Lanes (pcuHr): 21.84 Cycle Time (s): 180
PRC Over All Lanes (%): 17.2 Total Delay Over All Lanes(pcuHr): 21.84

Full Input Data And Results

Scenario 28: '34OP 08:00-09:00' (FG28: '34OP 08:00-09:00', Plan 2: 'Network Control Plan 2')

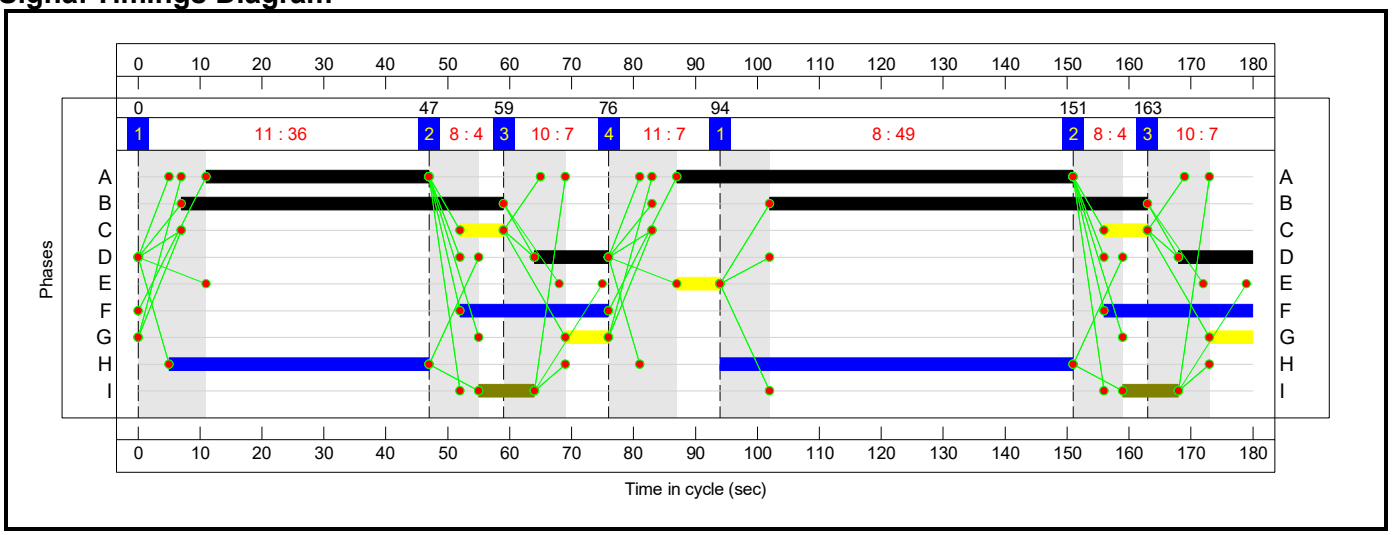
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	36	4	7	7	49	4	7
Change Point	0	47	59	76	94	151	163

Signal Timings Diagram

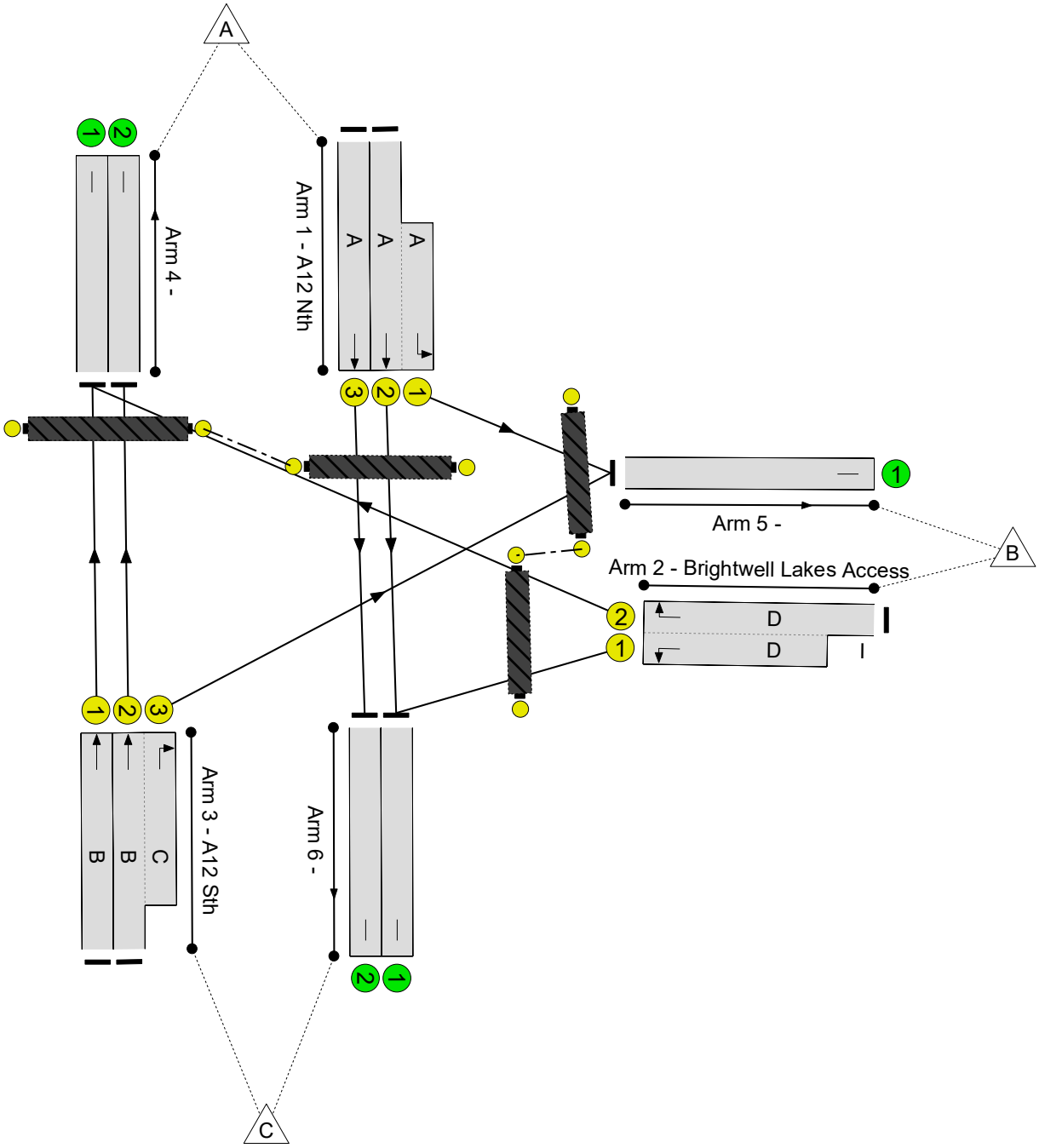


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -2.1 %
Total Traffic Delay: 34.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.9%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1020	2120:1980	1199+0	85.1 : 0.0%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	947	1980	1122	84.4%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	2	1965:1762	0+431	0.0 : 0.5%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	1155	1980	1265	91.3%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1250	2120:1906	1354+5	91.9 : 91.9%
4/1		U	N/A	N/A	-		-	-	-	1155	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	1245	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1022	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	947	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.2**	**15.4**	**0.0**	**34.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.2**	**15.4**	**0.0**	**34.6**	**-**	**-**	**-**	**-**
1/2+1/1	1020	1020	-	-	-	4.6	2.8	-	7.4	26.1	21.2	2.8	24.0
1/3	947	947	-	-	-	4.3	2.6	-	6.9	26.2	19.5	2.6	22.1
2/2+2/1	2	2	-	-	-	0.0	0.0	-	0.0	31.4	0.0	0.0	0.0
3/1	1155	1155	-	-	-	4.9	4.8	-	9.7	30.3	32.1	4.8	36.9
3/2+3/3	1250	1250	-	-	-	5.4	5.2	-	10.6	30.5	35.1	5.2	40.3
4/1	1155	1155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	1245	1245	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1022	1022	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	947	947	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

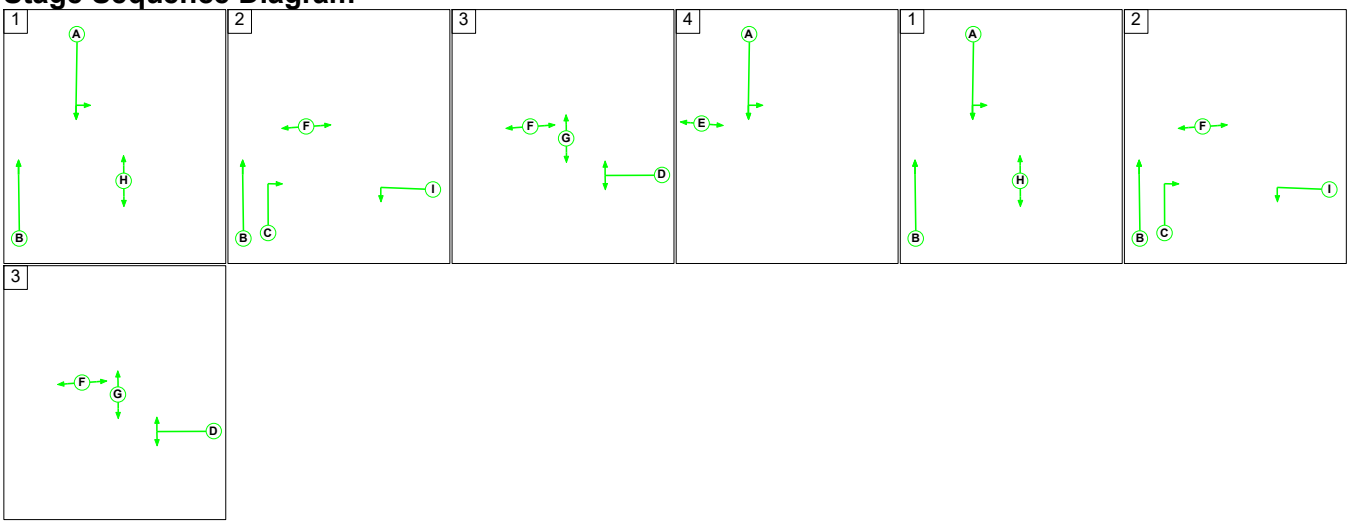
C1 PRC for Signalled Lanes (%): -2.1 Total Delay for Signalled Lanes (pcuHr): 34.63 Cycle Time (s): 180

PRC Over All Lanes (%): -2.1 Total Delay Over All Lanes(pcuHr): 34.63

Full Input Data And Results

Scenario 29: '34OP 15:00-16:00' (FG29: '34OP 15:00-16:00', Plan 2: 'Network Control Plan 2')

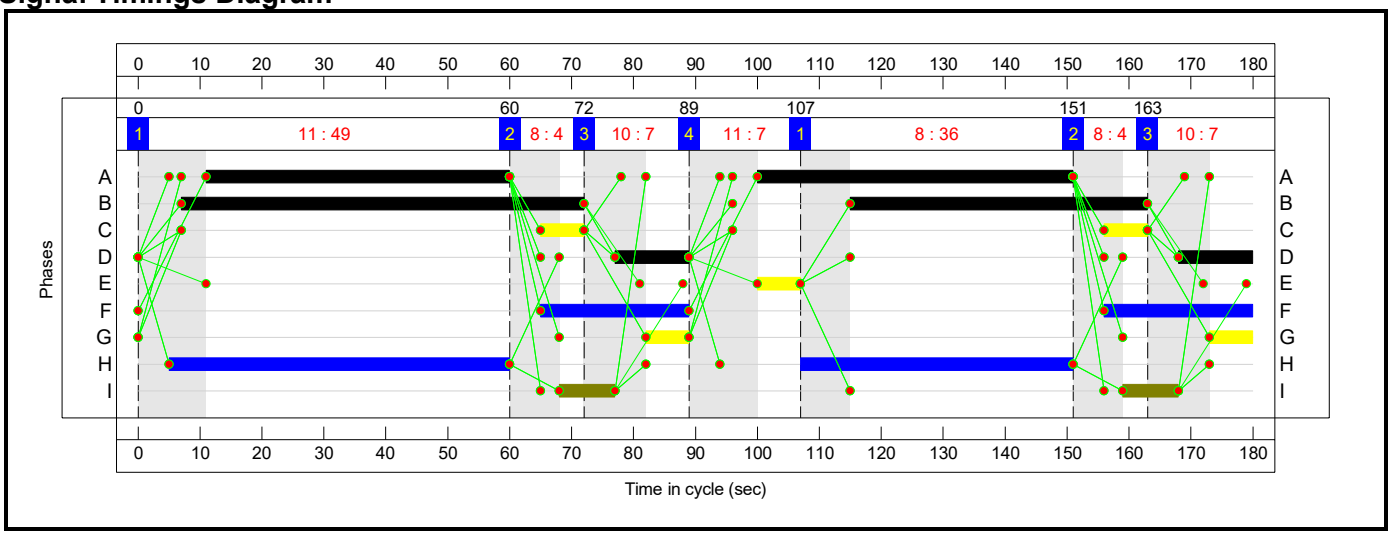
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	49	4	7	7	36	4	7
Change Point	0	60	72	89	107	151	163

Signal Timings Diagram

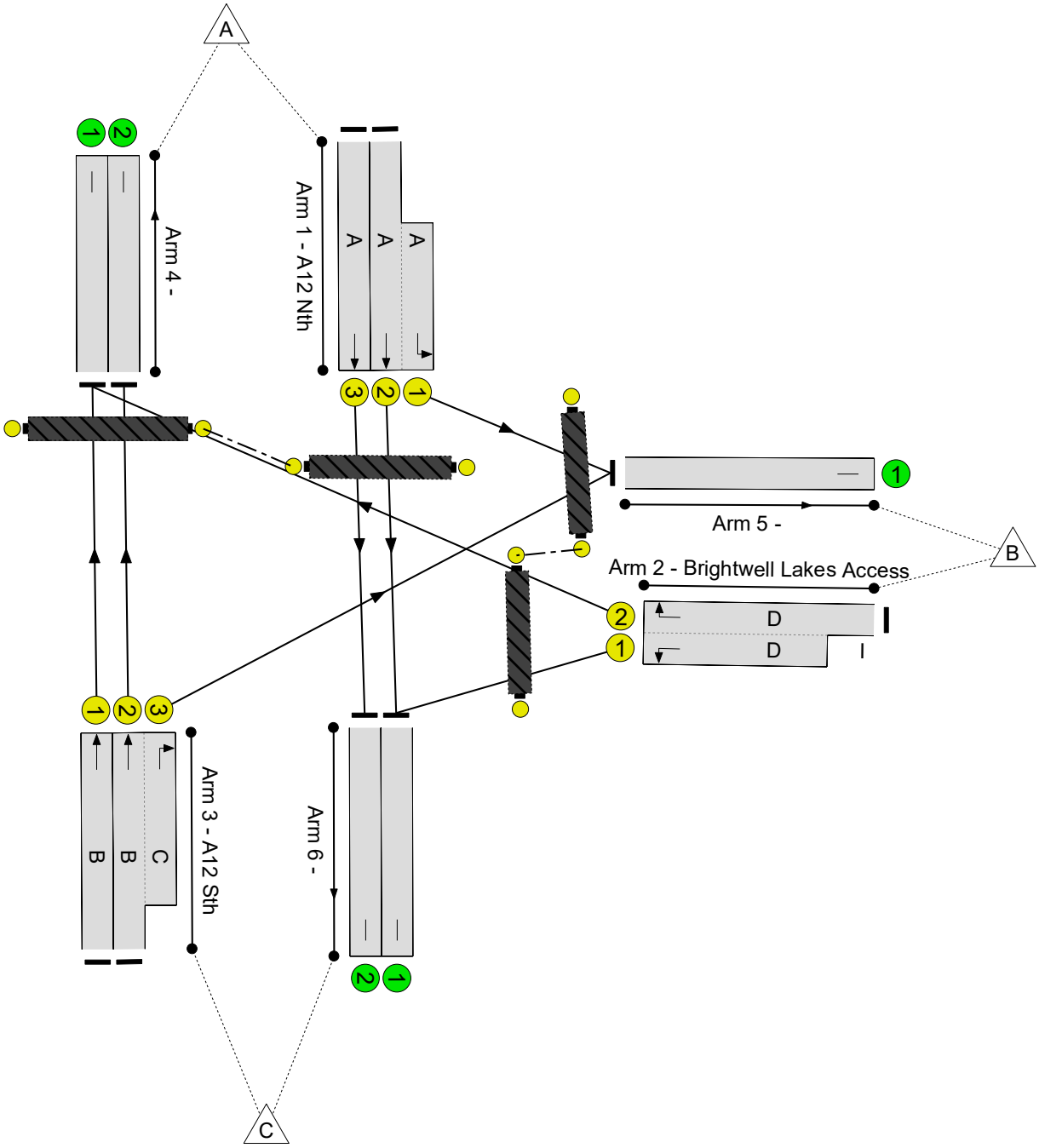


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -1.8 %
Total Traffic Delay: 31.7 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.6%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1113	2120:1819	1095+119	91.6 : 91.6%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1017	1980	1122	90.6%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	167	1786:1762	258+73	50.4 : 50.4%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	910	1980	1265	71.9%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1086	2120:1906	1330+125	74.7 : 74.7%
4/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	993	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	202	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1041	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1017	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

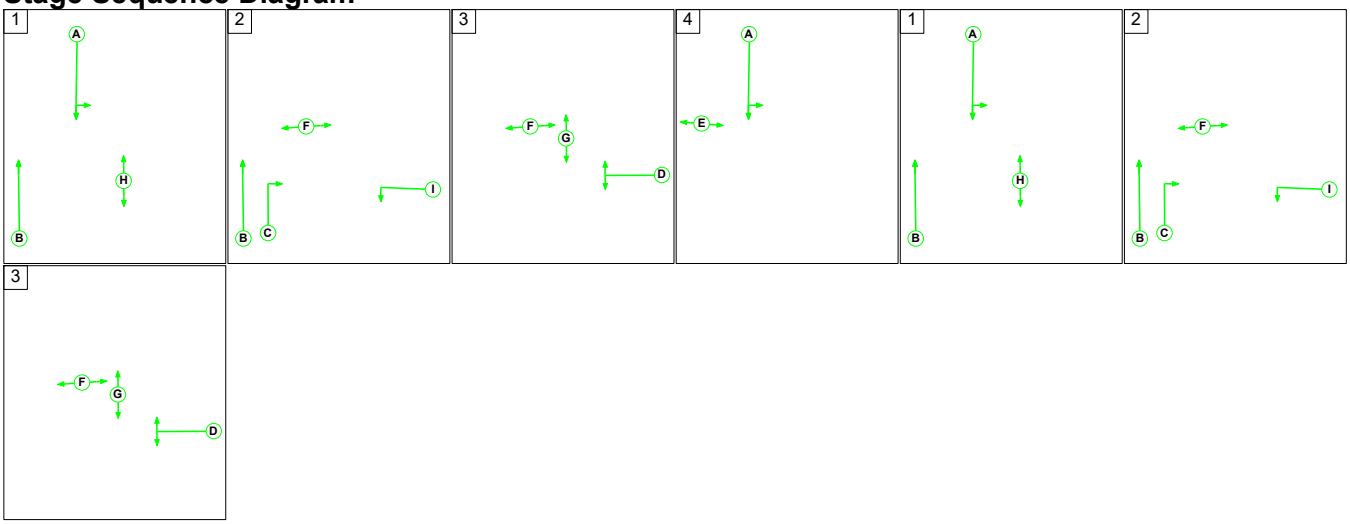
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.0**	**12.7**	**0.0**	**31.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.0**	**12.7**	**0.0**	**31.7**	**-**	**-**	**-**	**-**
1/2+1/1	1113	1113	-	-	-	5.2	5.0	-	10.2	33.1	24.0	5.0	29.0
1/3	1017	1017	-	-	-	4.9	4.5	-	9.4	33.2	22.6	4.5	27.1
2/2+2/1	167	167	-	-	-	1.6	0.5	-	2.1	44.4	3.0	0.5	3.5
3/1	910	910	-	-	-	3.0	1.3	-	4.3	16.8	19.5	1.3	20.7
3/2+3/3	1086	1086	-	-	-	4.3	1.5	-	5.8	19.2	21.8	1.5	23.3
4/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	993	993	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1041	1041	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1017	1017	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -1.8 Total Delay for Signalled Lanes (pcuHr): 31.69 Cycle Time (s): 180
PRC Over All Lanes (%): -1.8 Total Delay Over All Lanes(pcuHr): 31.69

Full Input Data And Results

Scenario 30: '34OP 17:00-18:00' (FG30: '34OP 17:00-18:00', Plan 2: 'Network Control Plan 2')

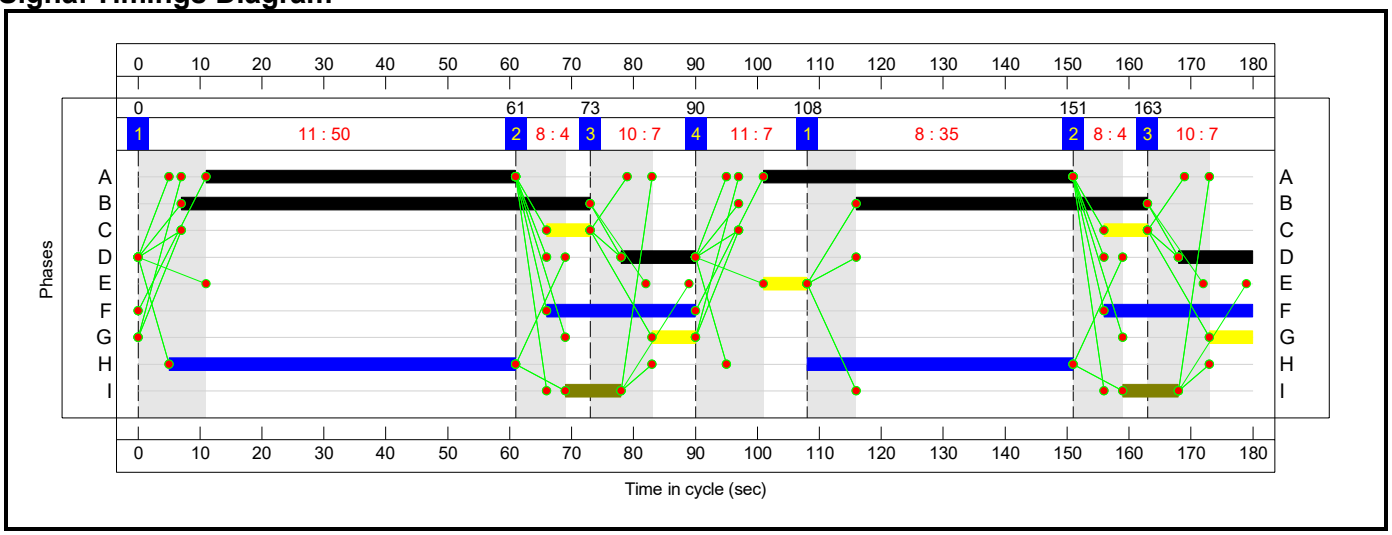
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	50	4	7	7	35	4	7
Change Point	0	61	73	90	108	151	163

Signal Timings Diagram

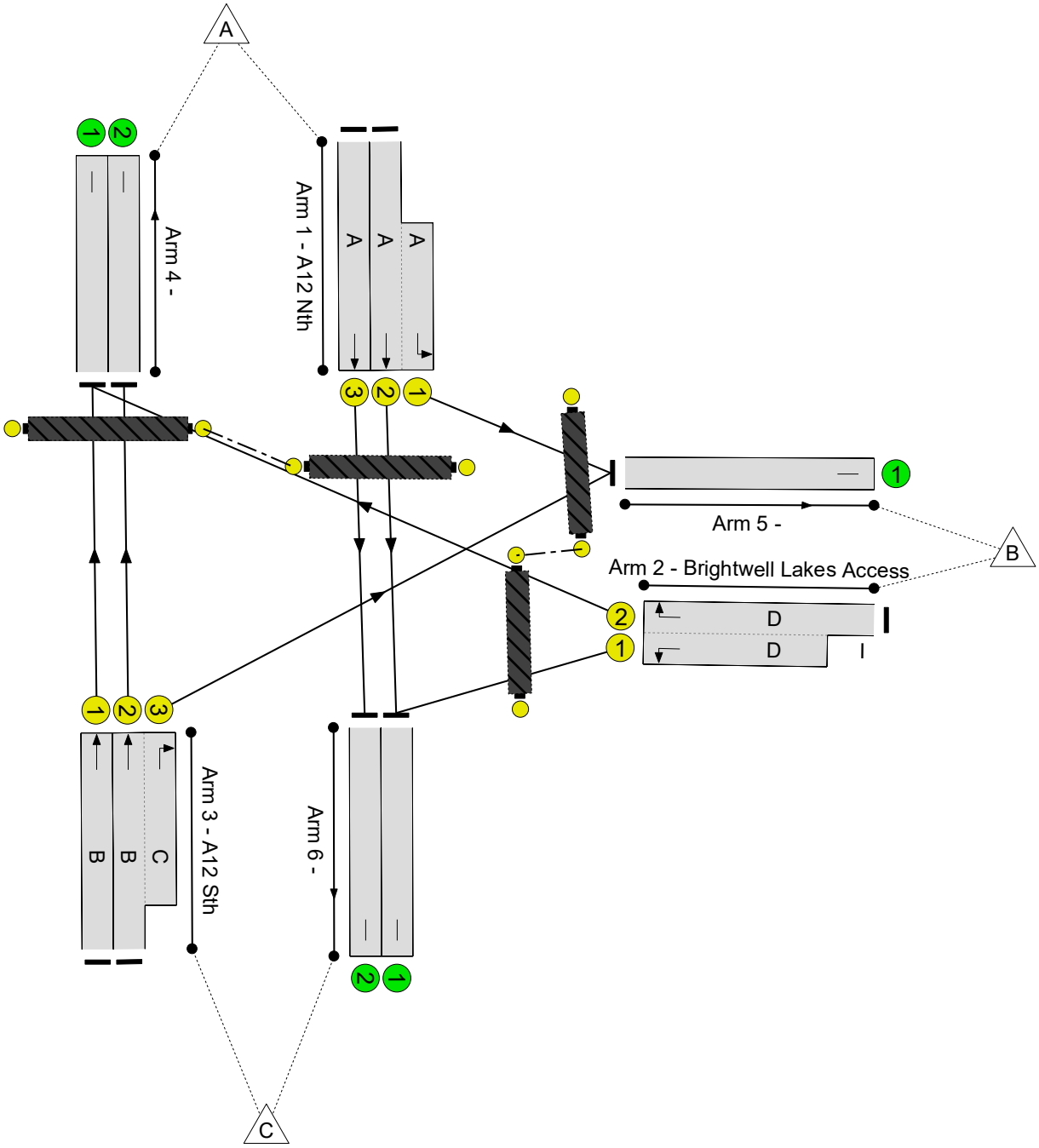


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -2.6 %
Total Traffic Delay: 32.7 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.3%**
1/2+1/1	A12 Nth Left Ahead	U	N/A	N/A	A		2	100	-	1118	2120:1819	1115+96	92.3 : 92.3%
1/3	A12 Nth Ahead	U	N/A	N/A	A		2	100	-	1027	1980	1122	91.5%
2/2+2/1	Brightwell Lakes Access Right Left	U	N/A	N/A	D	I	2	24:42	18	174	1786:1762	258+110	47.3 : 47.3%
3/1	A12 Sth Ahead	U	N/A	N/A	B		2	113	-	888	1980	1265	70.2%
3/2+3/3	A12 Sth Ahead Right	U	N/A	N/A	B C		2	113:14	-	1098	2120:1906	1319+169	73.5 : 75.6%
4/1		U	N/A	N/A	-		-	-	-	1010	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	970	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	217	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1081	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	1027	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	14	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	H		2	99	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	F		2	48	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.4**	**13.3**	**0.0**	**32.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**19.4**	**13.3**	**0.0**	**32.7**	**-**	**-**	**-**	**-**
1/2+1/1	1118	1118	-	-	-	5.3	5.4	-	10.7	34.6	24.5	5.4	29.9
1/3	1027	1027	-	-	-	5.0	4.9	-	9.9	34.7	23.1	4.9	28.0
2/2+2/1	174	174	-	-	-	1.6	0.4	-	2.0	42.0	2.8	0.4	3.2
3/1	888	888	-	-	-	2.8	1.2	-	4.0	16.3	18.7	1.2	19.9
3/2+3/3	1098	1098	-	-	-	4.6	1.4	-	6.0	19.6	20.7	1.4	22.1
4/1	1010	1010	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	217	217	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1081	1081	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1027	1027	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

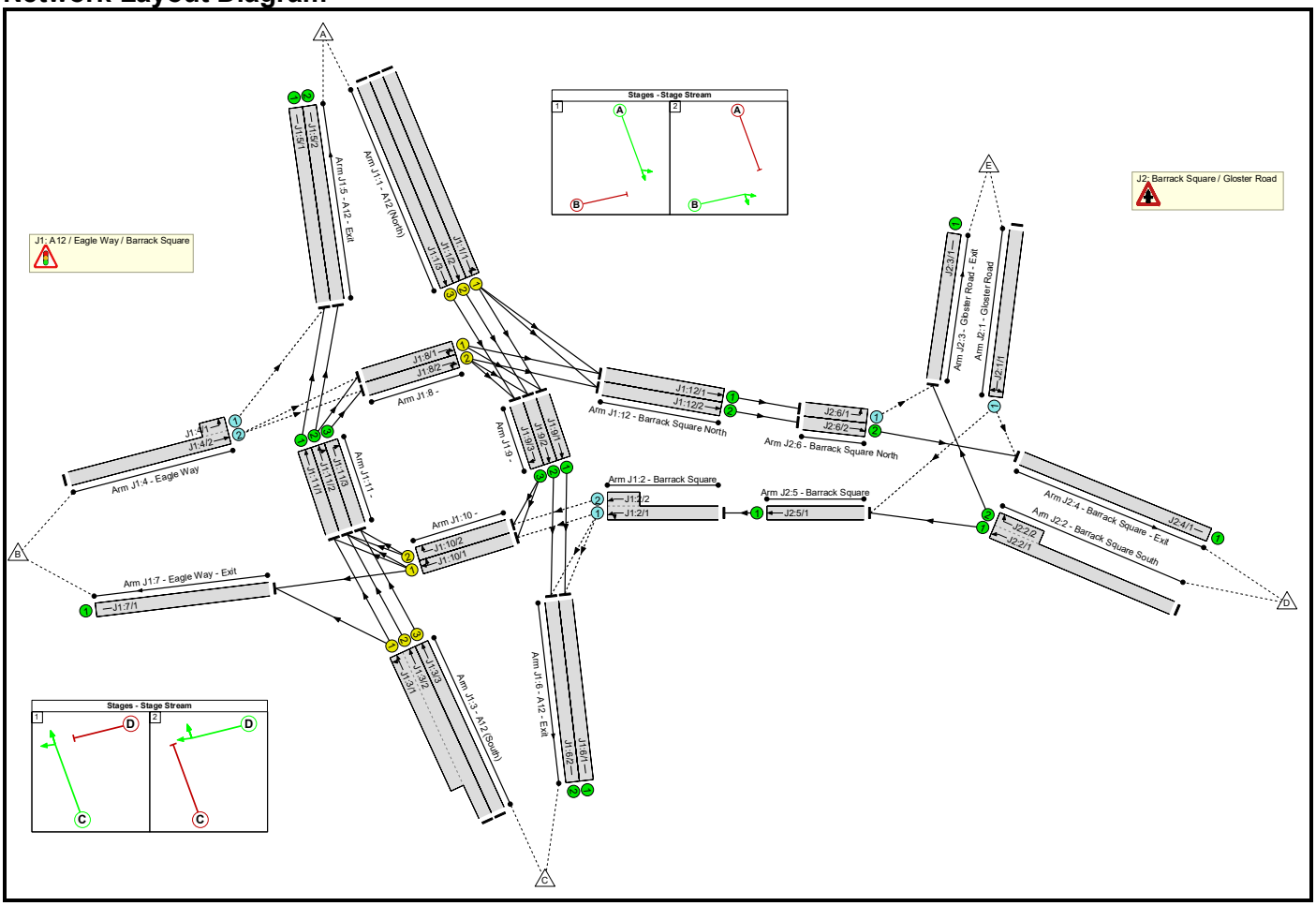
C1 PRC for Signalled Lanes (%): -2.6 Total Delay for Signalled Lanes (pcuHr): 32.67 Cycle Time (s): 180
PRC Over All Lanes (%): -2.6 Total Delay Over All Lanes(pcuHr): 32.67

Full Input Data And Results

User and Project Details

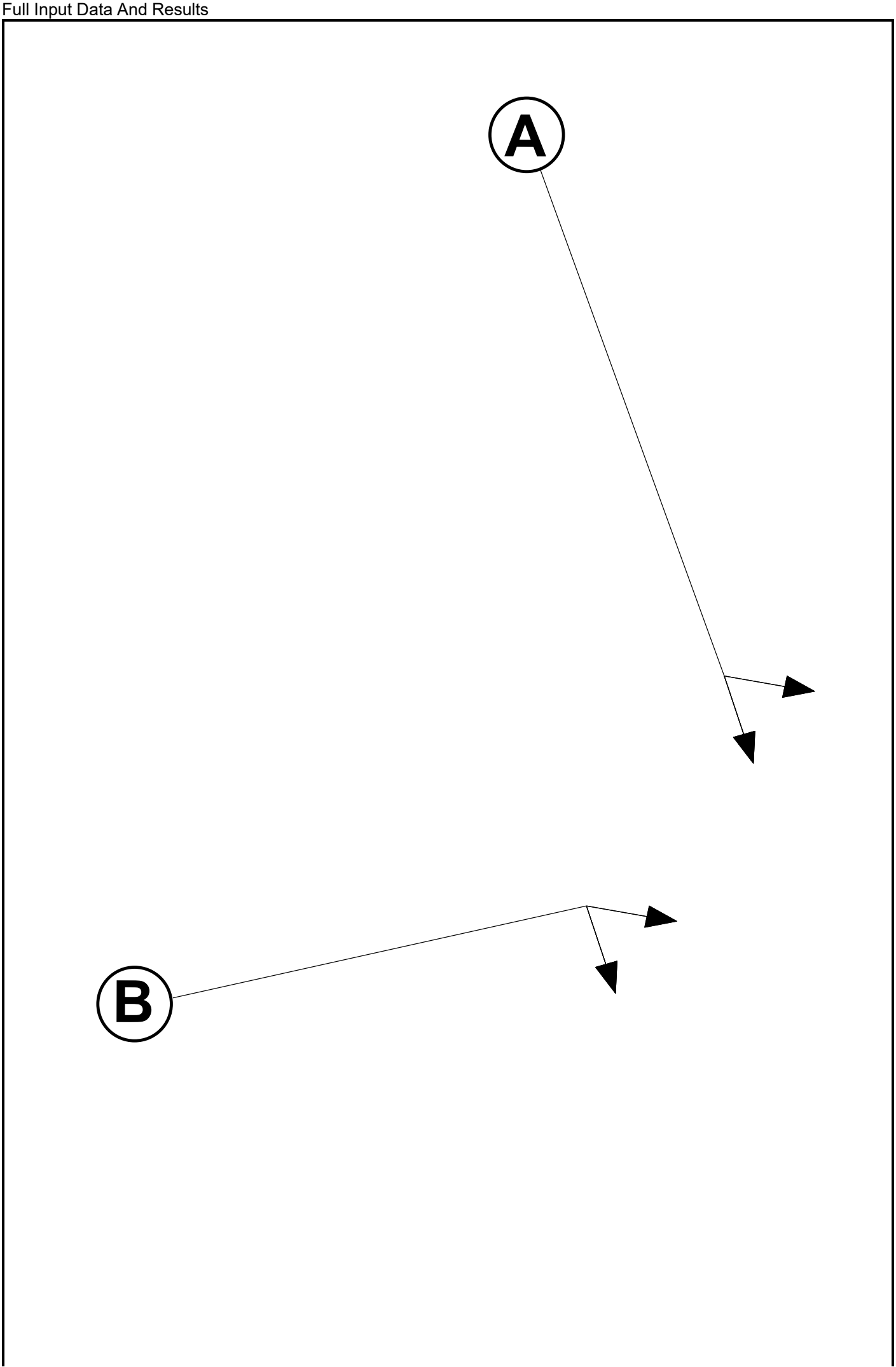
Project:	
Title:	
Location:	
Additional detail:	
File name:	J23_Model_v16 miti sens (updated).lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram


A
B

Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Phase Intergreens Matrix

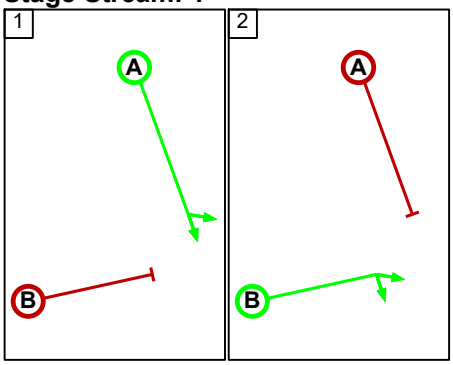
		Starting Phase			
		A	B	C	D
Terminating Phase	A		5	-	-
	B	5		-	-
	C	-	-		5
	D	-	-	5	

Phases in Stage

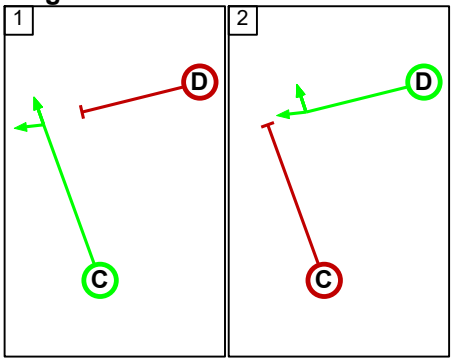
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

		To Stage	
		1	2
From Stage	1		5
	2	5	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
J1:2/1 (Barrack Square)	J1:6/1 (Left)	1000	0	J1:9/1	0.33	All	-	-	-	-	-
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
	J1:6/2 (Left)	1000	0	J1:9/1	0.33	All					
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
J1:2/2 (Barrack Square)	J1:10/1 (Ahead)	1000	0	J1:9/1	0.33	All					
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
	J1:10/2 (Ahead)	1000	0	J1:9/1	0.33	All					
				J1:9/2	0.33	All					
				J1:9/3	0.33	All					
J1:4/1 (Eagle Way)	J1:5/1 (Left)	1000	0	J1:11/1	0.33	All	-	-	-	-	-
				J1:11/2	0.33	All					
				J1:11/3	0.33	All					
J1:4/2 (Eagle Way)	J1:8/1 (Ahead)	1000	0	J1:11/1	0.33	All	-	-	-	-	-
				J1:11/2	0.33	All					
				J1:11/3	0.33	All					
	J1:8/2 (Ahead)	1000	0	J1:11/1	0.33	All					
				J1:11/2	0.33	All					
				J1:11/3	0.33	All					

Full Input Data And Results

Junction: J2: Barrack Square / Gloster Road											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
J2:1/1 (Gloster Road)	J2:4/1 (Left)	715	0	J2:6/2	0.22	To J2:4/1 (Ahead)	-	-	-	-	-
	J2:5/1 (Right)	600	0	J2:6/2	0.22	To J2:4/1 (Ahead)					
				J2:2/1	0.19	All					
				J2:2/2	0.19	All					
J2:6/1 (Barrack Square North)	J2:3/1 (Left)	1000	0	J2:2/2	0.33	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
J1:1/1 (A12 (North))	U	A	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	20.00
											Arm J1:12 Left	Inf
J1:1/2 (A12 (North))	U	A	2	3	34.8	Geom	-	3.50	0.00	N	Arm J1:9 Ahead	20.00
J1:1/3 (A12 (North))	U	A	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:9 Ahead	20.00
J1:2/1 (Barrack Square)	O		2	3	6.4	Geom	-	3.50	0.00	N	Arm J1:6 Left	27.00
											Arm J1:10 Ahead	27.00
J1:2/2 (Barrack Square)	O		2	3	3.5	Geom	-	3.50	0.00	Y	Arm J1:10 Ahead	27.00
J1:3/1 (A12 (South))	U	C	2	3	17.4	Geom	-	3.50	0.00	Y	Arm J1:7 Left	20.00
											Arm J1:11 Ahead	20.00
J1:3/2 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:11 Ahead	20.00
J1:3/3 (A12 (South))	U	C	2	3	34.8	Geom	-	3.50	0.00	Y	Arm J1:11 Ahead	20.00
J1:4/1 (Eagle Way)	O		2	3	2.8	Geom	-	3.25	0.00	Y	Arm J1:5 Left	23.00
J1:4/2 (Eagle Way)	O		2	3	34.8	Inf	-	-	-	-	-	-
J1:5/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:5/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:6/1 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:6/2 (A12 - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:7/1 (Eagle Way - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J1:8/1	U	B	2	3	10.4	Geom	-	3.25	0.00	Y	Arm J1:9 Right	15.00
											Arm J1:12 Ahead	15.00

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J1:8/2	U	B	2	3	10.4	Geom	-	3.25	0.00	Y	Arm J1:9 Right	15.00
											Arm J1:12 Ahead	15.00
J1:9/1	U		2	3	9.7	Inf	-	-	-	-	-	-
J1:9/2	U		2	3	9.7	Inf	-	-	-	-	-	-
J1:9/3	U		2	3	9.7	Inf	-	-	-	-	-	-
J1:10/1	U	D	2	3	9.0	Geom	-	3.25	0.00	Y	Arm J1:7 Ahead	15.00
											Arm J1:11 Right	15.00
J1:10/2	U	D	2	3	9.0	Geom	-	3.25	0.00	Y	Arm J1:11 Right	15.00
J1:11/1	U		2	3	9.2	Inf	-	-	-	-	-	-
J1:11/2	U		2	3	9.2	Inf	-	-	-	-	-	-
J1:11/3	U		2	3	9.2	Inf	-	-	-	-	-	-
J1:12/1 (Barrack Square North)	U		2	3	5.2	Inf	-	-	-	-	-	-
J1:12/2 (Barrack Square North)	U		2	3	5.2	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: Barrack Square / Gloster Road												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
J2:1/1 (Gloster Road)	O		2	3	34.8	Inf	-	-	-	-	-	-
J2:2/1 (Barrack Square South)	U		2	3	34.8	User	1800	-	-	-	-	-
J2:2/2 (Barrack Square South)	U		2	3	5.2	User	1800	-	-	-	-	-
J2:3/1 (Gloster Road - Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:4/1 (Barrack Square - Exit)	U		2	3	34.8	Inf	-	-	-	-	-	-
J2:5/1 (Barrack Square)	U		2	3	7.0	Inf	-	-	-	-	-	-
J2:6/1 (Barrack Square North)	O		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/2 (Barrack Square North)	U		2	3	6.3	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Base 06:00-07:00'	06:00	07:00	01:00	
2: 'Base 07:00-08:00'	07:00	08:00	01:00	
3: 'Base 08:00-09:00'	08:00	09:00	01:00	
4: 'Base 15:00-16:00'	15:00	16:00	01:00	
5: 'Base 17:00-18:00'	17:00	18:00	01:00	
6: '28RC 06:00-07:00'	06:00	07:00	01:00	
7: '28RC 07:00-08:00'	07:00	08:00	01:00	
8: '28RC 08:00-09:00'	08:00	09:00	01:00	
9: '28RC 15:00-16:00'	15:00	16:00	01:00	
10: '28RC 17:00-18:00'	17:00	18:00	01:00	
11: '28PC 06:00-07:00'	06:00	07:00	01:00	
12: '28PC 07:00-08:00'	07:00	08:00	01:00	
13: '28PC 08:00-09:00'	08:00	09:00	01:00	
14: '28PC 15:00-16:00'	15:00	16:00	01:00	
15: '28PC 17:00-18:00'	17:00	18:00	01:00	
16: '34RC 06:00-07:00'	06:00	07:00	01:00	
17: '34RC 07:00-08:00'	07:00	08:00	01:00	
18: '34RC 08:00-09:00'	08:00	09:00	01:00	
19: '34RC 15:00-16:00'	15:00	16:00	01:00	
20: '34RC 17:00-18:00'	17:00	18:00	01:00	
21: '34OP 06:00-07:00'	06:00	07:00	01:00	
22: '34OP 07:00-08:00'	07:00	08:00	01:00	
23: '34OP 08:00-09:00'	08:00	09:00	01:00	
24: '34OP 15:00-16:00'	15:00	16:00	01:00	
25: '34OP 17:00-18:00'	17:00	18:00	01:00	
36: 'Aldi 28PC 15:00-16:00'	15:00	16:00	01:00	
37: 'Aldi 28PC 17:00-18:00'	17:00	18:00	01:00	
38: 'Aldi 34RC 07:00-08:00'	07:00	08:00	01:00	
39: 'Aldi 34RC 08:00-09:00'	08:00	09:00	01:00	
40: 'Aldi 34RC 15:00-16:00'	15:00	16:00	01:00	
41: 'Aldi 34RC 17:00-18:00'	17:00	18:00	01:00	
42: 'Aldi 34OP 07:00-08:00'	07:00	08:00	01:00	
43: 'Aldi 34OP 08:00-09:00'	08:00	09:00	01:00	
44: 'Aldi 34OP 15:00-16:00'	15:00	16:00	01:00	
45: 'Aldi 34OP 17:00-18:00'	17:00	18:00	01:00	
46: 'New Base 06:00-07:00'	06:00	07:00	01:00	F2+F26
47: 'New Base 07:00-08:00'	07:00	08:00	01:00	F2+F26
48: 'New Base 08:00-09:00'	08:00	09:00	01:00	F3+F27
49: 'New Base 15:00-16:00'	15:00	16:00	01:00	F4+F28

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50: 'New Base 17:00-18:00'	17:00	18:00	01:00	F5+F29
76: '28RC 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F6+F56
77: '28RC 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F7+F57+F30
78: '28RC 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F8+F58+F31
79: '28RC 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F9+F59+F32
80: '28RC 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F10+F60+F33
81: '28PC 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F11+F61
82: '28PC 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F12+F62+F34
83: '28PC 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F13+F63+F35
84: '28PC 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F14+F64+F36
85: '28PC 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F15+F65+F37
86: '34RC 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F16+F66
87: '34RC 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F17+F67+F38
88: '34RC 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F18+F68+F39
89: '34RC 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F19+F69+F40
90: '34RC 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F20+F70+F41
91: '34OP 06:00-07:00 (Aldi+Growth)'	06:00	07:00	01:00	F21+F71
92: '34OP 07:00-08:00 (Aldi+Growth)'	07:00	08:00	01:00	F22+F72+F42
93: '34OP 08:00-09:00 (Aldi+Growth)'	08:00	09:00	01:00	F23+F73+F43
94: '34OP 15:00-16:00 (Aldi+Growth)'	15:00	16:00	01:00	F24+F74+F44
95: '34OP 17:00-18:00 (Aldi+Growth)'	17:00	18:00	01:00	F25+F75+F45

Scenario 1: 'Base 06:00-07:00' (FG1: 'Base 06:00-07:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	2	808	15	23	848
	B	15	0	18	15	22	70
	C	616	11	36	61	82	806

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	D	0	3	19	0	6	28
	E	0	3	22	47	0	72
	Tot.	631	19	903	138	133	1824

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Base 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	397
J1:1/2	449
J1:1/3	2
J1:2/1 (with short)	47(In) 47(Out)
J1:2/2 (short)	0
J1:3/1 (short)	353
J1:3/2 (with short)	709(In) 356(Out)
J1:3/3	97
J1:4/1 (short)	15
J1:4/2 (with short)	70(In) 55(Out)
J1:5/1	357
J1:5/2	274
J1:6/1	392
J1:6/2	511
J1:7/1	19
J1:8/1	116
J1:8/2	118
J1:9/1	371
J1:9/2	491
J1:9/3	2
J1:10/1	8
J1:10/2	0
J1:11/1	342
J1:11/2	356
J1:11/3	97
J1:12/1	127
J1:12/2	91
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	72
J2:2/1 (with short)	28(In) 22(Out)
J2:2/2 (short)	6
J2:3/1	133
J2:4/1	138
J2:5/1	47
J2:6/1	127
J2:6/2	91

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.4 %	1840	1840
				Arm J1:12 Left	Inf	9.6 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	87.2 %	1994	1994
				Arm J1:10 Ahead	27.00	12.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	0.0 %	1965	1965
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.1 %	1828	1828
				Arm J1:11 Ahead	20.00	96.9 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	10.3 %	1764	1764
				Arm J1:12 Ahead	15.00	89.7 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.6 %	1764	1764
				Arm J1:12 Ahead	15.00	64.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	0.0 %	1940	1940

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'Base 07:00-08:00' (FG47: 'New Base 07:00-08:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	3	1370	18	22	1413
	B	45	0	30	50	53	178
	C	1301	29	84	219	232	1865
	D	3	1	19	0	5	28
	E	17	11	143	41	0	212
	Tot.	1366	44	1646	328	312	3696

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Traffic Lane Flows

Lane	Scenario 2: Base 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	675
J1:1/2	735
J1:1/3	3
J1:2/1 (with short)	194(In) 176(Out)
J1:2/2 (short)	18
J1:3/1 (short)	781
J1:3/2 (with short)	1562(In) 781(Out)
J1:3/3	303
J1:4/1 (short)	45
J1:4/2 (with short)	178(In) 133(Out)
J1:5/1	798
J1:5/2	568
J1:6/1	747
J1:6/2	899
J1:7/1	44
J1:8/1	315
J1:8/2	353
J1:9/1	665
J1:9/2	819
J1:9/3	3
J1:10/1	17
J1:10/2	18
J1:11/1	753
J1:11/2	800
J1:11/3	303
J1:12/1	307
J1:12/2	287
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	212
J2:2/1 (with short)	28(In) 23(Out)
J2:2/2 (short)	5
J2:3/1	312
J2:4/1	328
J2:5/1	194
J2:6/1	307
J2:6/2	287

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	94.1 %	1835	1835
				Arm J1:12 Left	Inf	5.9 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	92.0 %	1994	1994
				Arm J1:10 Ahead	27.00	8.0 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.7 %	1828	1828
				Arm J1:11 Ahead	20.00	96.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	9.5 %	1764	1764
				Arm J1:12 Ahead	15.00	90.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	23.8 %	1764	1764
				Arm J1:12 Ahead	15.00	76.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	88.2 %	1764	1764
				Arm J1:11 Right	15.00	11.8 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'Base 08:00-09:00' (FG48: 'New Base 08:00-09:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	18	1432	24	26	1500
	B	52	0	25	79	41	197
	C	1563	67	108	429	270	2437
	D	4	1	54	0	9	68
	E	24	16	280	67	0	387
	Tot.	1643	102	1899	599	346	4589

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Traffic Lane Flows

Lane	Scenario 3: Base 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	716
J1:1/2	766
J1:1/3	18
J1:2/1 (with short)	379(In) 351(Out)
J1:2/2 (short)	28
J1:3/1 (short)	950
J1:3/2 (with short)	1900(In) 950(Out)
J1:3/3	537
J1:4/1 (short)	52
J1:4/2 (with short)	197(In) 145(Out)
J1:5/1	935
J1:5/2	708
J1:6/1	858
J1:6/2	1041
J1:7/1	102
J1:8/1	336
J1:8/2	616
J1:9/1	691
J1:9/2	874
J1:9/3	18
J1:10/1	35
J1:10/2	28
J1:11/1	883
J1:11/2	978
J1:11/3	537
J1:12/1	337
J1:12/2	532
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	387
J2:2/1 (with short)	68(In) 59(Out)
J2:2/2 (short)	9
J2:3/1	346
J2:4/1	599
J2:5/1	379
J2:6/1	337
J2:6/2	532

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	93.0 %	1837	1837
				Arm J1:12 Left	Inf	7.0 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	95.2 %	1994	1994
				Arm J1:10 Ahead	27.00	4.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	7.1 %	1828	1828
				Arm J1:11 Ahead	20.00	92.9 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	7.4 %	1764	1764
				Arm J1:12 Ahead	15.00	92.6 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.5 %	1764	1764
				Arm J1:12 Ahead	15.00	82.5 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'Base 15:00-16:00' (FG49: 'New Base 15:00-16:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	48	1365	0	44	1457
	B	56	0	31	7	81	175
	C	1481	92	54	30	265	1922
	D	41	13	197	0	46	297
	E	77	18	265	17	0	377
	Tot.	1655	171	1912	54	436	4228

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: Base 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	674
J1:1/2	735
J1:1/3	48
J1:2/1 (with short)	611(In) 493(Out)
J1:2/2 (short)	118
J1:3/1 (short)	919
J1:3/2 (with short)	1838(In) 919(Out)
J1:3/3	84
J1:4/1 (short)	56
J1:4/2 (with short)	175(In) 119(Out)
J1:5/1	883
J1:5/2	772
J1:6/1	862
J1:6/2	1050
J1:7/1	171
J1:8/1	346
J1:8/2	122
J1:9/1	630
J1:9/2	820
J1:9/3	48
J1:10/1	79
J1:10/2	118
J1:11/1	827
J1:11/2	1037
J1:11/3	84
J1:12/1	390
J1:12/2	37
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	377
J2:2/1 (with short)	297(In) 251(Out)
J2:2/2 (short)	46
J2:3/1	436
J2:4/1	54
J2:5/1	611
J2:6/1	390
J2:6/2	37

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	93.5 %	1836	1836
				Arm J1:12 Left	Inf	6.5 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	93.7 %	1994	1994
				Arm J1:10 Ahead	27.00	6.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.0 %	1828	1828
				Arm J1:11 Ahead	20.00	90.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	69.7 %	1764	1764
				Arm J1:12 Ahead	15.00	30.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'Base 17:00-18:00' (FG50: 'New Base 17:00-18:00', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	60	1362	1	48	1471
	B	40	0	33	5	62	140
	C	1435	130	53	22	213	1853
	D	40	24	225	0	34	323
	E	65	22	228	6	0	321
	Tot.	1580	236	1901	34	357	4108

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: Base 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	674
J1:1/2	737
J1:1/3	60
J1:2/1 (with short)	604(In) 499(Out)
J1:2/2 (short)	105
J1:3/1 (short)	889
J1:3/2 (with short)	1778(In) 889(Out)
J1:3/3	75
J1:4/1 (short)	40
J1:4/2 (with short)	140(In) 100(Out)
J1:5/1	799
J1:5/2	781
J1:6/1	852
J1:6/2	1049
J1:7/1	236
J1:8/1	275
J1:8/2	113
J1:9/1	625
J1:9/2	823
J1:9/3	60
J1:10/1	106
J1:10/2	105
J1:11/1	759
J1:11/2	994
J1:11/3	75
J1:12/1	323
J1:12/2	28
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	321
J2:2/1 (with short)	323(In) 289(Out)
J2:2/2 (short)	34
J2:3/1	357
J2:4/1	34
J2:5/1	604
J2:6/1	323
J2:6/2	28

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	92.7 %	1837	1837
				Arm J1:12 Left	Inf	7.3 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	90.8 %	1994	1994
				Arm J1:10 Ahead	27.00	9.2 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	14.6 %	1828	1828
				Arm J1:11 Ahead	20.00	85.4 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	76.1 %	1764	1764
				Arm J1:12 Ahead	15.00	23.9 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '28RC 06:00-07:00' (FG76: '28RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	867	18	25	912
	B	17	0	29	17	24	87
	C	680	12	39	70	90	891
	D	3	6	23	0	7	39
	E	0	3	24	51	0	78
	Tot.	700	23	982	156	146	2007

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 28RC 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	430
J1:1/2	480
J1:1/3	2
J1:2/1 (with short)	59(In) 56(Out)
J1:2/2 (short)	3
J1:3/1 (short)	390
J1:3/2 (with short)	782(In) 392(Out)
J1:3/3	109
J1:4/1 (short)	17
J1:4/2 (with short)	87(In) 70(Out)
J1:5/1	395
J1:5/2	305
J1:6/1	431
J1:6/2	551
J1:7/1	23
J1:8/1	134
J1:8/2	135
J1:9/1	407
J1:9/2	528
J1:9/3	2
J1:10/1	11
J1:10/2	3
J1:11/1	378
J1:11/2	395
J1:11/3	109
J1:12/1	139
J1:12/2	105
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	78
J2:2/1 (with short)	39(In) 32(Out)
J2:2/2 (short)	7
J2:3/1	146
J2:4/1	156
J2:5/1	59
J2:6/1	139
J2:6/2	105

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.0 %	1841	1841
				Arm J1:12 Left	Inf	10.0 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	83.9 %	1994	1994
				Arm J1:10 Ahead	27.00	16.1 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.1 %	1828	1828
				Arm J1:11 Ahead	20.00	96.9 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	14.9 %	1764	1764
				Arm J1:12 Ahead	15.00	85.1 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.6 %	1764	1764
				Arm J1:12 Ahead	15.00	64.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 7: '28RC 07:00-08:00' (FG77: '28RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1408	36	25	1473
	B	52	0	58	57	59	226
	C	1447	34	93	255	258	2087
	D	73	5	35	0	6	119
	E	20	12	159	46	0	237
	Tot.	1592	55	1753	394	348	4142

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 28RC 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	705
J1:1/2	764
J1:1/3	4
J1:2/1 (with short)	304(In) 247(Out)
J1:2/2 (short)	57
J1:3/1 (short)	869
J1:3/2 (with short)	1739(In) 870(Out)
J1:3/3	348
J1:4/1 (short)	52
J1:4/2 (with short)	226(In) 174(Out)
J1:5/1	905
J1:5/2	687
J1:6/1	800
J1:6/2	953
J1:7/1	55
J1:8/1	375
J1:8/2	405
J1:9/1	702
J1:9/2	857
J1:9/3	4
J1:10/1	57
J1:10/2	57
J1:11/1	853
J1:11/2	945
J1:11/3	348
J1:12/1	342
J1:12/2	348
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	237
J2:2/1 (with short)	119(In) 113(Out)
J2:2/2 (short)	6
J2:3/1	348
J2:4/1	394
J2:5/1	304
J2:6/1	342
J2:6/2	348

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	91.3 %	1839	1839
				Arm J1:12 Left	Inf	8.7 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	78.5 %	1994	1994
				Arm J1:10 Ahead	27.00	21.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.9 %	1828	1828
				Arm J1:11 Ahead	20.00	96.1 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.5 %	1764	1764
				Arm J1:12 Ahead	15.00	84.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	23.0 %	1764	1764
				Arm J1:12 Ahead	15.00	77.0 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	36.8 %	1764	1764
				Arm J1:11 Right	15.00	63.2 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '28RC 08:00-09:00' (FG78: '28RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1431	55	33	1541
	B	60	0	56	88	46	250
	C	1695	78	119	467	303	2662
	D	181	6	84	0	10	281
	E	28	18	313	74	0	433
	Tot.	1964	124	2003	684	392	5167

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 28RC 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	734
J1:1/2	785
J1:1/3	22
J1:2/1 (with short)	630(In) 501(Out)
J1:2/2 (short)	129
J1:3/1 (short)	1029
J1:3/2 (with short)	2076(In) 1047(Out)
J1:3/3	586
J1:4/1 (short)	60
J1:4/2 (with short)	250(In) 190(Out)
J1:5/1	1051
J1:5/2	913
J1:6/1	901
J1:6/2	1102
J1:7/1	124
J1:8/1	405
J1:8/2	674
J1:9/1	702
J1:9/2	904
J1:9/3	22
J1:10/1	126
J1:10/2	129
J1:11/1	991
J1:11/2	1216
J1:11/3	586
J1:12/1	382
J1:12/2	610
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	433
J2:2/1 (with short)	281(In) 271(Out)
J2:2/2 (short)	10
J2:3/1	392
J2:4/1	684
J2:5/1	630
J2:6/1	382
J2:6/2	610

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	88.0 %	1843	1843
				Arm J1:12 Left	Inf	12.0 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	79.2 %	1994	1994
				Arm J1:10 Ahead	27.00	20.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	7.6 %	1828	1828
				Arm J1:11 Ahead	20.00	92.4 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	13.8 %	1764	1764
				Arm J1:12 Ahead	15.00	86.2 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.7 %	1764	1764
				Arm J1:12 Ahead	15.00	82.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	36.5 %	1764	1764
				Arm J1:11 Right	15.00	63.5 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 9: '28RC 15:00-16:00' (FG79: '28RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	56	1388	101	55	1600
	B	66	0	50	14	88	218
	C	1616	108	58	53	296	2131
	D	115	19	217	0	50	401
	E	91	20	297	18	0	426
	Tot.	1888	203	2010	186	489	4776

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 28RC 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	747
J1:1/2	797
J1:1/3	56
J1:2/1 (with short)	759(In) 553(Out)
J1:2/2 (short)	206
J1:3/1 (short)	1005
J1:3/2 (with short)	2020(In) 1015(Out)
J1:3/3	111
J1:4/1 (short)	66
J1:4/2 (with short)	218(In) 152(Out)
J1:5/1	963
J1:5/2	925
J1:6/1	849
J1:6/2	1161
J1:7/1	203
J1:8/1	384
J1:8/2	175
J1:9/1	591
J1:9/2	905
J1:9/3	56
J1:10/1	95
J1:10/2	206
J1:11/1	897
J1:11/2	1221
J1:11/3	111
J1:12/1	439
J1:12/2	168
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	426
J2:2/1 (with short)	401(In) 351(Out)
J2:2/2 (short)	50
J2:3/1	489
J2:4/1	186
J2:5/1	759
J2:6/1	439
J2:6/2	168

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	79.1 %	1855	1855
				Arm J1:12 Left	Inf	20.9 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	92.9 %	1994	1994
				Arm J1:10 Ahead	27.00	7.1 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.7 %	1828	1828
				Arm J1:11 Ahead	20.00	89.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	61.7 %	1764	1764
				Arm J1:12 Ahead	15.00	38.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 10: '28RC 17:00-18:00' (FG80: '28RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	70	1424	88	59	1641
	B	47	0	51	9	67	174
	C	1510	152	58	43	239	2002
	D	126	34	244	0	37	441
	E	76	25	256	7	0	364
	Tot.	1759	281	2033	147	402	4622

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 28RC 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	760
J1:1/2	811
J1:1/3	70
J1:2/1 (with short)	761(In) 559(Out)
J1:2/2 (short)	202
J1:3/1 (short)	950
J1:3/2 (with short)	1901(In) 951(Out)
J1:3/3	101
J1:4/1 (short)	47
J1:4/2 (with short)	174(In) 127(Out)
J1:5/1	845
J1:5/2	914
J1:6/1	863
J1:6/2	1170
J1:7/1	281
J1:8/1	306
J1:8/2	161
J1:9/1	613
J1:9/2	920
J1:9/3	70
J1:10/1	129
J1:10/2	202
J1:11/1	798
J1:11/2	1153
J1:11/3	101
J1:12/1	365
J1:12/2	140
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	364
J2:2/1 (with short)	441(In) 404(Out)
J2:2/2 (short)	37
J2:3/1	402
J2:4/1	147
J2:5/1	761
J2:6/1	365
J2:6/2	140

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	80.7 %	1853	1853
				Arm J1:12 Left	Inf	19.3 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	89.4 %	1994	1994
				Arm J1:10 Ahead	27.00	10.6 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	16.0 %	1828	1828
				Arm J1:11 Ahead	20.00	84.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	67.7 %	1764	1764
				Arm J1:12 Ahead	15.00	32.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 11: '28PC 06:00-07:00' (FG81: '28PC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	871	21	27	921
	B	17	0	32	18	26	93
	C	829	13	43	81	98	1064
	D	3	6	27	0	7	43
	E	0	4	26	56	0	86
	Tot.	849	25	999	176	158	2207

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 28PC 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	434
J1:1/2	485
J1:1/3	2
J1:2/1 (with short)	66(In) 63(Out)
J1:2/2 (short)	3
J1:3/1 (short)	470
J1:3/2 (with short)	940(In) 470(Out)
J1:3/3	124
J1:4/1 (short)	17
J1:4/2 (with short)	93(In) 76(Out)
J1:5/1	474
J1:5/2	375
J1:6/1	437
J1:6/2	562
J1:7/1	25
J1:8/1	148
J1:8/2	150
J1:9/1	410
J1:9/2	536
J1:9/3	2
J1:10/1	12
J1:10/2	3
J1:11/1	457
J1:11/2	473
J1:11/3	124
J1:12/1	151
J1:12/2	120
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	86
J2:2/1 (with short)	43(In) 36(Out)
J2:2/2 (short)	7
J2:3/1	158
J2:4/1	176
J2:5/1	66
J2:6/1	151
J2:6/2	120

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	88.9 %	1842	1842
				Arm J1:12 Left	Inf	11.1 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	84.1 %	1994	1994
				Arm J1:10 Ahead	27.00	15.9 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	2.8 %	1828	1828
				Arm J1:11 Ahead	20.00	97.2 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	16.2 %	1764	1764
				Arm J1:12 Ahead	15.00	83.8 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	34.0 %	1764	1764
				Arm J1:12 Ahead	15.00	66.0 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 12: '28PC 07:00-08:00' (FG82: '28PC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1385	37	26	1452
	B	52	0	61	58	61	232
	C	1560	34	97	270	268	2229
	D	74	5	42	0	6	127
	E	21	13	165	47	0	246
	Tot.	1707	56	1750	412	361	4286

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 28PC 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	695
J1:1/2	753
J1:1/3	4
J1:2/1 (with short)	320(In) 261(Out)
J1:2/2 (short)	59
J1:3/1 (short)	931
J1:3/2 (with short)	1862(In) 931(Out)
J1:3/3	367
J1:4/1 (short)	52
J1:4/2 (with short)	232(In) 180(Out)
J1:5/1	967
J1:5/2	740
J1:6/1	797
J1:6/2	953
J1:7/1	56
J1:8/1	390
J1:8/2	425
J1:9/1	693
J1:9/2	850
J1:9/3	4
J1:10/1	58
J1:10/2	59
J1:11/1	915
J1:11/2	1008
J1:11/3	367
J1:12/1	355
J1:12/2	365
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	246
J2:2/1 (with short)	127(In) 121(Out)
J2:2/2 (short)	6
J2:3/1	361
J2:4/1	412
J2:5/1	320
J2:6/1	355
J2:6/2	365

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.9 %	1840	1840
				Arm J1:12 Left	Inf	9.1 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	79.3 %	1994	1994
				Arm J1:10 Ahead	27.00	20.7 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.7 %	1828	1828
				Arm J1:11 Ahead	20.00	96.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.6 %	1764	1764
				Arm J1:12 Ahead	15.00	84.4 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	22.8 %	1764	1764
				Arm J1:12 Ahead	15.00	77.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	37.9 %	1764	1764
				Arm J1:11 Right	15.00	62.1 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 13: '28PC 08:00-09:00' (FG83: '28PC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1421	56	33	1532
	B	60	0	59	90	47	256
	C	1688	78	122	475	309	2672
	D	166	6	90	0	10	272
	E	29	18	318	76	0	441
	Tot.	1943	124	2010	697	399	5173

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 28PC 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	730
J1:1/2	780
J1:1/3	22
J1:2/1 (with short)	627(In) 542(Out)
J1:2/2 (short)	85
J1:3/1 (short)	1035
J1:3/2 (with short)	2075(In) 1040(Out)
J1:3/3	597
J1:4/1 (short)	60
J1:4/2 (with short)	256(In) 196(Out)
J1:5/1	1072
J1:5/2	871
J1:6/1	904
J1:6/2	1106
J1:7/1	124
J1:8/1	415
J1:8/2	687
J1:9/1	700
J1:9/2	902
J1:9/3	22
J1:10/1	156
J1:10/2	85
J1:11/1	1012
J1:11/2	1180
J1:11/3	597
J1:12/1	389
J1:12/2	621
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	441
J2:2/1 (with short)	272(In) 262(Out)
J2:2/2 (short)	10
J2:3/1	399
J2:4/1	697
J2:5/1	627
J2:6/1	389
J2:6/2	621

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	87.8 %	1844	1844
				Arm J1:12 Left	Inf	12.2 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	75.3 %	1994	1994
				Arm J1:10 Ahead	27.00	24.7 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	7.5 %	1828	1828
				Arm J1:11 Ahead	20.00	92.5 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	14.2 %	1764	1764
				Arm J1:12 Ahead	15.00	85.8 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.8 %	1764	1764
				Arm J1:12 Ahead	15.00	82.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	29.5 %	1764	1764
				Arm J1:11 Right	15.00	70.5 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 14: '28PC 15:00-16:00' (FG84: '28PC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	56	1363	99	58	1576
	B	66	0	52	15	91	224
	C	1597	108	60	61	304	2130
	D	116	20	224	0	51	411
	E	94	21	305	19	0	439
	Tot.	1873	205	2004	194	504	4780

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 28PC 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	735
J1:1/2	785
J1:1/3	56
J1:2/1 (with short)	780(In) 570(Out)
J1:2/2 (short)	210
J1:3/1 (short)	1000
J1:3/2 (with short)	2009(In) 1009(Out)
J1:3/3	121
J1:4/1 (short)	66
J1:4/2 (with short)	224(In) 158(Out)
J1:5/1	958
J1:5/2	915
J1:6/1	843
J1:6/2	1161
J1:7/1	205
J1:8/1	395
J1:8/2	188
J1:9/1	578
J1:9/2	897
J1:9/3	56
J1:10/1	97
J1:10/2	210
J1:11/1	892
J1:11/2	1219
J1:11/3	121
J1:12/1	453
J1:12/2	175
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	439
J2:2/1 (with short)	411(In) 360(Out)
J2:2/2 (short)	51
J2:3/1	504
J2:4/1	194
J2:5/1	780
J2:6/1	453
J2:6/2	175

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	78.6 %	1856	1856
				Arm J1:12 Left	Inf	21.4 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	92.8 %	1994	1994
				Arm J1:10 Ahead	27.00	7.2 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.8 %	1828	1828
				Arm J1:11 Ahead	20.00	89.2 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	59.6 %	1764	1764
				Arm J1:12 Ahead	15.00	40.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 15: '28PC 17:00-18:00' (FG85: '28PC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	70	1370	86	59	1585
	B	47	0	51	9	67	174
	C	1510	152	57	42	240	2001
	D	126	34	243	0	37	440
	E	77	25	256	7	0	365
	Tot.	1760	281	1977	144	403	4565

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 15: 28PC 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	732
J1:1/2	783
J1:1/3	70
J1:2/1 (with short)	761(In) 558(Out)
J1:2/2 (short)	203
J1:3/1 (short)	951
J1:3/2 (with short)	1902(In) 951(Out)
J1:3/3	99
J1:4/1 (short)	47
J1:4/2 (with short)	174(In) 127(Out)
J1:5/1	846
J1:5/2	914
J1:6/1	837
J1:6/2	1140
J1:7/1	281
J1:8/1	307
J1:8/2	159
J1:9/1	587
J1:9/2	891
J1:9/3	70
J1:10/1	129
J1:10/2	203
J1:11/1	799
J1:11/2	1154
J1:11/3	99
J1:12/1	366
J1:12/2	137
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	365
J2:2/1 (with short)	440(In) 403(Out)
J2:2/2 (short)	37
J2:3/1	403
J2:4/1	144
J2:5/1	761
J2:6/1	366
J2:6/2	137

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	80.2 %	1854	1854
				Arm J1:12 Left	Inf	19.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	89.4 %	1994	1994
				Arm J1:10 Ahead	27.00	10.6 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	16.0 %	1828	1828
				Arm J1:11 Ahead	20.00	84.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	67.9 %	1764	1764
				Arm J1:12 Ahead	15.00	32.1 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 16: '34RC 06:00-07:00' (FG86: '34RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	893	19	26	940
	B	18	0	32	17	25	92
	C	754	13	41	76	94	978
	D	3	6	25	0	7	41
	E	0	3	25	54	0	82
	Tot.	775	24	1016	166	152	2133

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 16: 34RC 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	443
J1:1/2	495
J1:1/3	2
J1:2/1 (with short)	62(In) 59(Out)
J1:2/2 (short)	3
J1:3/1 (short)	430
J1:3/2 (with short)	861(In) 431(Out)
J1:3/3	117
J1:4/1 (short)	18
J1:4/2 (with short)	92(In) 74(Out)
J1:5/1	435
J1:5/2	340
J1:6/1	446
J1:6/2	570
J1:7/1	24
J1:8/1	141
J1:8/2	144
J1:9/1	420
J1:9/2	546
J1:9/3	2
J1:10/1	11
J1:10/2	3
J1:11/1	417
J1:11/2	434
J1:11/3	117
J1:12/1	145
J1:12/2	112
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	82
J2:2/1 (with short)	41(In) 34(Out)
J2:2/2 (short)	7
J2:3/1	152
J2:4/1	166
J2:5/1	62
J2:6/1	145
J2:6/2	112

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	89.8 %	1841	1841
				Arm J1:12 Left	Inf	10.2 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	84.7 %	1994	1994
				Arm J1:10 Ahead	27.00	15.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.0 %	1828	1828
				Arm J1:11 Ahead	20.00	97.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.6 %	1764	1764
				Arm J1:12 Ahead	15.00	84.4 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.4 %	1764	1764
				Arm J1:12 Ahead	15.00	64.6 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 17: '34RC 07:00-08:00' (FG87: '34RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1454	41	26	1525
	B	54	0	66	60	62	242
	C	1570	35	98	274	271	2248
	D	128	5	44	0	6	183
	E	21	13	167	48	0	249
	Tot.	1773	57	1829	423	365	4447

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 17: 34RC 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	731
J1:1/2	790
J1:1/3	4
J1:2/1 (with short)	378(In) 291(Out)
J1:2/2 (short)	87
J1:3/1 (short)	938
J1:3/2 (with short)	1876(In) 938(Out)
J1:3/3	372
J1:4/1 (short)	54
J1:4/2 (with short)	242(In) 188(Out)
J1:5/1	988
J1:5/2	785
J1:6/1	836
J1:6/2	993
J1:7/1	57
J1:8/1	399
J1:8/2	432
J1:9/1	730
J1:9/2	888
J1:9/3	4
J1:10/1	84
J1:10/2	87
J1:11/1	934
J1:11/2	1056
J1:11/3	372
J1:12/1	359
J1:12/2	375
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	249
J2:2/1 (with short)	183(In) 177(Out)
J2:2/2 (short)	6
J2:3/1	365
J2:4/1	423
J2:5/1	378
J2:6/1	359
J2:6/2	375

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	90.8 %	1840	1840
				Arm J1:12 Left	Inf	9.2 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	72.5 %	1994	1994
				Arm J1:10 Ahead	27.00	27.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.7 %	1828	1828
				Arm J1:11 Ahead	20.00	96.3 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	16.5 %	1764	1764
				Arm J1:12 Ahead	15.00	83.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	22.7 %	1764	1764
				Arm J1:12 Ahead	15.00	77.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	26.2 %	1764	1764
				Arm J1:11 Right	15.00	73.8 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 18: '34RC 08:00-09:00' (FG88: '34RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1388	63	35	1508
	B	63	0	67	93	49	272
	C	1679	81	126	488	320	2694
	D	290	8	101	0	11	410
	E	30	19	330	78	0	457
	Tot.	2062	130	2012	722	415	5341

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 18: 34RC 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	718
J1:1/2	768
J1:1/3	22
J1:2/1 (with short)	778(In) 741(Out)
J1:2/2 (short)	37
J1:3/1 (short)	1039
J1:3/2 (with short)	2080(In) 1041(Out)
J1:3/3	614
J1:4/1 (short)	63
J1:4/2 (with short)	272(In) 209(Out)
J1:5/1	1162
J1:5/2	900
J1:6/1	903
J1:6/2	1109
J1:7/1	130
J1:8/1	436
J1:8/2	707
J1:9/1	687
J1:9/2	894
J1:9/3	22
J1:10/1	332
J1:10/2	37
J1:11/1	1099
J1:11/2	1220
J1:11/3	614
J1:12/1	404
J1:12/2	644
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	457
J2:2/1 (with short)	410(In) 399(Out)
J2:2/2 (short)	11
J2:3/1	415
J2:4/1	722
J2:5/1	778
J2:6/1	404
J2:6/2	644

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	86.4 %	1845	1845
				Arm J1:12 Left	Inf	13.6 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	58.2 %	1994	1994
				Arm J1:10 Ahead	27.00	41.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	7.8 %	1828	1828
				Arm J1:11 Ahead	20.00	92.2 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.4 %	1764	1764
				Arm J1:12 Ahead	15.00	84.6 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.8 %	1764	1764
				Arm J1:12 Ahead	15.00	82.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	14.8 %	1764	1764
				Arm J1:11 Right	15.00	85.2 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 19: '34RC 15:00-16:00' (FG89: '34RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	58	1473	178	62	1771
	B	68	0	60	19	98	245
	C	1780	112	65	85	327	2369
	D	170	22	244	0	55	491
	E	101	23	328	20	0	472
	Tot.	2119	215	2170	302	542	5348

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 19: 34RC 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	832
J1:1/2	881
J1:1/3	58
J1:2/1 (with short)	888(In) 671(Out)
J1:2/2 (short)	217
J1:3/1 (short)	1082
J1:3/2 (with short)	2219(In) 1137(Out)
J1:3/3	150
J1:4/1 (short)	68
J1:4/2 (with short)	245(In) 177(Out)
J1:5/1	1065
J1:5/2	1054
J1:6/1	878
J1:6/2	1292
J1:7/1	215
J1:8/1	425
J1:8/2	229
J1:9/1	592
J1:9/2	1006
J1:9/3	58
J1:10/1	157
J1:10/2	217
J1:11/1	997
J1:11/2	1381
J1:11/3	150
J1:12/1	487
J1:12/2	282
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	472
J2:2/1 (with short)	491(In) 436(Out)
J2:2/2 (short)	55
J2:3/1	542
J2:4/1	302
J2:5/1	888
J2:6/1	487
J2:6/2	282

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	71.2 %	1865	1865
				Arm J1:12 Left	Inf	28.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	85.2 %	1994	1994
				Arm J1:10 Ahead	27.00	14.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.4 %	1828	1828
				Arm J1:11 Ahead	20.00	89.6 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	54.6 %	1764	1764
				Arm J1:12 Ahead	15.00	45.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	65.6 %	1764	1764
				Arm J1:11 Right	15.00	34.4 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 20: '34RC 17:00-18:00' (FG90: '34RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	73	1407	145	64	1689
	B	49	0	59	10	72	190
	C	1641	158	62	63	259	2183
	D	182	38	261	0	40	521
	E	83	26	277	7	0	393
	Tot.	1955	295	2066	225	435	4976

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 20: 34RC 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	784
J1:1/2	832
J1:1/3	73
J1:2/1 (with short)	867(In) 610(Out)
J1:2/2 (short)	257
J1:3/1 (short)	1027
J1:3/2 (with short)	2058(In) 1031(Out)
J1:3/3	125
J1:4/1 (short)	49
J1:4/2 (with short)	190(In) 141(Out)
J1:5/1	922
J1:5/2	1033
J1:6/1	845
J1:6/2	1221
J1:7/1	295
J1:8/1	331
J1:8/2	194
J1:9/1	575
J1:9/2	953
J1:9/3	73
J1:10/1	145
J1:10/2	257
J1:11/1	873
J1:11/2	1292
J1:11/3	125
J1:12/1	395
J1:12/2	218
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	393
J2:2/1 (with short)	521(In) 481(Out)
J2:2/2 (short)	40
J2:3/1	435
J2:4/1	225
J2:5/1	867
J2:6/1	395
J2:6/2	218

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	73.3 %	1863	1863
				Arm J1:12 Left	Inf	26.7 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	88.2 %	1994	1994
				Arm J1:10 Ahead	27.00	11.8 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	15.4 %	1828	1828
				Arm J1:11 Ahead	20.00	84.6 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	62.4 %	1764	1764
				Arm J1:12 Ahead	15.00	37.6 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	94.5 %	1764	1764
				Arm J1:11 Right	15.00	5.5 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 21: '34OP 06:00-07:00' (FG91: '34OP 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	2	894	19	26	941
	B	18	0	32	17	25	92
	C	755	13	41	76	94	979
	D	3	6	25	0	7	41
	E	0	3	25	54	0	82
	Tot.	776	24	1017	166	152	2135

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 21: 34OP 06:00-07:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	444
J1:1/2	495
J1:1/3	2
J1:2/1 (with short)	62(In) 59(Out)
J1:2/2 (short)	3
J1:3/1 (short)	430
J1:3/2 (with short)	862(In) 432(Out)
J1:3/3	117
J1:4/1 (short)	18
J1:4/2 (with short)	92(In) 74(Out)
J1:5/1	435
J1:5/2	341
J1:6/1	447
J1:6/2	570
J1:7/1	24
J1:8/1	141
J1:8/2	144
J1:9/1	421
J1:9/2	546
J1:9/3	2
J1:10/1	11
J1:10/2	3
J1:11/1	417
J1:11/2	435
J1:11/3	117
J1:12/1	145
J1:12/2	112
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	82
J2:2/1 (with short)	41(In) 34(Out)
J2:2/2 (short)	7
J2:3/1	152
J2:4/1	166
J2:5/1	62
J2:6/1	145
J2:6/2	112

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	89.9 %	1841	1841
				Arm J1:12 Left	Inf	10.1 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	84.7 %	1994	1994
				Arm J1:10 Ahead	27.00	15.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.0 %	1828	1828
				Arm J1:11 Ahead	20.00	97.0 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.6 %	1764	1764
				Arm J1:12 Ahead	15.00	84.4 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	35.4 %	1764	1764
				Arm J1:12 Ahead	15.00	64.6 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	100.0 %	1764	1764
				Arm J1:11 Right	15.00	0.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 22: '34OP 07:00-08:00' (FG92: '34OP 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	4	1475	41	26	1546
	B	54	0	66	60	62	242
	C	1560	35	98	274	271	2238
	D	128	5	44	0	6	183
	E	21	13	167	48	0	249
	Tot.	1763	57	1850	423	365	4458

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 22: 34OP 07:00-08:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	741
J1:1/2	801
J1:1/3	4
J1:2/1 (with short)	378(In) 291(Out)
J1:2/2 (short)	87
J1:3/1 (short)	933
J1:3/2 (with short)	1866(In) 933(Out)
J1:3/3	372
J1:4/1 (short)	54
J1:4/2 (with short)	242(In) 188(Out)
J1:5/1	983
J1:5/2	780
J1:6/1	846
J1:6/2	1004
J1:7/1	57
J1:8/1	399
J1:8/2	432
J1:9/1	740
J1:9/2	899
J1:9/3	4
J1:10/1	84
J1:10/2	87
J1:11/1	929
J1:11/2	1051
J1:11/3	372
J1:12/1	359
J1:12/2	375
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	249
J2:2/1 (with short)	183(In) 177(Out)
J2:2/2 (short)	6
J2:3/1	365
J2:4/1	423
J2:5/1	378
J2:6/1	359
J2:6/2	375

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	91.0 %	1840	1840
				Arm J1:12 Left	Inf	9.0 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	72.5 %	1994	1994
				Arm J1:10 Ahead	27.00	27.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	3.8 %	1828	1828
				Arm J1:11 Ahead	20.00	96.2 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	16.5 %	1764	1764
				Arm J1:12 Ahead	15.00	83.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	22.7 %	1764	1764
				Arm J1:12 Ahead	15.00	77.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	26.2 %	1764	1764
				Arm J1:11 Right	15.00	73.8 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 23: '34OP 08:00-09:00' (FG93: '34OP 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	22	1436	65	35	1558
	B	63	0	68	93	49	273
	C	1734	81	126	490	321	2752
	D	290	8	102	0	11	411
	E	30	19	331	78	0	458
	Tot.	2117	130	2063	726	416	5452

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 23: 34OP 08:00-09:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	743
J1:1/2	793
J1:1/3	22
J1:2/1 (with short)	780(In) 738(Out)
J1:2/2 (short)	42
J1:3/1 (short)	1068
J1:3/2 (with short)	2136(In) 1068(Out)
J1:3/3	616
J1:4/1 (short)	63
J1:4/2 (with short)	273(In) 210(Out)
J1:5/1	1189
J1:5/2	928
J1:6/1	928
J1:6/2	1135
J1:7/1	130
J1:8/1	438
J1:8/2	709
J1:9/1	711
J1:9/2	919
J1:9/3	22
J1:10/1	327
J1:10/2	42
J1:11/1	1126
J1:11/2	1249
J1:11/3	616
J1:12/1	405
J1:12/2	648
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	458
J2:2/1 (with short)	411(In) 400(Out)
J2:2/2 (short)	11
J2:3/1	416
J2:4/1	726
J2:5/1	780
J2:6/1	405
J2:6/2	648

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	86.5 %	1845	1845
				Arm J1:12 Left	Inf	13.5 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	58.7 %	1994	1994
				Arm J1:10 Ahead	27.00	41.3 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	7.6 %	1828	1828
				Arm J1:11 Ahead	20.00	92.4 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	15.5 %	1764	1764
				Arm J1:12 Ahead	15.00	84.5 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	17.8 %	1764	1764
				Arm J1:12 Ahead	15.00	82.2 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	15.0 %	1764	1764
				Arm J1:11 Right	15.00	85.0 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 24: '34OP 15:00-16:00' (FG94: '34OP 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	58	1477	180	61	1776
	B	68	0	60	19	97	244
	C	1782	112	64	84	326	2368
	D	169	22	243	0	55	489
	E	101	23	327	20	0	471
	Tot.	2120	215	2171	303	539	5348

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 24: 34OP 15:00-16:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	836
J1:1/2	882
J1:1/3	58
J1:2/1 (with short)	885(In) 671(Out)
J1:2/2 (short)	214
J1:3/1 (short)	1081
J1:3/2 (with short)	2220(In) 1139(Out)
J1:3/3	148
J1:4/1 (short)	68
J1:4/2 (with short)	244(In) 176(Out)
J1:5/1	1065
J1:5/2	1055
J1:6/1	881
J1:6/2	1290
J1:7/1	215
J1:8/1	423
J1:8/2	227
J1:9/1	595
J1:9/2	1006
J1:9/3	58
J1:10/1	159
J1:10/2	214
J1:11/1	997
J1:11/2	1381
J1:11/3	148
J1:12/1	484
J1:12/2	283
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	471
J2:2/1 (with short)	489(In) 434(Out)
J2:2/2 (short)	55
J2:3/1	539
J2:4/1	303
J2:5/1	885
J2:6/1	484
J2:6/2	283

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	71.2 %	1865	1865
				Arm J1:12 Left	Inf	28.8 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	84.9 %	1994	1994
				Arm J1:10 Ahead	27.00	15.1 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	10.4 %	1828	1828
				Arm J1:11 Ahead	20.00	89.6 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	54.6 %	1764	1764
				Arm J1:12 Ahead	15.00	45.4 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	64.8 %	1764	1764
				Arm J1:11 Right	15.00	35.2 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 25: '34OP 17:00-18:00' (FG95: '34OP 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	73	1410	145	64	1692
	B	49	0	59	10	72	190
	C	1608	158	62	62	259	2149
	D	182	38	260	0	40	520
	E	83	26	277	7	0	393
	Tot.	1922	295	2068	224	435	4944

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 25: 34OP 17:00-18:00
Junction: J1: A12 / Eagle Way / Barrack Square	
J1:1/1	789
J1:1/2	830
J1:1/3	73
J1:2/1 (with short)	866(In) 607(Out)
J1:2/2 (short)	259
J1:3/1 (short)	1012
J1:3/2 (with short)	2025(In) 1013(Out)
J1:3/3	124
J1:4/1 (short)	49
J1:4/2 (with short)	190(In) 141(Out)
J1:5/1	906
J1:5/2	1016
J1:6/1	849
J1:6/2	1219
J1:7/1	295
J1:8/1	331
J1:8/2	193
J1:9/1	580
J1:9/2	951
J1:9/3	73
J1:10/1	143
J1:10/2	259
J1:11/1	857
J1:11/2	1275
J1:11/3	124
J1:12/1	395
J1:12/2	217
Junction: J2: Barrack Square / Gloster Road	
J2:1/1	393
J2:2/1 (with short)	520(In) 480(Out)
J2:2/2 (short)	40
J2:3/1	435
J2:4/1	224
J2:5/1	866
J2:6/1	395
J2:6/2	217

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A12 / Eagle Way / Barrack Square

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	73.5 %	1862	1862
				Arm J1:12 Left	Inf	26.5 %		
J1:1/2 (A12 (North))	3.50	0.00	N	Arm J1:9 Ahead	20.00	100.0 %	1958	1958
J1:1/3 (A12 (North))	3.50	0.00	Y	Arm J1:9 Ahead	20.00	100.0 %	1828	1828
J1:2/1 (Barrack Square)	3.50	0.00	N	Arm J1:6 Left	27.00	88.5 %	1994	1994
				Arm J1:10 Ahead	27.00	11.5 %		
J1:2/2 (Barrack Square)	3.50	0.00	Y	Arm J1:10 Ahead	27.00	100.0 %	1862	1862
J1:3/1 (A12 (South))	3.50	0.00	Y	Arm J1:7 Left	20.00	15.6 %	1828	1828
				Arm J1:11 Ahead	20.00	84.4 %		
J1:3/2 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:3/3 (A12 (South))	3.50	0.00	Y	Arm J1:11 Ahead	20.00	100.0 %	1828	1828
J1:4/1 (Eagle Way)	3.25	0.00	Y	Arm J1:5 Left	23.00	100.0 %	1821	1821
J1:4/2 (Eagle Way Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:5/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:5/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A12 - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A12 - Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Eagle Way - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1	3.25	0.00	Y	Arm J1:9 Right	15.00	0.0 %	1764	1764
				Arm J1:12 Ahead	15.00	100.0 %		
J1:8/2	3.25	0.00	Y	Arm J1:9 Right	15.00	62.7 %	1764	1764
				Arm J1:12 Ahead	15.00	37.3 %		
J1:9/1	Infinite Saturation Flow						Inf	Inf
J1:9/2	Infinite Saturation Flow						Inf	Inf
J1:9/3	Infinite Saturation Flow						Inf	Inf
J1:10/1	3.25	0.00	Y	Arm J1:7 Ahead	15.00	95.8 %	1764	1764
				Arm J1:11 Right	15.00	4.2 %		
J1:10/2	3.25	0.00	Y	Arm J1:11 Right	15.00	100.0 %	1764	1764

J1:11/1	Infinite Saturation Flow	Inf	Inf
J1:11/2	Infinite Saturation Flow	Inf	Inf
J1:11/3	Infinite Saturation Flow	Inf	Inf
J1:12/1 (Barrack Square North Lane 1)	Infinite Saturation Flow	Inf	Inf
J1:12/2 (Barrack Square North Lane 2)	Infinite Saturation Flow	Inf	Inf

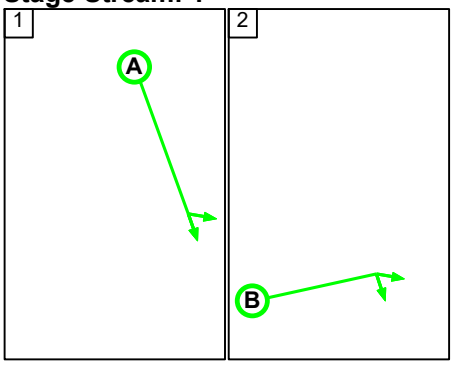
Junction: J2: Barrack Square / Gloster Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J2:1/1 (Gloster Road Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:2/1 (Barrack Square South Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/2 (Barrack Square South Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (Gloster Road - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:4/1 (Barrack Square - Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/1 (Barrack Square Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (Barrack Square North Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (Barrack Square North Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Base 06:00-07:00' (FG1: 'Base 06:00-07:00', Plan 1: 'Network Control Plan 1')

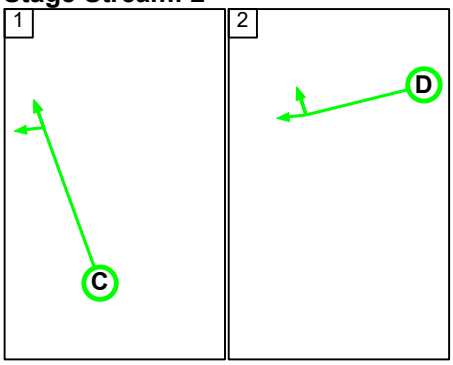
Stage Sequence Diagram

Stage Stream: 1



Full Input Data And Results

Stage Stream: 2



Stage Timings

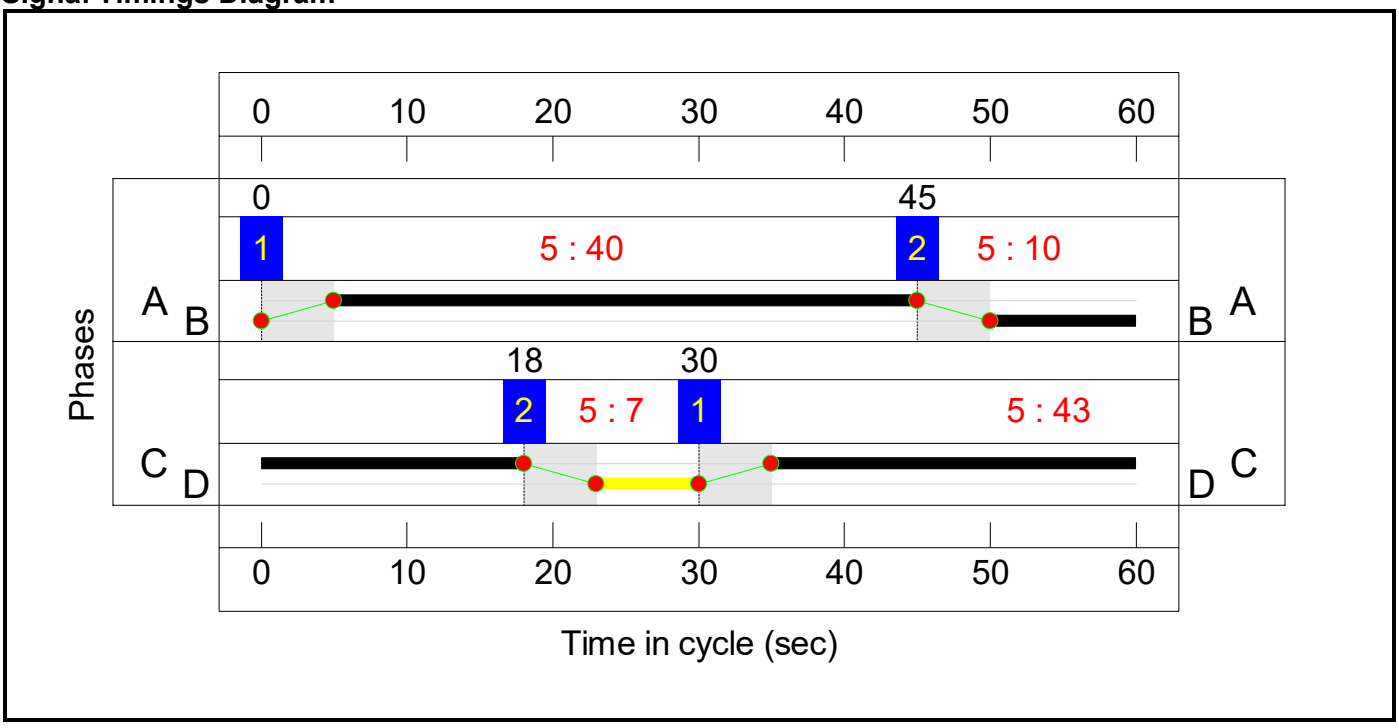
Stage Stream: 1

Stage	1	2
Duration	40	10
Change Point	0	45

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	30	18

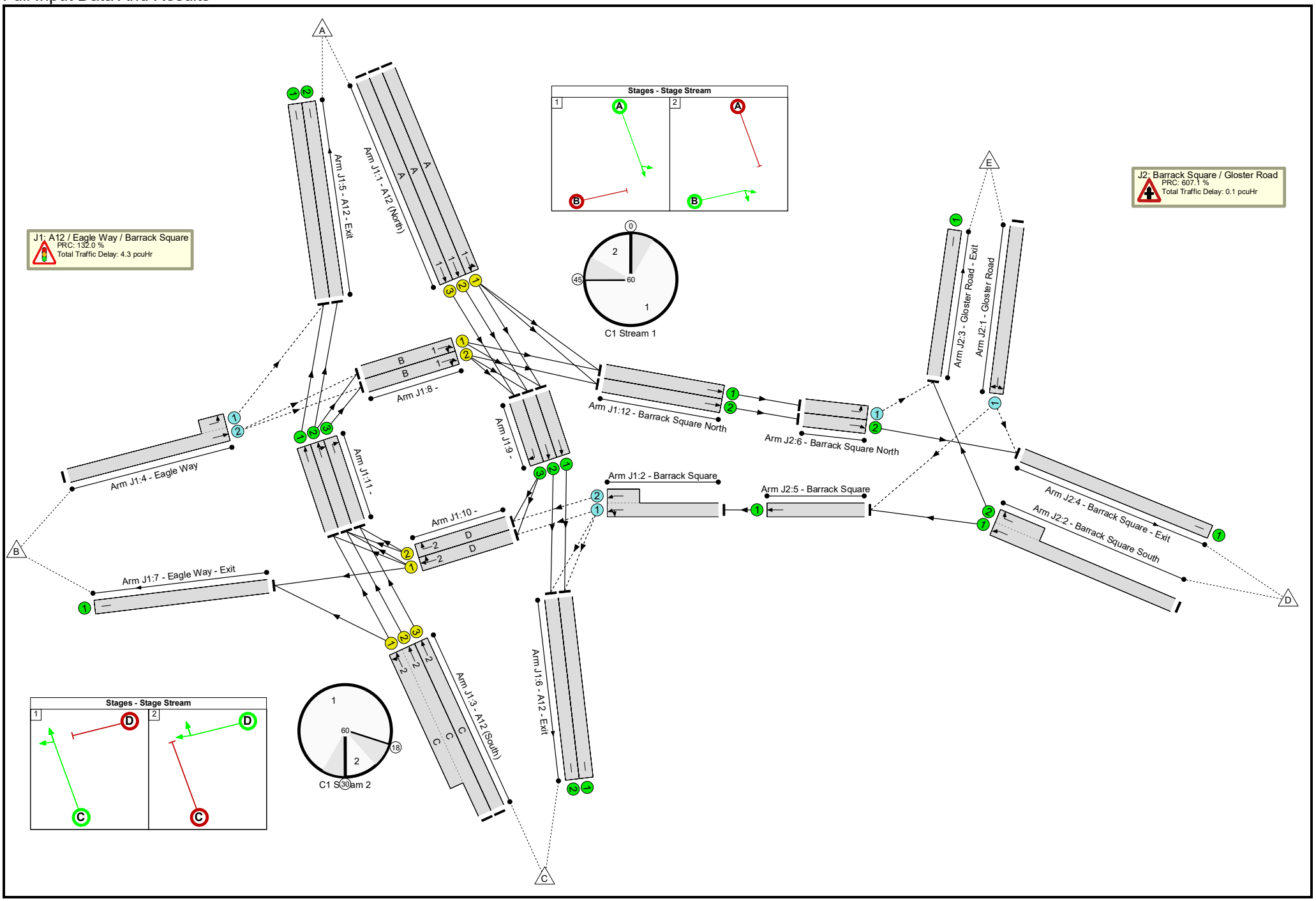
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**38.8%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**38.8%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	40	-	397	1840	1257	31.6%
1/2	A12 (North) Ahead	U	1	N/A	A		1	40	-	449	1958	1338	33.6%
1/3	A12 (North) Ahead	U	1	N/A	A		1	40	-	2	1828	1249	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	47	1994:1965	716+0	6.6 : 0.0%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	709	1828:1828	918+910	38.8 : 38.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	97	1828	1341	7.2%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	70	Inf :1821	738+201	7.5 : 7.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	274	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	19	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	10	-	116	1764	323	35.9%
8/2	Right Ahead	U	1	N/A	B		1	10	-	118	1764	323	36.5%
9/1	Ahead	U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	8	1764	235	3.4%
10/2	Right	U	2	N/A	D		1	7	-	0	1940	259	0.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	97	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	91	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**12.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	72	Inf	648	11.1%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	28	1800:1800	1414+386	1.6 : 1.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	133	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	138	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	47	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	127	Inf	998	12.7%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	91	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**433**	**0**	**0**	**2.8**	**1.6**	**0.0**	**4.5**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**234**	**0**	**0**	**2.8**	**1.5**	**0.0**	**4.3**	**-**	**-**	**-**	**-**
1/1	397	397	-	-	-	0.4	0.2	-	0.7	5.9	2.6	0.2	2.9
1/2	449	449	-	-	-	0.5	0.3	-	0.7	5.9	3.0	0.3	3.2
1/3	2	2	-	-	-	0.0	0.0	-	0.0	4.6	0.0	0.0	0.0
2/1+2/2	47	47	94	0	0	0.0	0.0	-	0.0	2.8	0.0	0.0	0.1
3/2+3/1	709	709	-	-	-	0.5	0.3	-	0.8	4.3	1.9	0.3	2.2
3/3	97	97	-	-	-	0.1	0.0	-	0.1	3.7	0.4	0.0	0.5
4/2+4/1	70	70	140	0	0	0.0	0.0	-	0.0	2.1	0.0	0.0	0.1
5/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	19	19	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	116	116	-	-	-	0.6	0.3	-	0.9	28.5	1.6	0.3	1.9
8/2	118	118	-	-	-	0.6	0.3	-	0.9	28.5	1.6	0.3	1.9
9/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	8	8	-	-	-	0.0	0.0	-	0.1	30.1	0.1	0.0	0.1
10/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	97	97	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	91	91	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**199**	**0**	**0**	**0.0**	**0.1**	**0.0**	**0.1**	**-**	**-**	**-**	**-**
1/1	72	72	72	0	0	0.0	0.1	-	0.1	3.1	0.0	0.1	0.1
2/1+2/2	28	28	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	133	133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	138	138	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	47	47	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	127	127	127	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	91	91	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

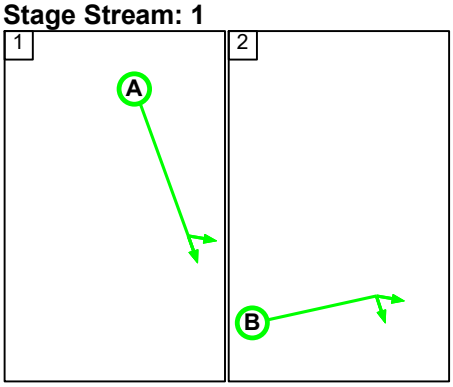
C1	Stream: 1 PRC for Signalled Lanes (%):	146.7	Total Delay for Signalled Lanes (pcuHr):	3.25	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	132.0	Total Delay for Signalled Lanes (pcuHr):	1.01	Cycle Time (s):	60
	PRC Over All Lanes (%):	132.0	Total Delay Over All Lanes(pcuHr):	4.48		

Full Input Data And Results

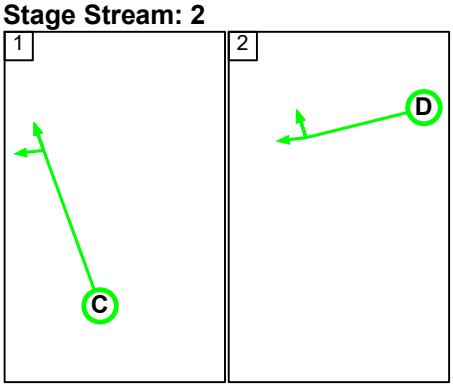
Scenario 2: 'Base 07:00-08:00' (FG47: 'New Base 07:00-08:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

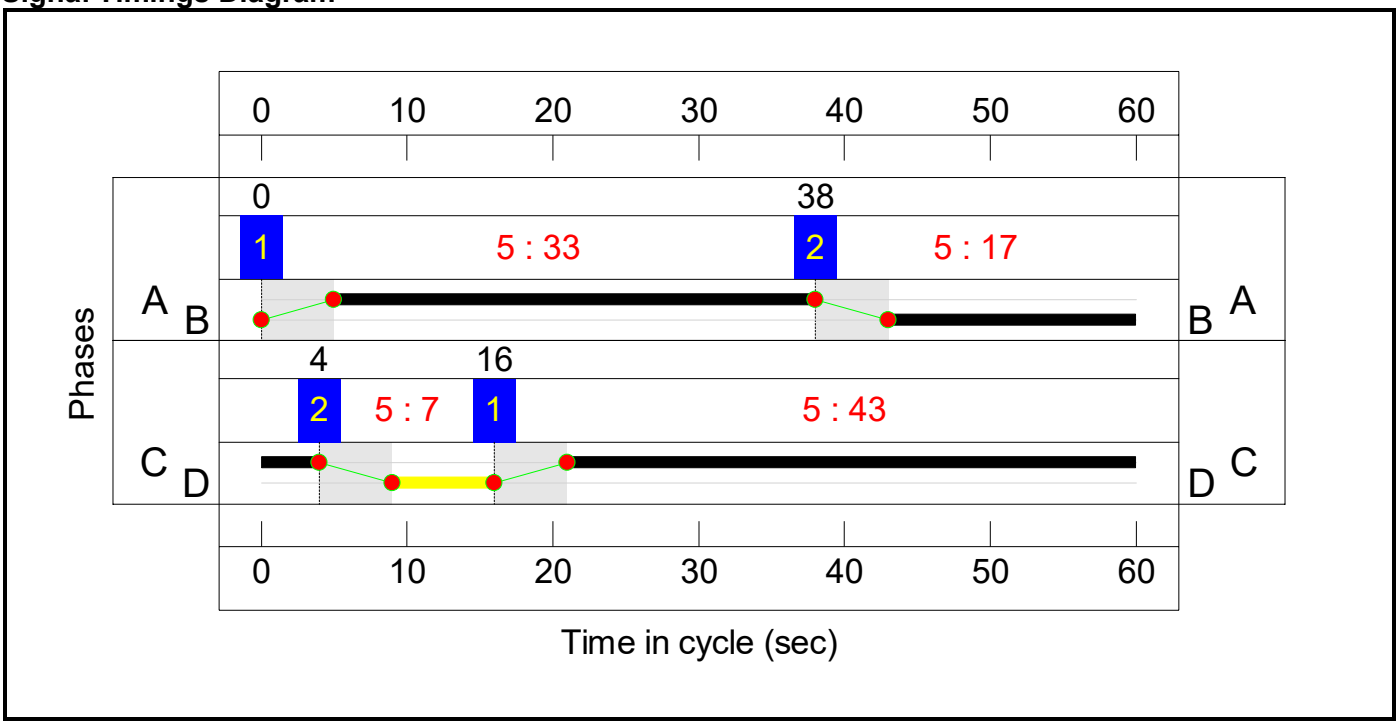
Stage	1	2
Duration	33	17
Change Point	0	38

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	16	4

Full Input Data And Results

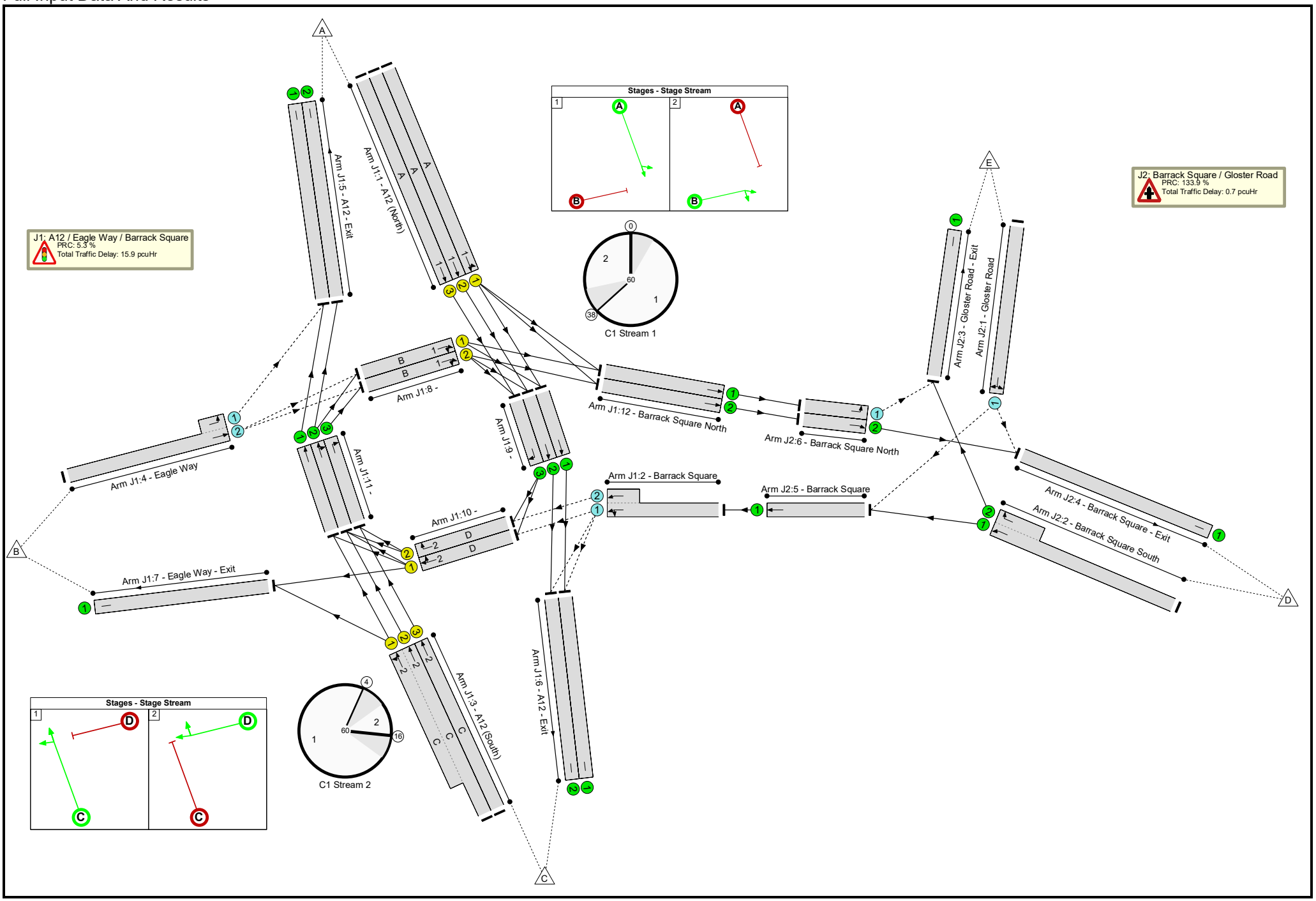
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.4%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.4%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	33	-	675	1835	1040	64.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	33	-	735	1958	1110	66.2%
1/3	A12 (North) Ahead	U	1	N/A	A		1	33	-	3	1828	1036	0.3%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	194	1994:1862	544+56	32.3 : 32.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1562	1828:1828	914+914	85.4 : 85.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	303	1828	1341	22.6%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	178	Inf :1821	439+149	30.3 : 30.3%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	747	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	44	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	17	-	315	1764	529	59.5%
8/2	Right Ahead	U	1	N/A	B		1	17	-	353	1764	529	66.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	819	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	3	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	17	1764	235	7.2%
10/2	Right	U	2	N/A	D		1	7	-	18	1764	235	7.7%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	307	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**38.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	212	Inf	551	38.5%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	28	1800:1800	1479+321	1.6 : 1.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	328	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	307	Inf	998	30.8%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1263**	**0**	**0**	**8.8**	**7.7**	**0.0**	**16.5**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**744**	**0**	**0**	**8.7**	**7.2**	**0.0**	**15.9**	**-**	**-**	**-**	**-**
1/1	675	675	-	-	-	1.7	0.9	-	2.6	13.8	7.7	0.9	8.6
1/2	735	735	-	-	-	1.8	1.0	-	2.8	13.8	8.4	1.0	9.3
1/3	3	3	-	-	-	0.0	0.0	-	0.0	7.6	0.0	0.0	0.0
2/1+2/2	194	194	388	0	0	0.1	0.2	-	0.4	7.1	1.1	0.2	1.4
3/2+3/1	1562	1562	-	-	-	1.6	2.9	-	4.5	10.3	5.9	2.9	8.7
3/3	303	303	-	-	-	0.2	0.1	-	0.4	4.3	1.6	0.1	1.7
4/2+4/1	178	178	356	0	0	0.1	0.2	-	0.3	6.5	0.7	0.2	1.0
5/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	44	44	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	315	315	-	-	-	1.3	0.7	-	2.0	23.2	4.1	0.7	4.8
8/2	353	353	-	-	-	1.6	1.0	-	2.6	26.1	5.0	1.0	6.0
9/1	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	3	3	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	17	17	-	-	-	0.1	0.0	-	0.1	30.8	0.2	0.0	0.3
10/2	18	18	-	-	-	0.1	0.0	-	0.1	29.7	0.3	0.0	0.3
11/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	800	800	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	303	303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**519**	**0**	**0**	**0.1**	**0.5**	**0.0**	**0.7**	**-**	**-**	**-**	**-**
1/1	212	212	212	0	0	0.0	0.3	-	0.3	5.3	0.0	0.3	0.3
2/1+2/2	28	28	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	328	328	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	307	307	307	0	0	0.1	0.2	-	0.3	4.0	4.0	0.2	4.3
6/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

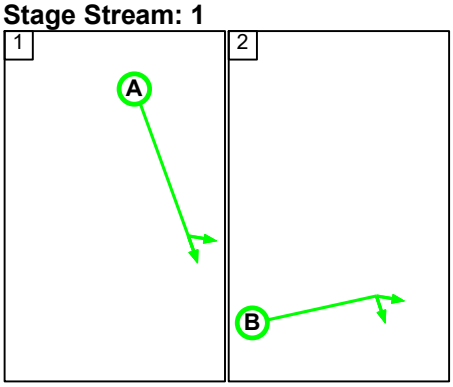
C1	Stream: 1 PRC for Signalled Lanes (%):	34.9	Total Delay for Signalled Lanes (pcuHr):	10.00	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	5.3	Total Delay for Signalled Lanes (pcuHr):	5.15	Cycle Time (s): 60
	PRC Over All Lanes (%):	5.3	Total Delay Over All Lanes(pcuHr):	16.51	

Full Input Data And Results

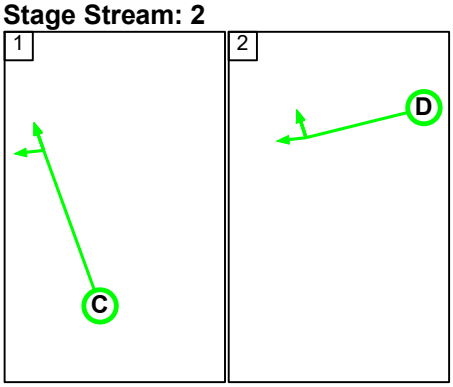
Scenario 3: 'Base 08:00-09:00' (FG48: 'New Base 08:00-09:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

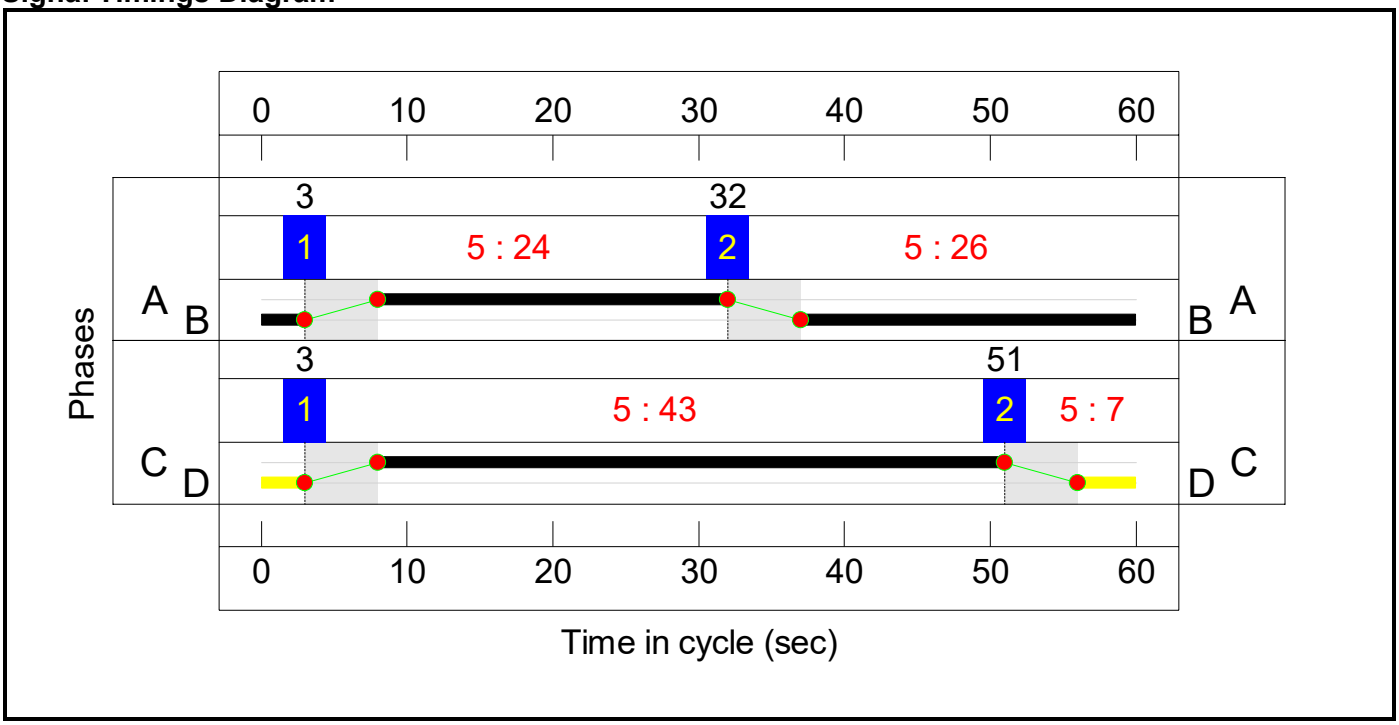
Stage	1	2
Duration	24	26
Change Point	3	32

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	3	51

Full Input Data And Results

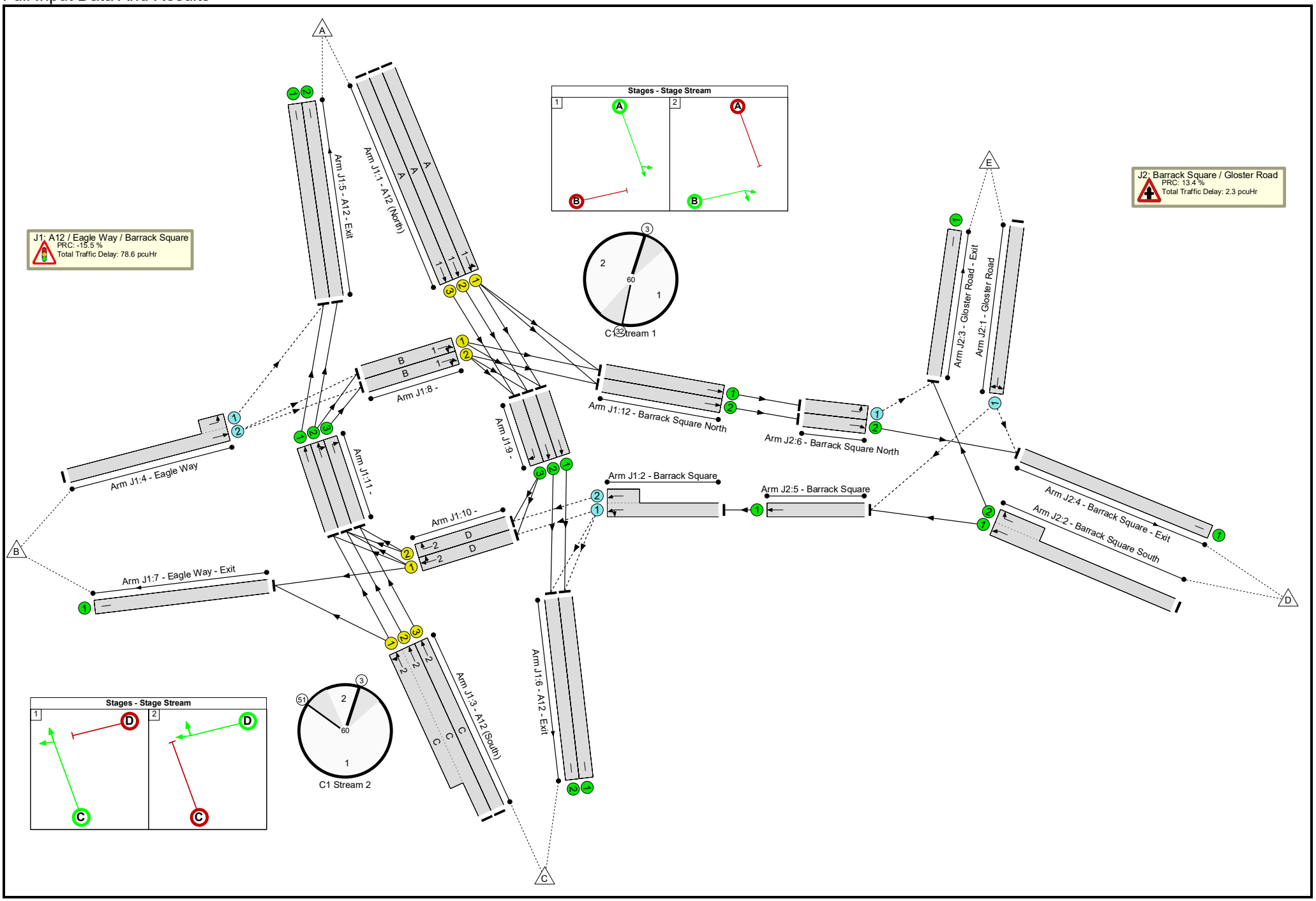
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	24	-	716	1837	765	93.5%
1/2	A12 (North) Ahead	U	1	N/A	A		1	24	-	766	1958	816	93.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	24	-	18	1828	762	2.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	379	1994:1862	539+43	65.2 : 65.2%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1900	1828:1828	914+914	103.9 : 103.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	537	1828	1341	40.1%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	197	Inf :1821	339+121	42.8 : 42.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	935	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	708	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	858	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1041	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	102	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	26	-	336	1764	794	41.0%
8/2	Right Ahead	U	1	N/A	B		1	26	-	616	1764	794	77.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	691	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	874	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	18	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	35	1764	235	14.9%
10/2	Right	U	2	N/A	D		1	7	-	28	1764	235	11.9%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	883	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	978	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**79.4%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	387	Inf	488	79.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	68	1800:1800	1562+238	3.8 : 3.8%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	599	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	337	Inf	997	32.8%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1866**	**0**	**0**	**16.7**	**64.3**	**0.0**	**80.9**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1152**	**0**	**0**	**16.5**	**62.1**	**0.0**	**78.6**	**-**	**-**	**-**	**-**
1/1	716	716	-	-	-	3.3	5.9	-	9.2	46.2	11.3	5.9	17.2
1/2	766	766	-	-	-	3.6	6.2	-	9.7	45.7	12.1	6.2	18.3
1/3	18	18	-	-	-	0.1	0.0	-	0.1	12.9	0.2	0.0	0.2
2/1+2/2	379	379	758	0	0	0.9	0.9	-	1.8	17.5	4.2	0.9	5.2
3/2+3/1	1900	1828	-	-	-	4.9	46.3	-	51.1	96.9	42.0	46.3	88.3
3/3	537	537	-	-	-	0.5	0.3	-	0.8	5.3	3.3	0.3	3.6
4/2+4/1	197	197	394	0	0	0.3	0.4	-	0.7	13.1	1.8	0.4	2.1
5/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	682	682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	858	858	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1041	1041	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	99	99	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	326	326	-	-	-	0.7	0.3	-	1.0	11.6	3.3	0.3	3.6
8/2	616	616	-	-	-	1.9	1.7	-	3.6	21.1	8.4	1.7	10.1
9/1	691	691	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	874	874	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	18	18	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	35	35	-	-	-	0.2	0.1	-	0.3	31.5	0.5	0.1	0.6
10/2	28	28	-	-	-	0.1	0.1	-	0.2	26.5	0.4	0.1	0.5
11/1	850	850	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	942	942	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**714**	**0**	**0**	**0.2**	**2.1**	**0.0**	**2.3**	**-**	**-**	**-**	**-**
1/1	387	387	387	0	0	0.1	1.9	-	2.0	18.2	3.1	1.9	5.0
2/1+2/2	68	68	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	327	327	327	0	0	0.1	0.2	-	0.3	3.6	3.3	0.2	3.6
6/2	532	532	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

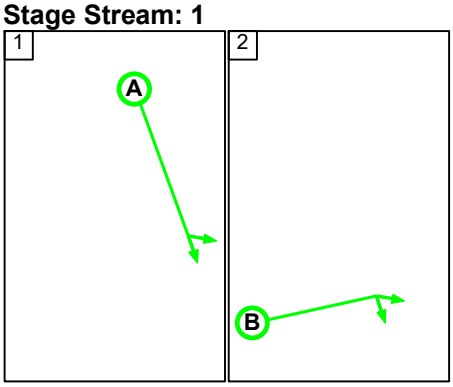
C1	Stream: 1 PRC for Signalled Lanes (%):	-4.3	Total Delay for Signalled Lanes (pcuHr):	23.63	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-15.5	Total Delay for Signalled Lanes (pcuHr):	52.42	Cycle Time (s):	60
	PRC Over All Lanes (%):	-15.5	Total Delay Over All Lanes(pcuHr):	80.92		

Full Input Data And Results

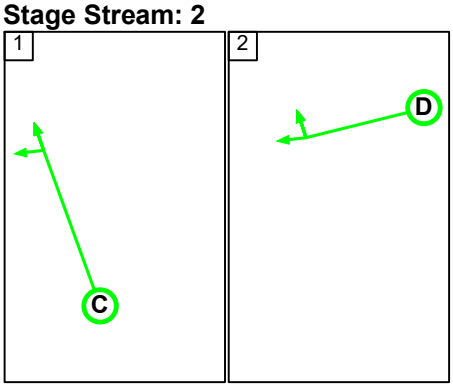
Scenario 4: 'Base 15:00-16:00' (FG49: 'New Base 15:00-16:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

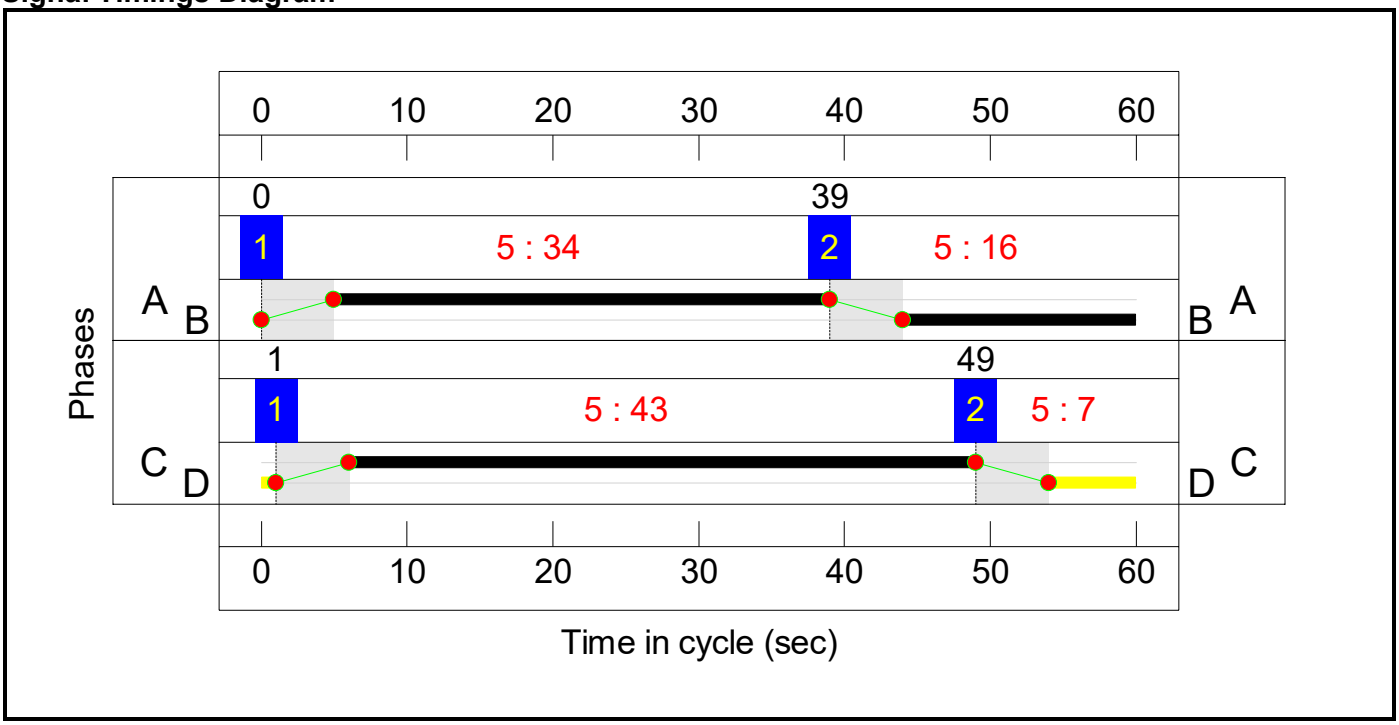
Stage	1	2
Duration	34	16
Change Point	0	39

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	1	49

Full Input Data And Results

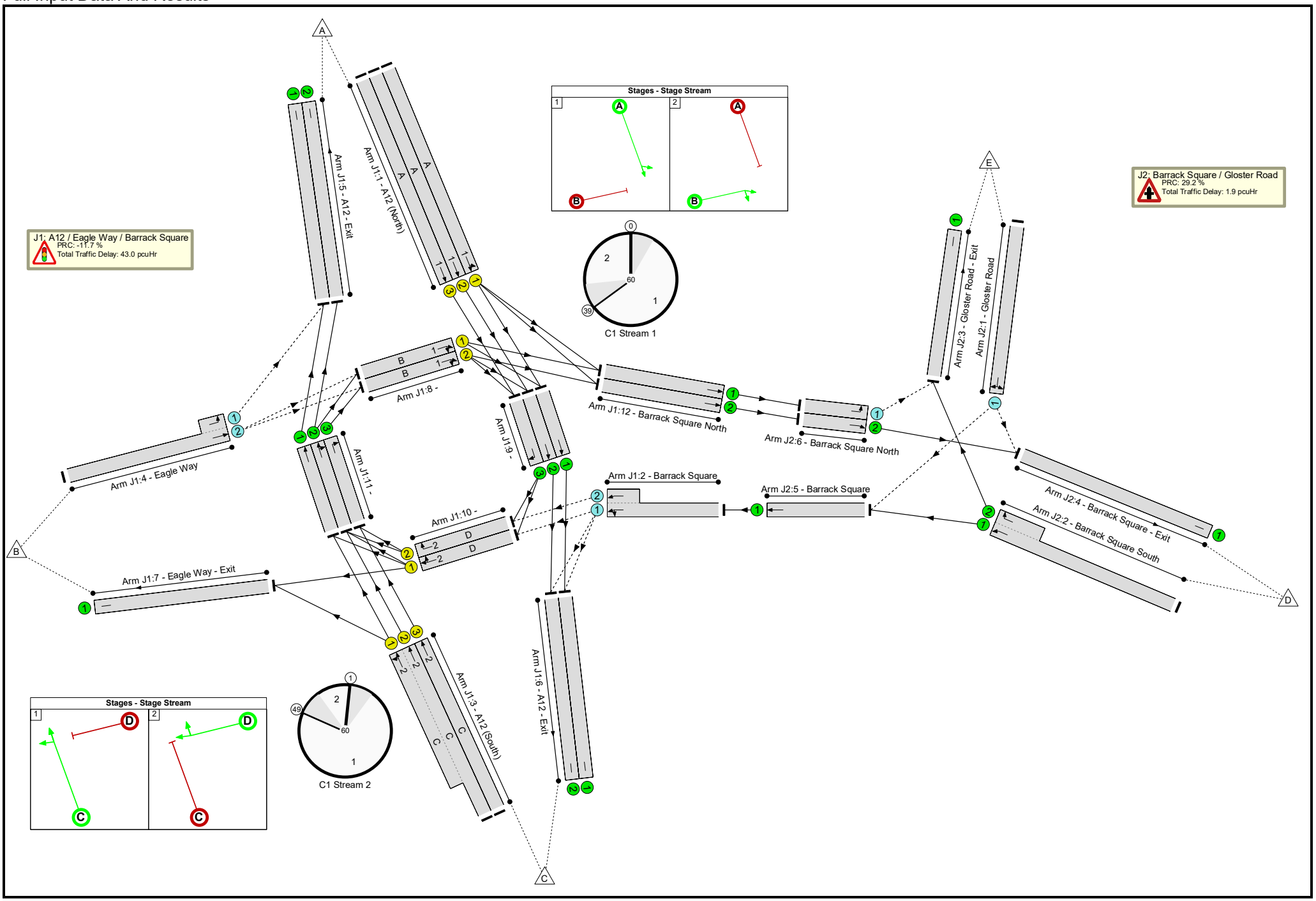
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.5%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.5%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	34	-	674	1836	1071	62.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	34	-	735	1958	1142	64.4%
1/3	A12 (North) Ahead	U	1	N/A	A		1	34	-	48	1828	1066	4.5%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	611	1994:1862	543+130	90.9 : 90.9%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1838	1828:1828	914+914	100.5 : 100.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	84	1828	1341	6.3%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	175	Inf :1821	391+184	30.4 : 30.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	883	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	772	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	862	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1050	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	171	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	16	-	346	1764	500	68.9%
8/2	Right Ahead	U	1	N/A	B		1	16	-	122	1764	500	24.4%
9/1	Ahead	U	N/A	N/A	-		-	-	-	630	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	820	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	48	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	79	1764	235	33.6%
10/2	Right	U	2	N/A	D		1	7	-	118	1764	235	50.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	827	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1037	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	84	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**69.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	377	Inf	541	69.7%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	297	1800:1800	1521+279	16.5 : 16.5%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	436	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	54	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	390	Inf	985	39.5%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	37	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2338**	**0**	**0**	**10.9**	**34.0**	**0.0**	**44.9**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1572**	**0**	**0**	**10.6**	**32.5**	**0.0**	**43.0**	**-**	**-**	**-**	**-**
1/1	674	674	-	-	-	1.5	0.8	-	2.4	12.7	7.3	0.8	8.1
1/2	735	735	-	-	-	1.7	0.9	-	2.6	12.7	8.2	0.9	9.1
1/3	48	48	-	-	-	0.1	0.0	-	0.1	7.2	0.3	0.0	0.4
2/1+2/2	611	611	1222	0	0	1.3	4.4	-	5.7	33.5	7.3	4.4	11.6
3/2+3/1	1838	1828	-	-	-	2.5	24.1	-	26.6	52.1	40.1	24.1	64.1
3/3	84	84	-	-	-	0.1	0.0	-	0.1	3.7	0.4	0.0	0.4
4/2+4/1	175	175	350	0	0	0.1	0.2	-	0.3	7.2	0.8	0.2	1.0
5/1	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	768	768	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	862	862	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1050	1050	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	345	345	-	-	-	1.5	1.1	-	2.6	26.6	5.1	1.1	6.2
8/2	122	122	-	-	-	0.5	0.2	-	0.6	18.9	1.5	0.2	1.7
9/1	630	630	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	820	820	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	48	48	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	79	79	-	-	-	0.6	0.3	-	0.8	37.1	1.2	0.3	1.5
10/2	118	118	-	-	-	0.7	0.5	-	1.2	37.1	1.8	0.5	2.3
11/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	84	84	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**766**	**0**	**0**	**0.3**	**1.6**	**0.0**	**1.9**	**-**	**-**	**-**	**-**
1/1	377	377	377	0	0	0.0	1.1	-	1.1	10.8	0.0	1.1	1.1
2/1+2/2	297	297	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	54	54	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	389	389	389	0	0	0.3	0.3	-	0.6	5.8	5.3	0.3	5.6
6/2	37	37	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

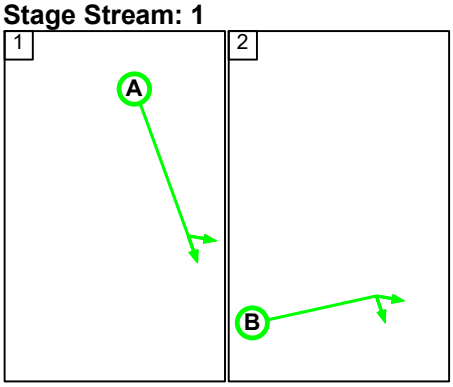
C1	Stream: 1 PRC for Signalled Lanes (%):	30.5	Total Delay for Signalled Lanes (pcuHr):	8.27	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-11.7	Total Delay for Signalled Lanes (pcuHr):	28.74	Cycle Time (s): 60
	PRC Over All Lanes (%):	-11.7	Total Delay Over All Lanes(pcuHr):	44.90	

Full Input Data And Results

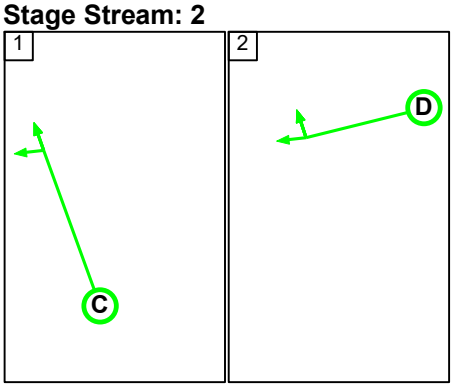
Scenario 5: 'Base 17:00-18:00' (FG50: 'New Base 17:00-18:00', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

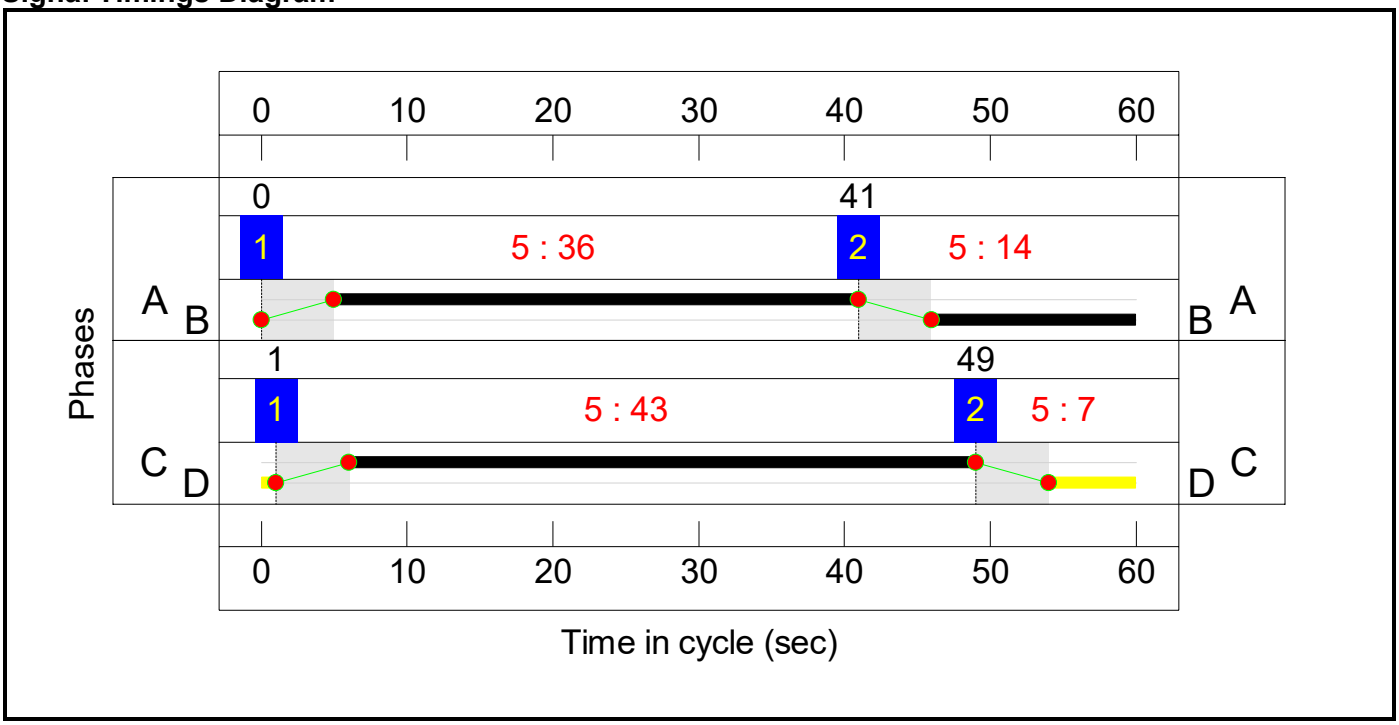
Stage	1	2
Duration	36	14
Change Point	0	41

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	1	49

Full Input Data And Results

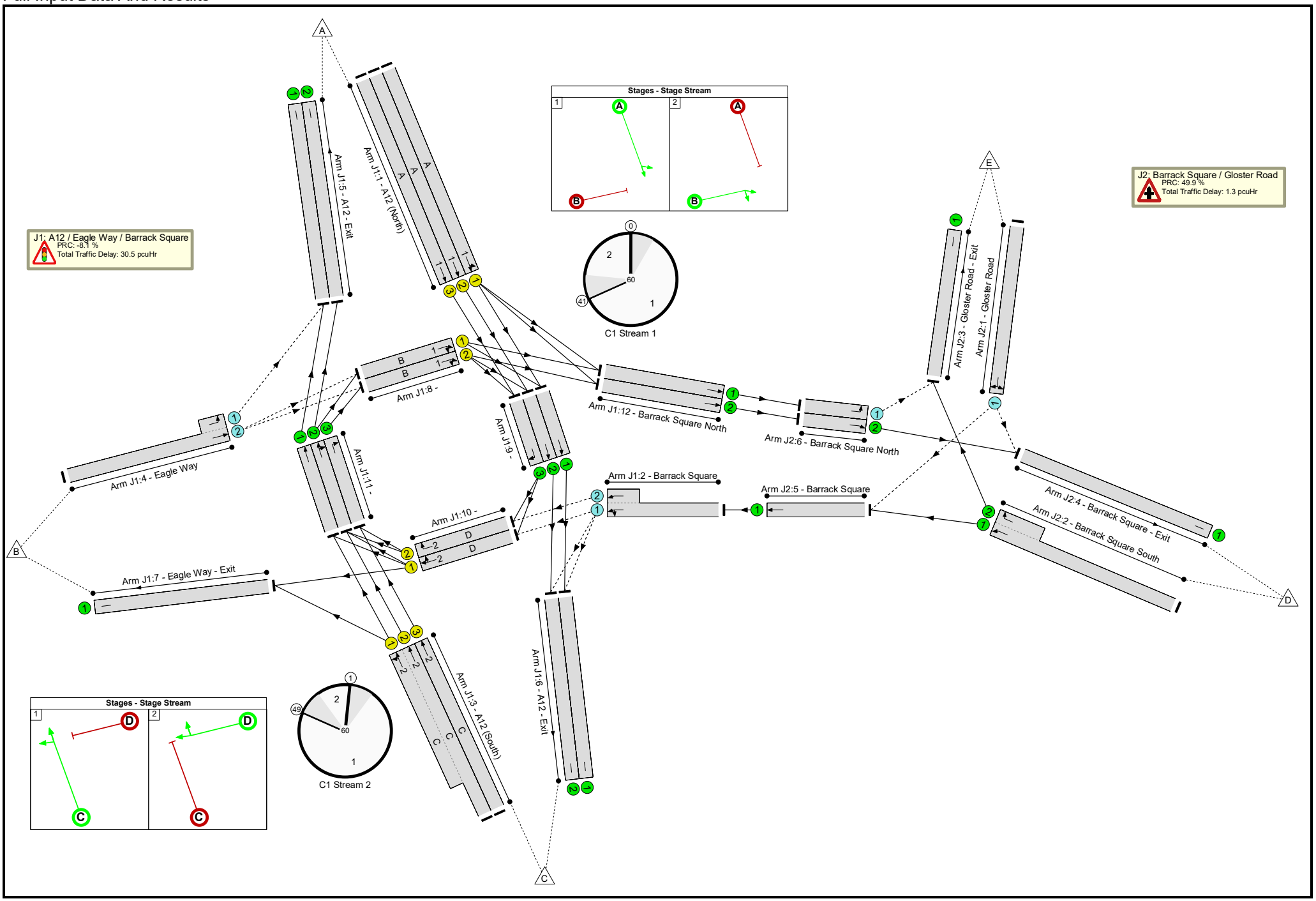
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.3%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**97.3%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	36	-	674	1837	1133	59.5%
1/2	A12 (North) Ahead	U	1	N/A	A		1	36	-	737	1958	1207	61.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	36	-	60	1828	1127	5.3%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	604	1994:1862	535+113	93.3 : 93.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1778	1828:1828	914+914	97.3 : 97.3%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	75	1828	1341	5.6%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	140	Inf :1821	418+167	23.9 : 23.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	799	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	781	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	852	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1049	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	236	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	14	-	275	1764	441	62.4%
8/2	Right Ahead	U	1	N/A	B		1	14	-	113	1764	441	25.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	60	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	106	1764	235	45.1%
10/2	Right	U	2	N/A	D		1	7	-	105	1764	235	44.6%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	759	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	323	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**60.0%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	321	Inf	535	60.0%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	323	1800:1800	1611+189	17.9 : 17.9%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	34	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	323	Inf	988	32.7%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	28	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2132**	**0**	**0**	**9.6**	**22.2**	**0.0**	**31.8**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1488**	**0**	**0**	**9.5**	**21.1**	**0.0**	**30.5**	**-**	**-**	**-**	**-**
1/1	674	674	-	-	-	1.3	0.7	-	2.0	10.9	6.7	0.7	7.5
1/2	737	737	-	-	-	1.4	0.8	-	2.2	10.9	7.4	0.8	8.2
1/3	60	60	-	-	-	0.1	0.0	-	0.1	6.3	0.4	0.0	0.4
2/1+2/2	604	604	1208	0	0	1.3	5.5	-	6.9	40.9	7.6	5.5	13.1
3/2+3/1	1778	1778	-	-	-	2.1	12.0	-	14.1	28.5	7.7	12.0	19.7
3/3	75	75	-	-	-	0.0	0.0	-	0.1	3.7	0.3	0.0	0.4
4/2+4/1	140	140	280	0	0	0.1	0.2	-	0.2	6.0	0.5	0.2	0.7
5/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	781	781	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	852	852	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	236	236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	275	275	-	-	-	1.2	0.8	-	2.1	27.0	4.0	0.8	4.9
8/2	113	113	-	-	-	0.5	0.2	-	0.7	21.3	1.5	0.2	1.7
9/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	60	60	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	106	106	-	-	-	0.7	0.4	-	1.2	39.3	1.7	0.4	2.1
10/2	105	105	-	-	-	0.6	0.4	-	1.0	35.9	1.6	0.4	2.0
11/1	759	759	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	994	994	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	75	75	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	28	28	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**644**	**0**	**0**	**0.2**	**1.1**	**0.0**	**1.3**	**-**	**-**	**-**	**-**
1/1	321	321	321	0	0	0.0	0.7	-	0.7	8.4	0.0	0.7	0.7
2/1+2/2	323	323	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	34	34	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	323	323	323	0	0	0.2	0.2	-	0.4	4.5	4.1	0.2	4.4
6/2	28	28	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

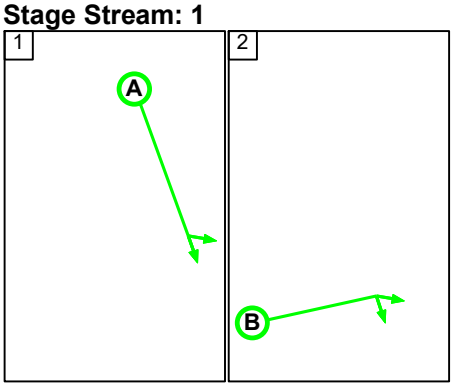
C1	Stream: 1 PRC for Signalled Lanes (%):	44.3	Total Delay for Signalled Lanes (pcuHr):	7.10	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-8.1	Total Delay for Signalled Lanes (pcuHr):	16.34	Cycle Time (s):	60
	PRC Over All Lanes (%):	-8.1	Total Delay Over All Lanes(pcuHr):	31.79		

Full Input Data And Results

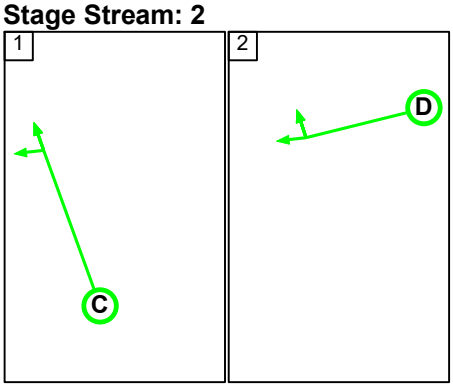
Scenario 6: '28RC 06:00-07:00' (FG76: '28RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

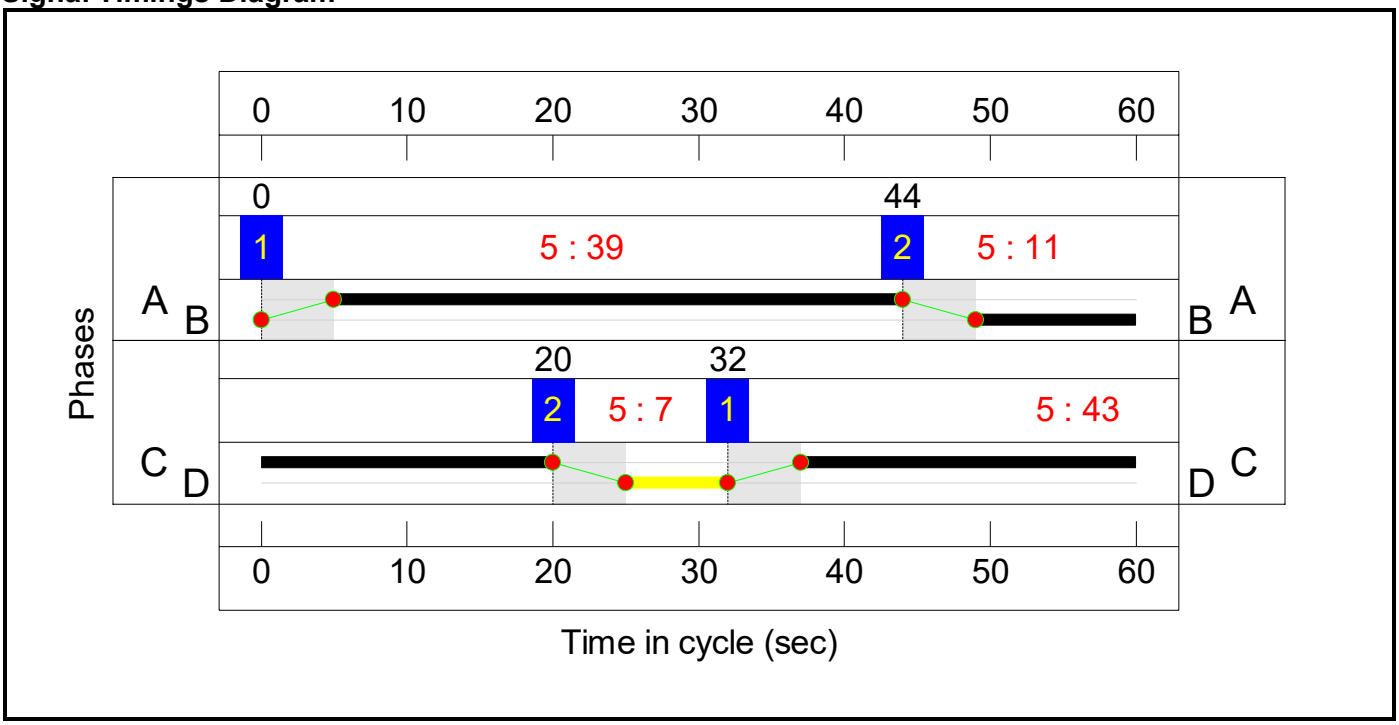
Stage	1	2
Duration	39	11
Change Point	0	44

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	32	20

Full Input Data And Results

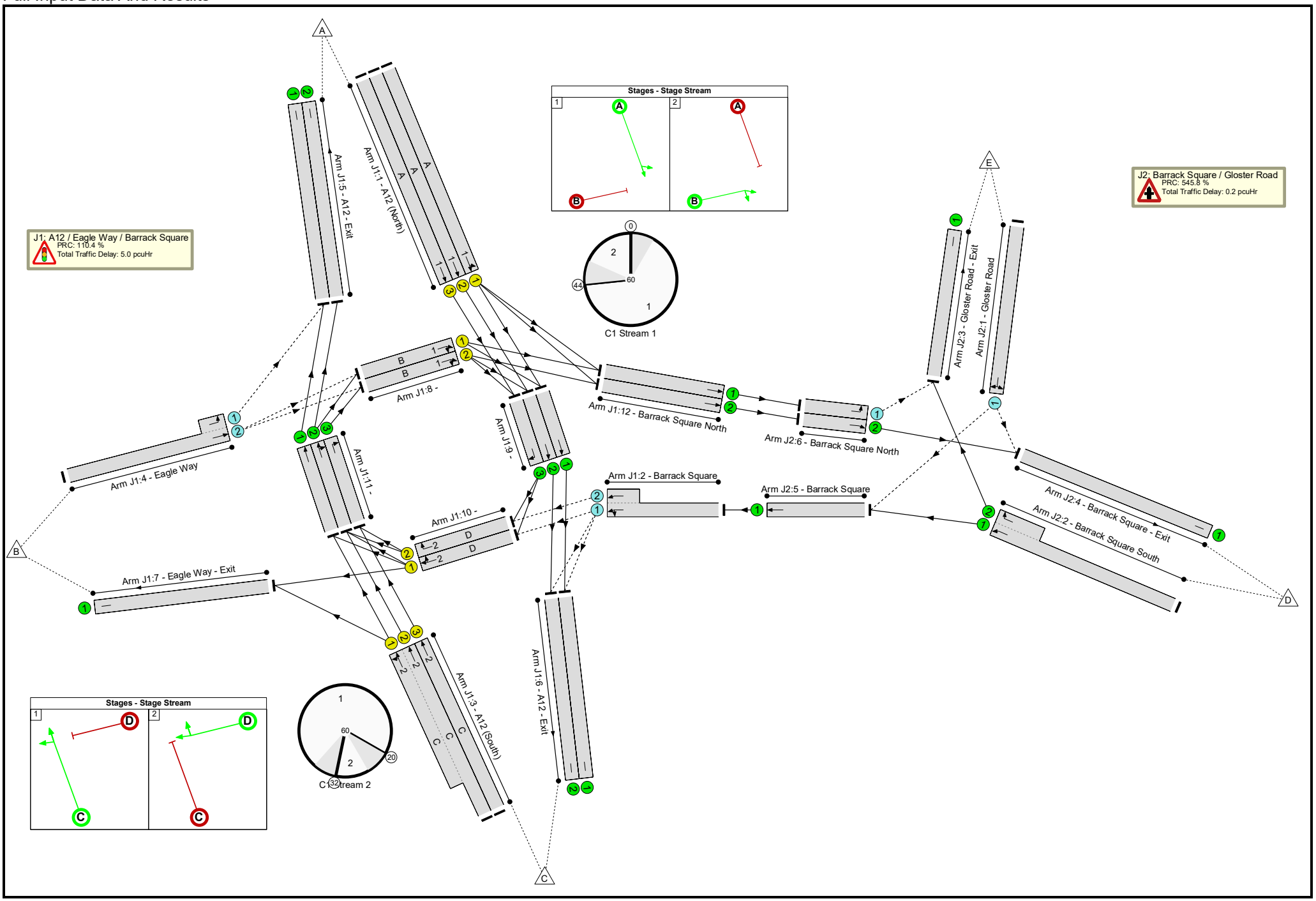
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.8%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**42.8%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	39	-	430	1841	1227	35.0%
1/2	A12 (North) Ahead	U	1	N/A	A		1	39	-	480	1958	1305	36.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	39	-	2	1828	1219	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	59	1994:1862	694+37	8.1 : 8.1%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	782	1828:1828	916+912	42.8 : 42.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	109	1828	1341	8.1%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	87	Inf :1821	710+172	9.9 : 9.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	305	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	551	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	11	-	134	1764	353	38.0%
8/2	Right Ahead	U	1	N/A	B		1	11	-	135	1764	353	38.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	407	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	11	1764	235	4.7%
10/2	Right	U	2	N/A	D		1	7	-	3	1764	235	1.3%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	139	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**13.9%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	78	Inf	644	12.1%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	39	1800:1800	1477+323	2.2 : 2.2%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	146	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	156	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	139	Inf	997	13.9%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**509**	**0**	**0**	**3.3**	**1.9**	**0.0**	**5.2**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**292**	**0**	**0**	**3.3**	**1.7**	**0.0**	**5.0**	**-**	**-**	**-**	**-**
1/1	430	430	-	-	-	0.5	0.3	-	0.8	6.6	3.1	0.3	3.4
1/2	480	480	-	-	-	0.6	0.3	-	0.9	6.6	3.5	0.3	3.8
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.0	0.0	0.0	0.0
2/1+2/2	59	59	118	0	0	0.0	0.0	-	0.0	2.8	0.1	0.0	0.1
3/2+3/1	782	782	-	-	-	0.6	0.4	-	1.0	4.4	2.2	0.4	2.6
3/3	109	109	-	-	-	0.1	0.0	-	0.1	3.7	0.5	0.0	0.6
4/2+4/1	87	87	174	0	0	0.0	0.1	-	0.1	2.3	0.1	0.1	0.1
5/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	431	431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	551	551	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	134	134	-	-	-	0.7	0.3	-	1.0	27.9	1.7	0.3	2.0
8/2	135	135	-	-	-	0.7	0.3	-	1.0	27.7	1.7	0.3	2.1
9/1	407	407	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	11	11	-	-	-	0.1	0.0	-	0.1	30.3	0.2	0.0	0.2
10/2	3	3	-	-	-	0.0	0.0	-	0.0	30.7	0.0	0.0	0.0
11/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	139	139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**217**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	78	78	78	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	39	39	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	146	146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	139	139	139	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

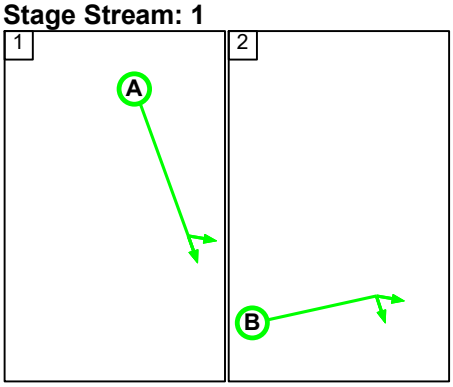
C1	Stream: 1 PRC for Signalled Lanes (%):	135.2	Total Delay for Signalled Lanes (pcuHr):	3.75	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	110.4	Total Delay for Signalled Lanes (pcuHr):	1.20	Cycle Time (s):	60
	PRC Over All Lanes (%):	110.4	Total Delay Over All Lanes(pcuHr):	5.21		

Full Input Data And Results

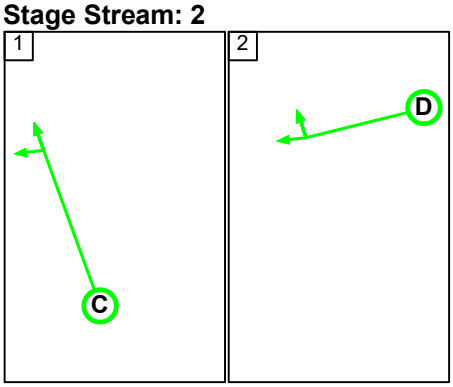
Scenario 7: '28RC 07:00-08:00' (FG77: '28RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

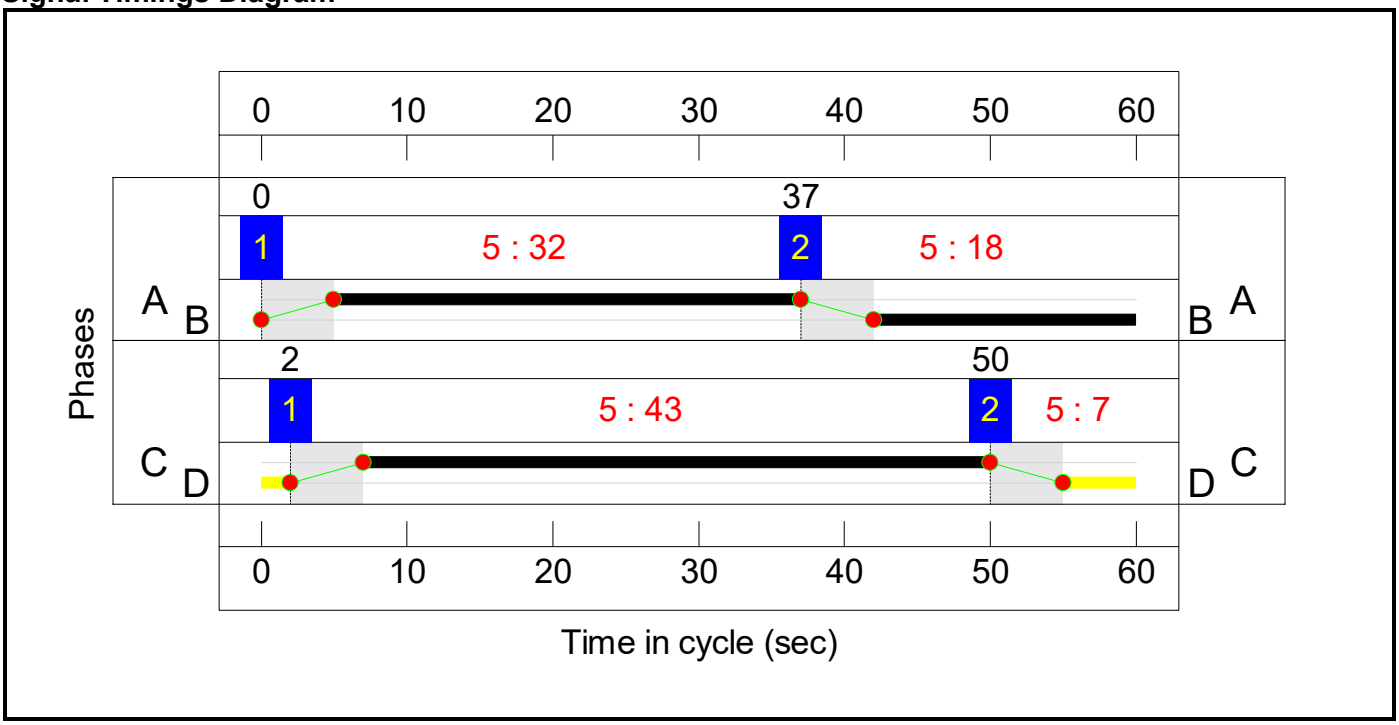
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	2	50

Full Input Data And Results

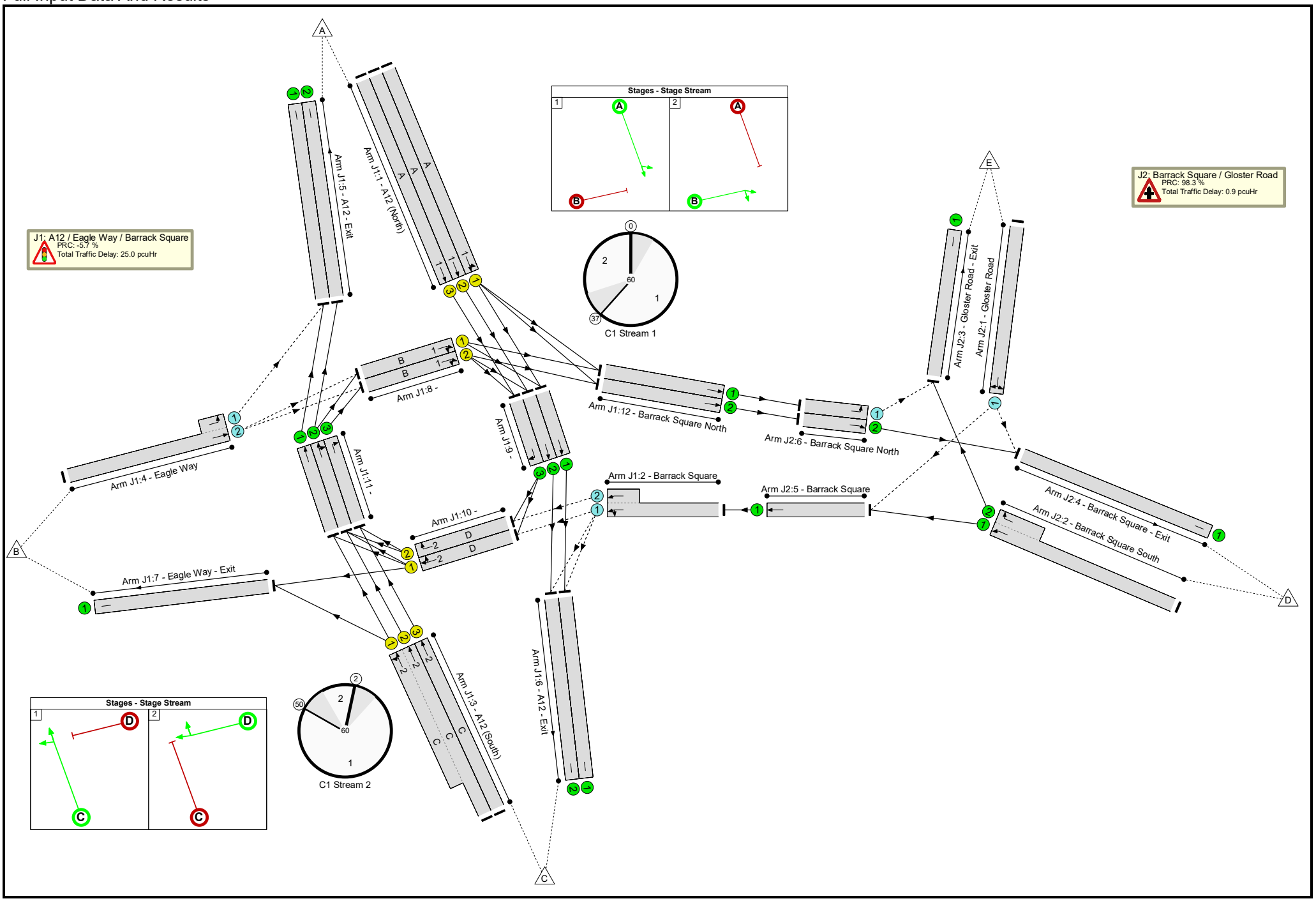
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.1%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.1%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	705	1839	1011	69.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	764	1958	1077	70.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	4	1828	1005	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	304	1994:1862	522+120	47.3 : 47.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1739	1828:1828	915+913	95.1 : 95.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	348	1828	1341	26.0%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	226	Inf :1821	363+108	47.9 : 47.9%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	905	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	953	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	375	1764	559	67.1%
8/2	Right Ahead	U	1	N/A	B		1	18	-	405	1764	559	72.5%
9/1	Ahead	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	857	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	57	1764	235	24.2%
10/2	Right	U	2	N/A	D		1	7	-	57	1764	235	24.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	945	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**45.4%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	237	Inf	522	45.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	119	1800:1800	1709+91	6.6 : 6.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	342	Inf	998	34.3%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1639**	**0**	**0**	**10.9**	**15.0**	**0.0**	**25.9**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1060**	**0**	**0**	**10.7**	**14.3**	**0.0**	**25.0**	**-**	**-**	**-**	**-**
1/1	705	705	-	-	-	1.9	1.1	-	3.1	15.7	8.4	1.1	9.6
1/2	764	764	-	-	-	2.1	1.2	-	3.3	15.7	9.3	1.2	10.5
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.1	0.0	0.0	0.0
2/1+2/2	304	304	608	0	0	0.3	0.4	-	0.8	9.4	2.1	0.4	2.6
3/2+3/1	1739	1739	-	-	-	2.0	8.2	-	10.2	21.1	7.3	8.2	15.5
3/3	348	348	-	-	-	0.3	0.2	-	0.4	4.5	1.8	0.2	2.0
4/2+4/1	226	226	452	0	0	0.3	0.5	-	0.7	11.8	1.7	0.5	2.2
5/1	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	800	800	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	953	953	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	375	375	-	-	-	1.4	1.0	-	2.4	23.4	5.1	1.0	6.1
8/2	405	405	-	-	-	1.7	1.3	-	3.0	26.8	5.9	1.3	7.2
9/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	857	857	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	57	57	-	-	-	0.3	0.2	-	0.5	29.6	0.8	0.2	1.0
10/2	57	57	-	-	-	0.3	0.2	-	0.5	31.1	0.8	0.2	1.0
11/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	945	945	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**579**	**0**	**0**	**0.2**	**0.7**	**0.0**	**0.9**	**-**	**-**	**-**	**-**
1/1	237	237	237	0	0	0.0	0.4	-	0.4	6.3	0.0	0.4	0.4
2/1+2/2	119	119	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/1	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	342	342	342	0	0	0.2	0.3	-	0.4	4.5	4.5	0.3	4.8
6/2	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

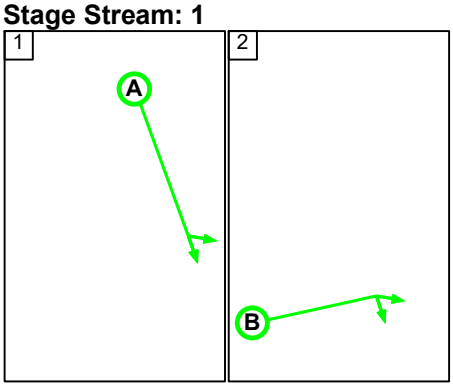
C1	Stream: 1 PRC for Signalled Lanes (%):	24.1	Total Delay for Signalled Lanes (pcuHr):	11.86	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-5.7	Total Delay for Signalled Lanes (pcuHr):	11.60	Cycle Time (s):	60
	PRC Over All Lanes (%):	-5.7	Total Delay Over All Lanes(pcuHr):	25.87		

Full Input Data And Results

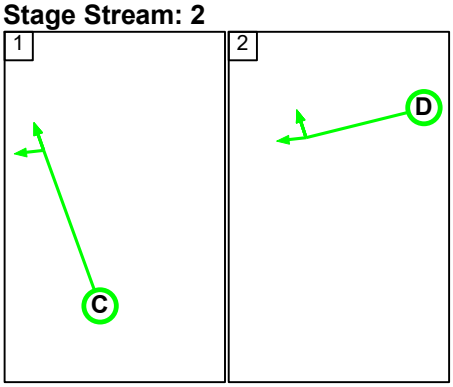
Scenario 8: '28RC 08:00-09:00' (FG78: '28RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

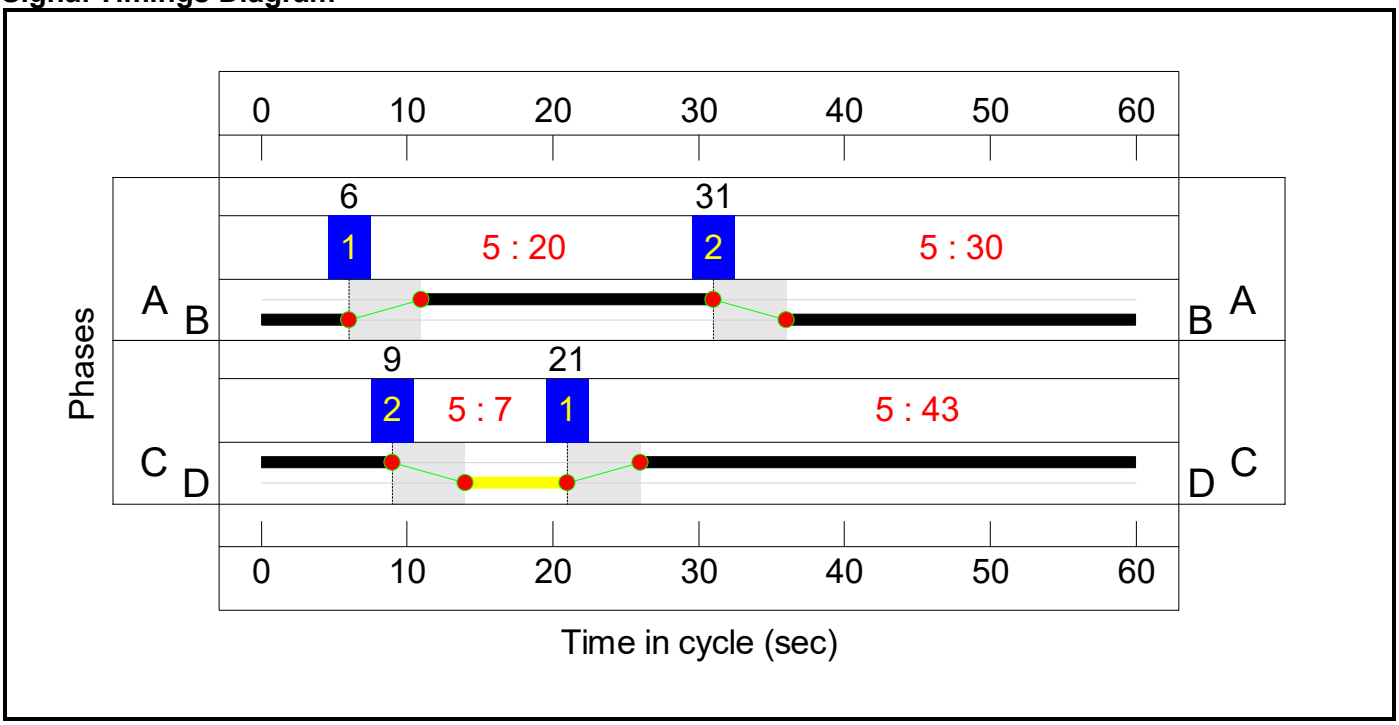
Stage	1	2
Duration	20	30
Change Point	6	31

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	21	9

Full Input Data And Results

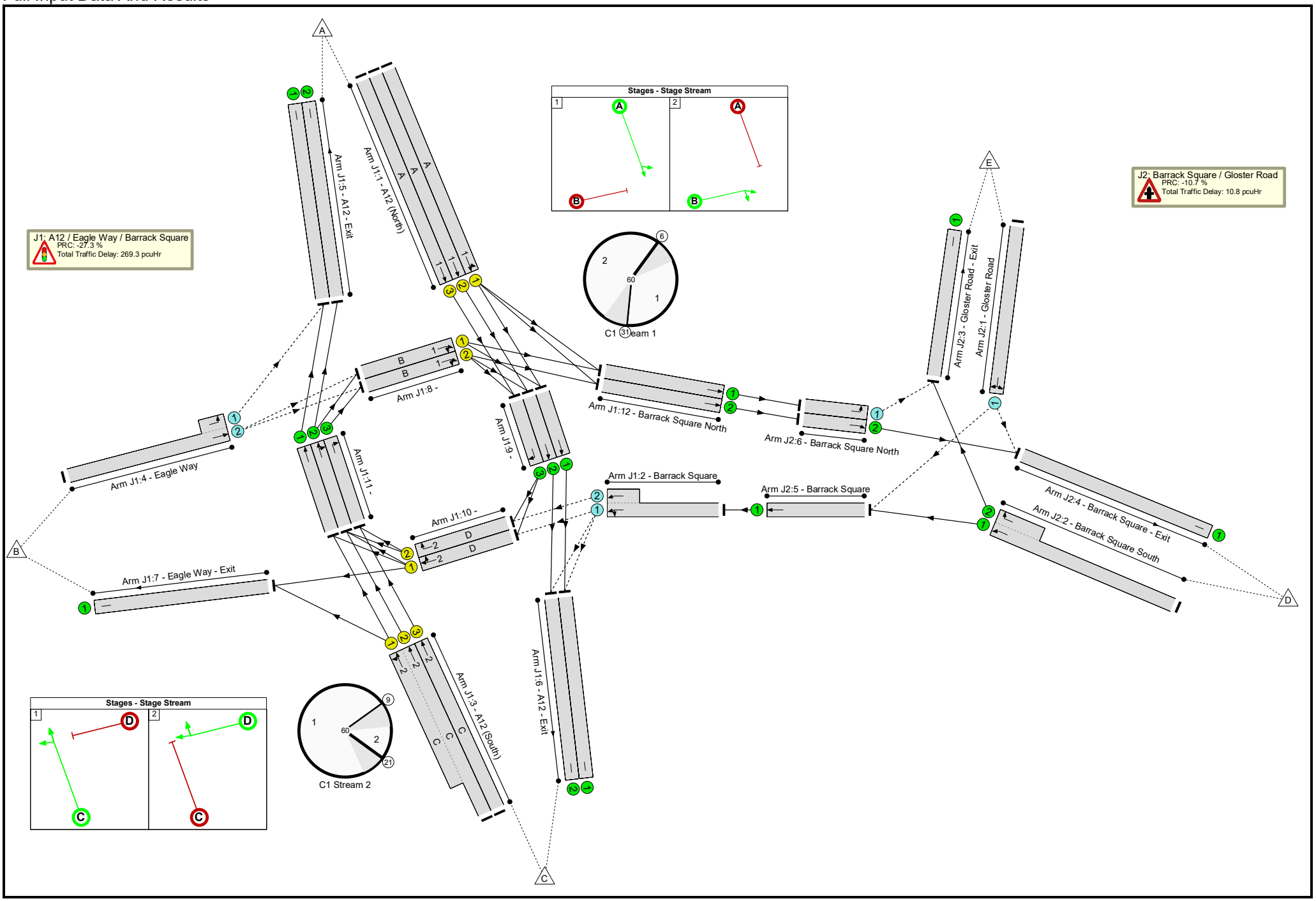
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**114.5%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**114.5%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	20	-	734	1843	645	113.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	20	-	785	1958	685	114.5%
1/3	A12 (North) Ahead	U	1	N/A	A		1	20	-	22	1828	640	3.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	630	1994:1862	570+147	87.9 : 87.9%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2076	1828:1828	922+906	113.6 : 113.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	586	1828	1341	43.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	250	Inf :1821	272+86	69.8 : 69.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1051	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	901	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	30	-	405	1764	911	40.5%
8/2	Right Ahead	U	1	N/A	B		1	30	-	674	1764	911	74.0%
9/1	Ahead	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	904	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	126	1764	235	53.6%
10/2	Right	U	2	N/A	D		1	7	-	129	1764	235	54.8%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	991	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1216	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	586	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**99.6%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	433	Inf	435	99.6%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	281	1800:1800	1736+64	15.6 : 15.6%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	684	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	630	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	382	Inf	996	34.3%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	610	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2535**	**0**	**0**	**32.2**	**248.0**	**0.0**	**280.2**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1760**	**0**	**0**	**31.7**	**237.7**	**0.0**	**269.3**	**-**	**-**	**-**	**-**
1/1	734	645	-	-	-	6.4	48.3	-	54.6	268.0	13.7	48.3	62.0
1/2	785	685	-	-	-	6.9	53.5	-	60.5	277.2	14.7	53.5	68.3
1/3	22	22	-	-	-	0.1	0.0	-	0.1	15.9	0.2	0.0	0.3
2/1+2/2	630	630	1260	0	0	1.7	3.4	-	5.0	28.8	7.2	3.4	10.6
3/2+3/1	2076	1828	-	-	-	11.4	128.1	-	139.5	241.9	48.8	128.1	176.9
3/3	586	586	-	-	-	0.5	0.4	-	0.9	5.5	3.7	0.4	4.1
4/2+4/1	250	250	500	0	0	0.6	1.1	-	1.7	25.0	2.5	1.1	3.7
5/1	937	937	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1002	1002	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	115	115	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	369	369	-	-	-	0.9	0.3	-	1.2	11.7	3.1	0.3	3.4
8/2	674	674	-	-	-	1.8	1.4	-	3.2	17.0	8.9	1.4	10.3
9/1	624	624	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	126	126	-	-	-	0.7	0.6	-	1.3	35.9	1.9	0.6	2.5
10/2	129	129	-	-	-	0.7	0.6	-	1.3	37.5	2.0	0.6	2.6
11/1	877	877	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1091	1091	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	586	586	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	603	603	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**775**	**0**	**0**	**0.5**	**10.3**	**0.0**	**10.8**	**-**	**-**	**-**	**-**
1/1	433	433	433	0	0	0.5	10.0	-	10.5	87.1	7.0	10.0	17.0
2/1+2/2	281	281	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	630	630	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	342	342	342	0	0	0.0	0.3	-	0.3	2.9	2.0	0.3	2.3
6/2	603	603	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

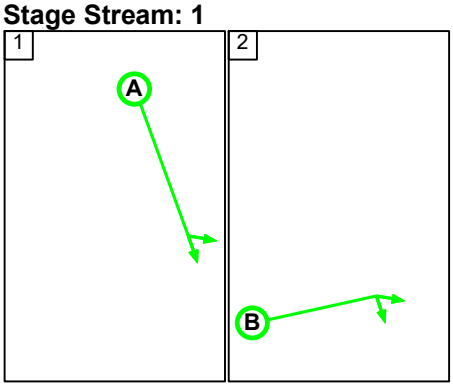
C1	Stream: 1 PRC for Signalled Lanes (%):	-27.3	Total Delay for Signalled Lanes (pcuHr):	119.59	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-26.2	Total Delay for Signalled Lanes (pcuHr):	142.99	Cycle Time (s): 60
	PRC Over All Lanes (%):	-27.3	Total Delay Over All Lanes(pcuHr):	280.19	

Full Input Data And Results

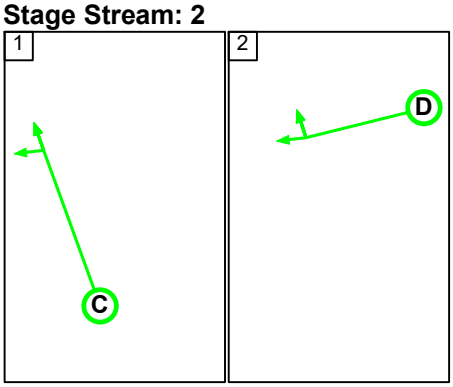
Scenario 9: '28RC 15:00-16:00' (FG79: '28RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

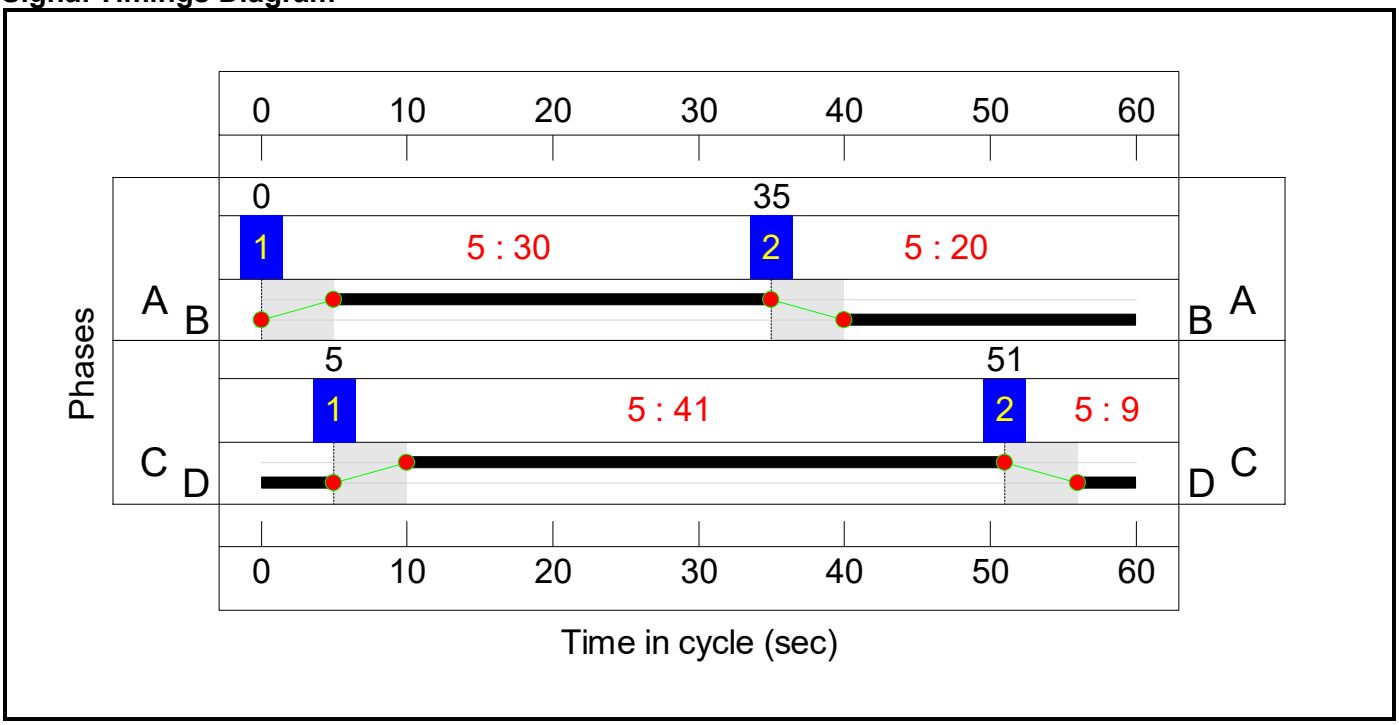
Stage	1	2
Duration	30	20
Change Point	0	35

Stage Stream: 2

Stage	1	2
Duration	41	9
Change Point	5	51

Full Input Data And Results

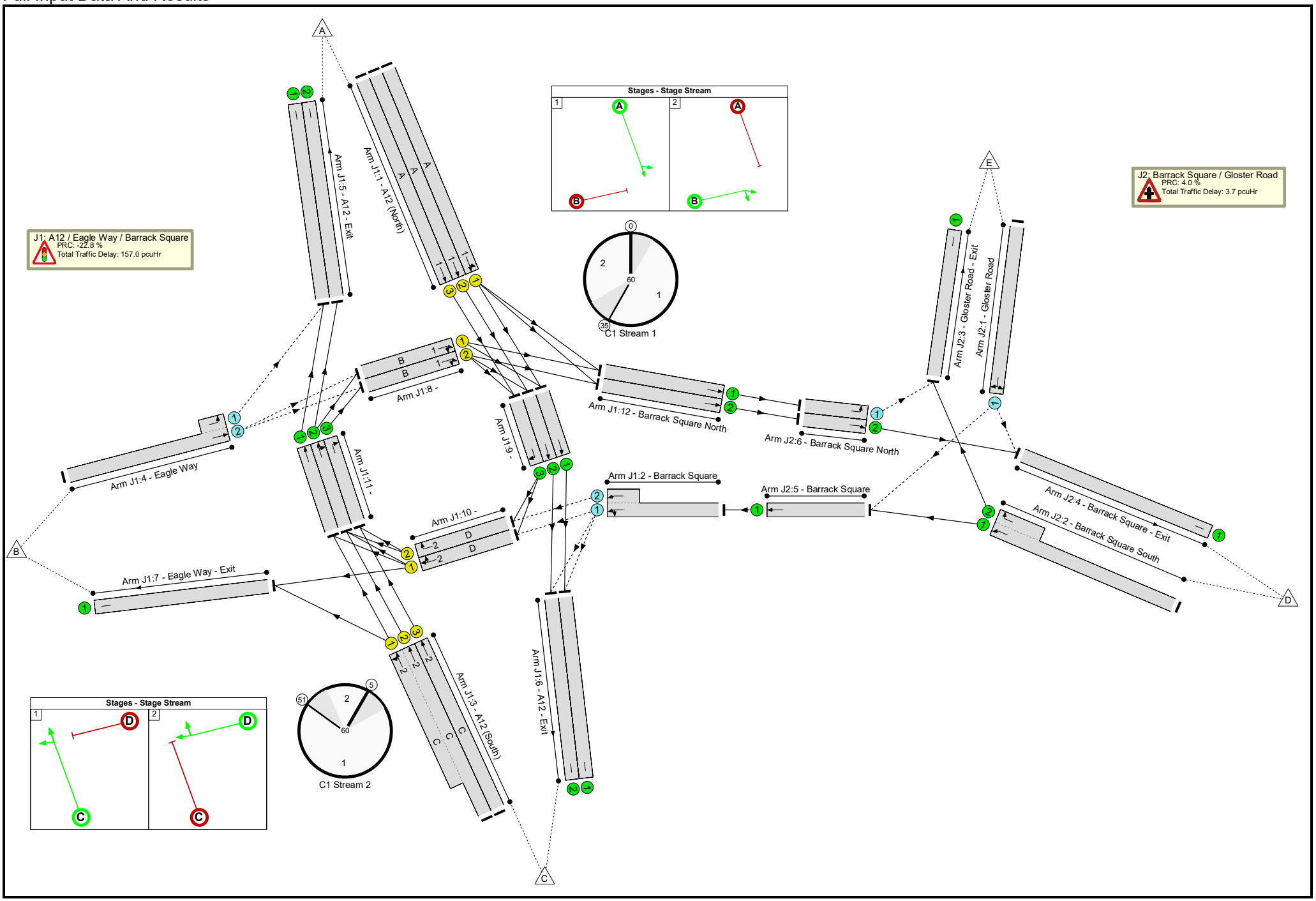
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.5%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.5%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	30	-	747	1855	958	77.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	30	-	797	1958	1012	78.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	30	-	56	1828	944	5.9%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	759	1994:1862	523+195	105.8 : 105.8%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	41	-	2020	1828:1828	919+909	110.5 : 110.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	41	-	111	1828	1280	8.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	218	Inf :1821	364+158	41.7 : 41.7%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	963	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	925	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	20	-	384	1764	617	57.6%
8/2	Right Ahead	U	1	N/A	B		1	20	-	175	1764	617	28.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	905	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	9	-	95	1764	294	31.6%
10/2	Right	U	2	N/A	D		1	9	-	206	1764	294	68.8%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	897	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1221	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	111	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	168	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	426	Inf	492	86.5%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	401	1800:1800	1576+224	22.3 : 22.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	186	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	759	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	439	Inf	983	41.8%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	168	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2723**	**0**	**0**	**22.3**	**138.4**	**0.0**	**160.7**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1886**	**0**	**0**	**22.1**	**134.9**	**0.0**	**157.0**	**-**	**-**	**-**	**-**
1/1	747	747	-	-	-	2.4	1.7	-	4.2	20.1	10.0	1.7	11.7
1/2	797	797	-	-	-	2.6	1.8	-	4.4	20.1	10.6	1.8	12.5
1/3	56	56	-	-	-	0.1	0.0	-	0.1	9.3	0.5	0.0	0.5
2/1+2/2	759	725	1450	0	0	3.3	27.7	-	31.0	147.2	25.3	27.7	53.1
3/2+3/1	2020	1828	-	-	-	9.9	101.0	-	110.9	197.7	44.8	101.0	145.8
3/3	111	111	-	-	-	0.1	0.0	-	0.1	4.4	0.6	0.0	0.6
4/2+4/1	218	218	436	0	0	0.3	0.4	-	0.6	10.1	1.3	0.4	1.7
5/1	878	878	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1147	1147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	191	191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	356	356	-	-	-	1.1	0.7	-	1.8	17.8	4.4	0.7	5.1
8/2	175	175	-	-	-	0.6	0.2	-	0.8	15.5	1.8	0.2	2.0
9/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	93	93	-	-	-	0.7	0.2	-	0.9	35.7	1.4	0.2	1.6
10/2	202	202	-	-	-	1.0	1.1	-	2.1	37.1	3.1	1.1	4.1
11/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1121	1121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	111	111	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	411	411	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	168	168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**837**	**0**	**0**	**0.3**	**3.4**	**0.0**	**3.7**	**-**	**-**	**-**	**-**
1/1	426	426	426	0	0	0.0	2.9	-	2.9	24.9	0.4	2.9	3.3
2/1+2/2	401	401	-	-	-	0.0	0.1	-	0.1	1.3	0.0	0.1	0.1
3/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	186	186	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	759	759	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	411	411	411	0	0	0.3	0.4	-	0.6	5.4	5.3	0.4	5.7
6/2	168	168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

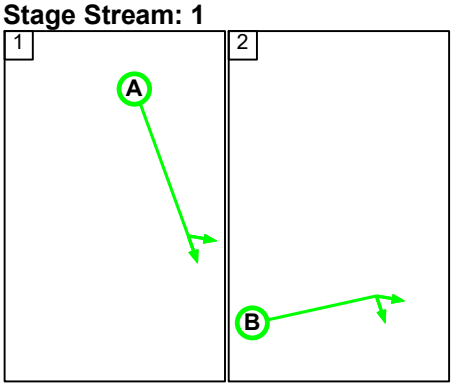
C1	Stream: 1 PRC for Signalled Lanes (%):	14.2	Total Delay for Signalled Lanes (pcuHr):	11.27	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-22.8	Total Delay for Signalled Lanes (pcuHr):	114.06	Cycle Time (s):	60
	PRC Over All Lanes (%):	-22.8	Total Delay Over All Lanes(pcuHr):	160.67		

Full Input Data And Results

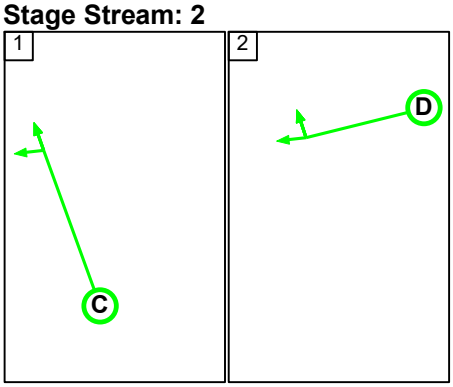
Scenario 10: '28RC 17:00-18:00' (FG80: '28RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

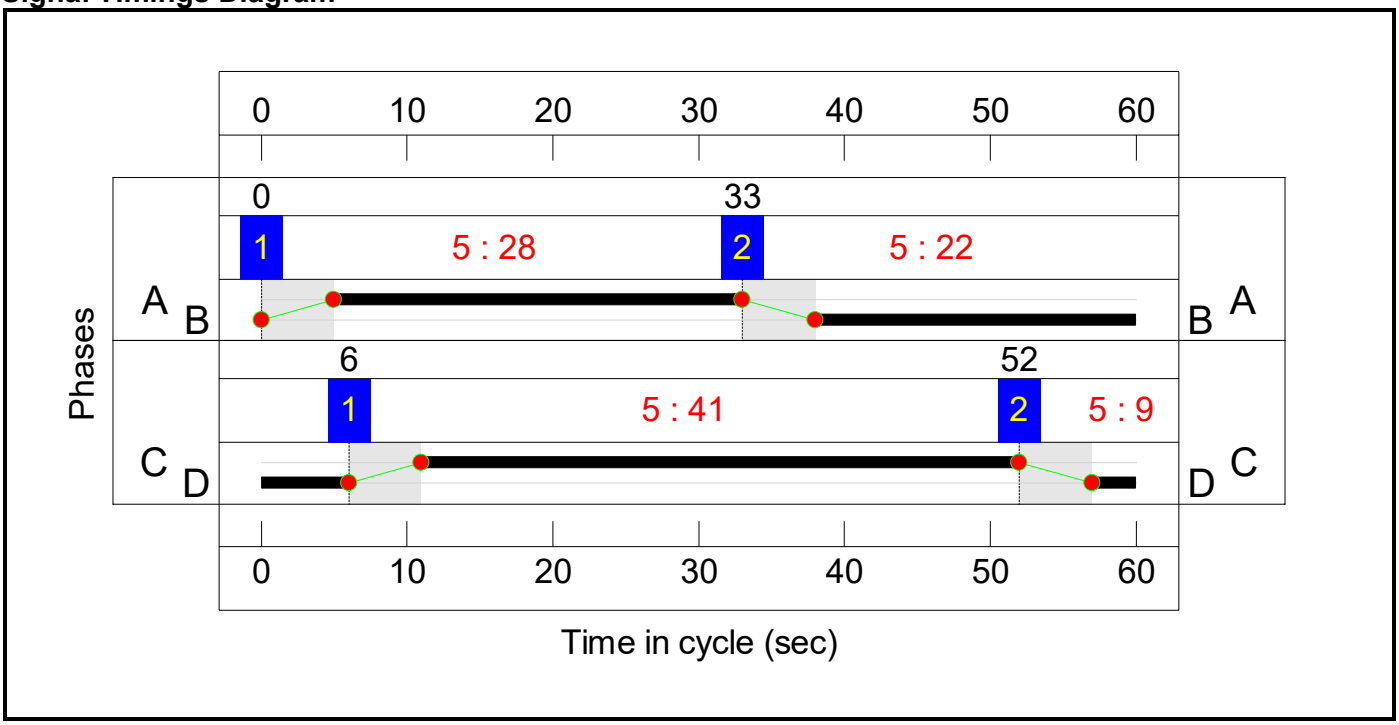
Stage	1	2
Duration	28	22
Change Point	0	33

Stage Stream: 2

Stage	1	2
Duration	41	9
Change Point	6	52

Full Input Data And Results

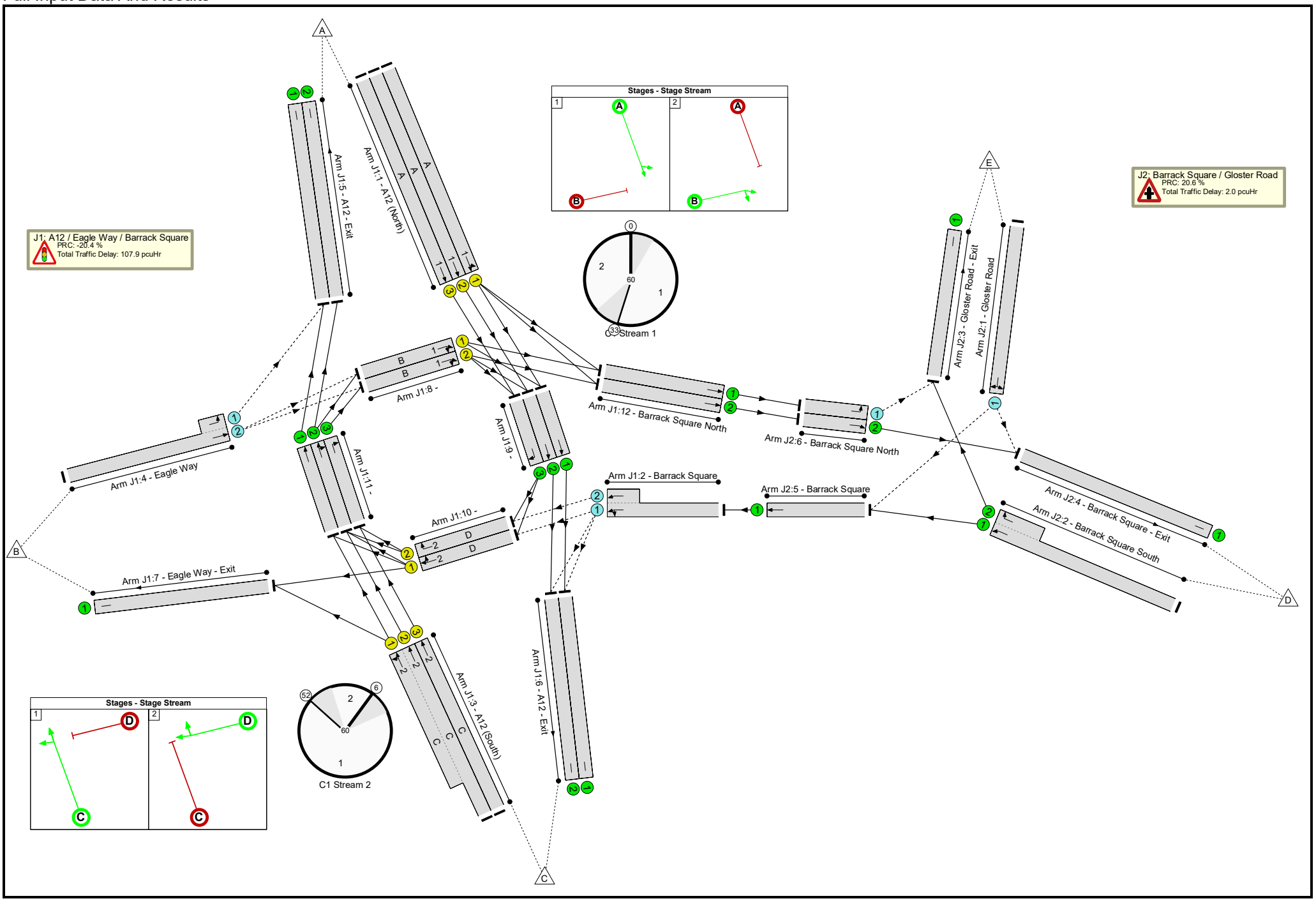
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.3%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.3%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	28	-	760	1853	896	84.9%
1/2	A12 (North) Ahead	U	1	N/A	A		1	28	-	811	1958	946	85.7%
1/3	A12 (North) Ahead	U	1	N/A	A		1	28	-	70	1828	884	7.9%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	761	1994:1862	516+186	108.3 : 108.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	41	-	1901	1828:1828	914+914	104.0 : 104.0%
3/3	A12 (South) Ahead	U	2	N/A	C		1	41	-	101	1828	1280	7.9%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	174	Inf :1821	380+141	33.4 : 33.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	914	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	863	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1170	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	22	-	306	1764	676	43.9%
8/2	Right Ahead	U	1	N/A	B		1	22	-	161	1764	676	23.8%
9/1	Ahead	U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	920	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	70	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	9	-	129	1764	294	42.3%
10/2	Right	U	2	N/A	D		1	9	-	202	1764	294	63.4%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1153	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	101	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	140	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.6%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	364	Inf	488	74.6%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	441	1800:1800	1649+151	24.5 : 24.5%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	147	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	761	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	365	Inf	988	36.0%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	140	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2473**	**0**	**0**	**18.9**	**91.0**	**0.0**	**109.9**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1753**	**0**	**0**	**18.8**	**89.1**	**0.0**	**107.9**	**-**	**-**	**-**	**-**
1/1	760	760	-	-	-	2.9	2.7	-	5.6	26.3	11.0	2.7	13.7
1/2	811	811	-	-	-	3.1	2.9	-	6.0	26.4	11.7	2.9	14.6
1/3	70	70	-	-	-	0.2	0.0	-	0.2	10.6	0.6	0.0	0.7
2/1+2/2	761	702	1405	0	0	4.0	34.7	-	38.7	183.0	25.0	34.7	59.7
3/2+3/1	1901	1828	-	-	-	5.5	46.7	-	52.2	98.8	41.1	46.7	87.7
3/3	101	101	-	-	-	0.1	0.0	-	0.1	4.4	0.5	0.0	0.6
4/2+4/1	174	174	348	0	0	0.2	0.3	-	0.4	8.6	0.9	0.3	1.2
5/1	814	814	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	871	871	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1151	1151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	271	271	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	297	297	-	-	-	0.7	0.4	-	1.1	13.8	3.2	0.4	3.6
8/2	161	161	-	-	-	0.5	0.2	-	0.6	13.8	1.6	0.2	1.7
9/1	613	613	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	920	920	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	70	70	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	124	124	-	-	-	0.9	0.4	-	1.3	38.0	1.9	0.4	2.2
10/2	186	186	-	-	-	0.9	0.9	-	1.7	33.4	2.7	0.9	3.6
11/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	101	101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	140	140	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**720**	**0**	**0**	**0.1**	**1.9**	**0.0**	**2.0**	**-**	**-**	**-**	**-**
1/1	364	364	364	0	0	0.0	1.4	-	1.4	14.2	0.0	1.4	1.4
2/1+2/2	441	441	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	147	147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	761	761	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	356	356	356	0	0	0.1	0.3	-	0.4	3.9	3.6	0.3	3.9
6/2	140	140	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

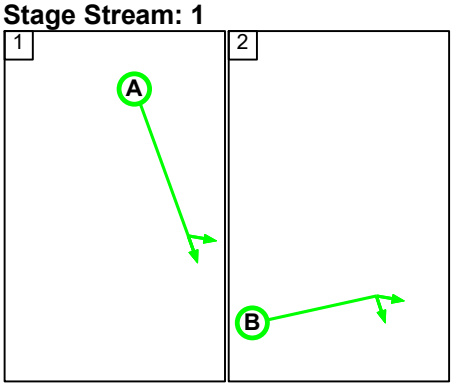
C1	Stream: 1 PRC for Signalled Lanes (%):	5.0	Total Delay for Signalled Lanes (pcuHr):	13.48	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-15.5	Total Delay for Signalled Lanes (pcuHr):	55.32	Cycle Time (s):	60
	PRC Over All Lanes (%):	-20.4	Total Delay Over All Lanes(pcuHr):	109.88		

Full Input Data And Results

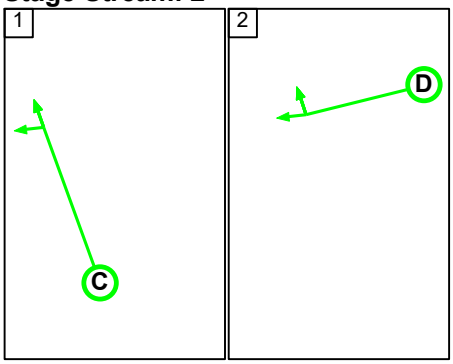
Scenario 11: '28PC 06:00-07:00' (FG81: '28PC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

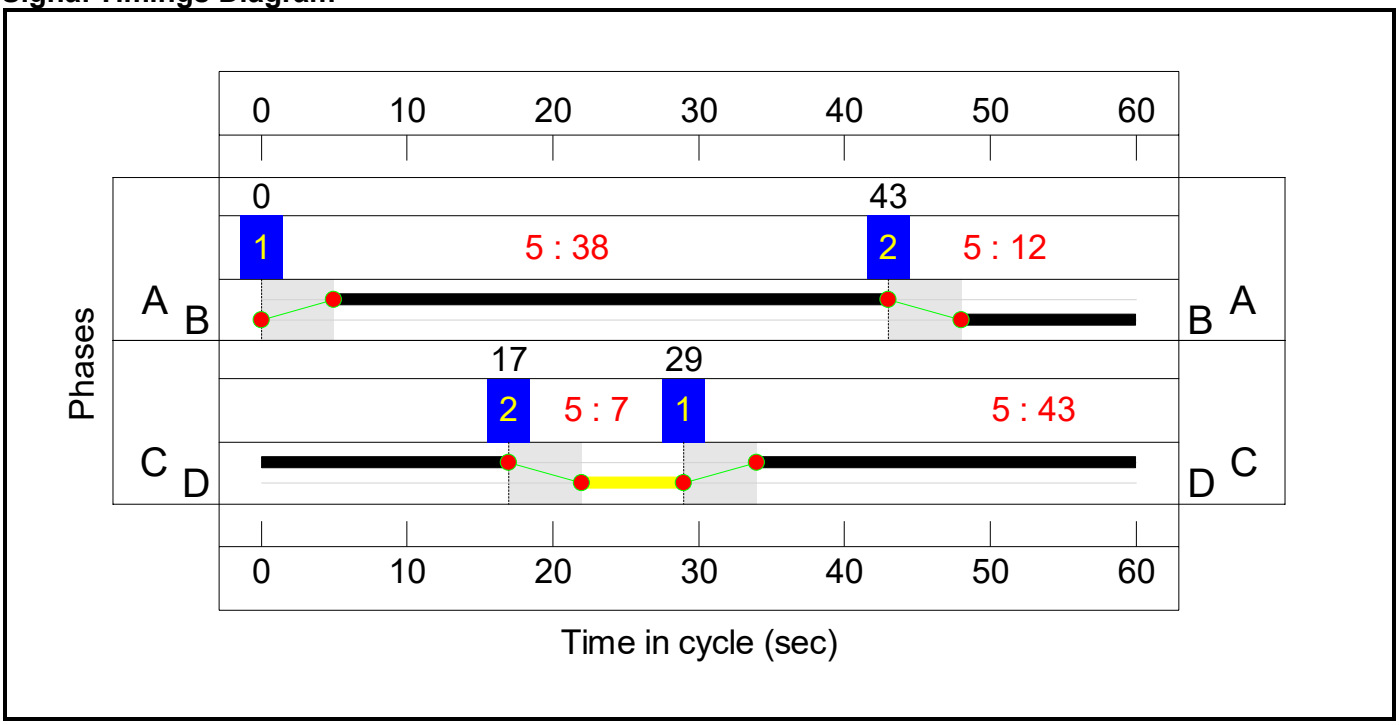
Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	29	17

Full Input Data And Results

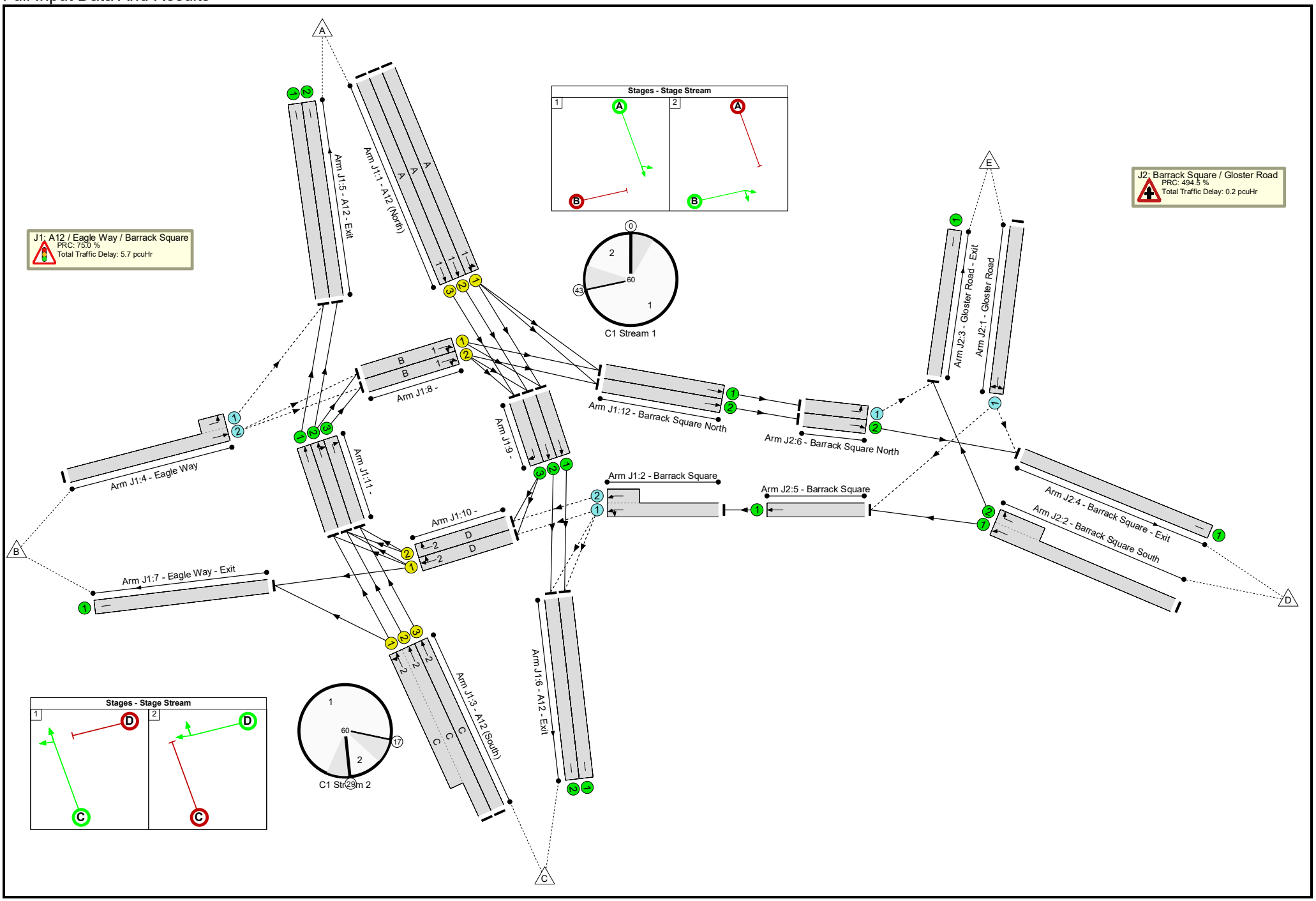
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**51.4%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**51.4%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	38	-	434	1842	1197	36.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	38	-	485	1958	1273	38.1%
1/3	A12 (North) Ahead	U	1	N/A	A		1	38	-	2	1828	1188	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	66	1994:1862	691+33	9.1 : 9.1%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	940	1828:1828	914+914	51.4 : 51.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	124	1828	1341	9.3%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	93	Inf :1821	657+147	11.6 : 11.6%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	437	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	562	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	12	-	148	1764	382	38.7%
8/2	Right Ahead	U	1	N/A	B		1	12	-	150	1764	382	39.2%
9/1	Ahead	U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	536	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	12	1764	235	5.1%
10/2	Right	U	2	N/A	D		1	7	-	3	1764	235	1.3%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	457	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	151	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	120	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**15.1%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	86	Inf	640	13.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	43	1800:1800	1507+293	2.4 : 2.4%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	158	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	176	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	151	Inf	997	15.1%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	120	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**555**	**0**	**0**	**3.7**	**2.1**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**318**	**0**	**0**	**3.7**	**2.0**	**0.0**	**5.7**	**-**	**-**	**-**	**-**
1/1	434	434	-	-	-	0.6	0.3	-	0.9	7.2	3.3	0.3	3.5
1/2	485	485	-	-	-	0.7	0.3	-	1.0	7.2	3.6	0.3	3.9
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.4	0.0	0.0	0.0
2/1+2/2	66	66	132	0	0	0.0	0.1	-	0.1	2.9	0.1	0.1	0.1
3/2+3/1	940	940	-	-	-	0.8	0.5	-	1.3	4.9	2.7	0.5	3.3
3/3	124	124	-	-	-	0.1	0.1	-	0.1	3.8	0.6	0.1	0.6
4/2+4/1	93	93	186	0	0	0.0	0.1	-	0.1	2.7	0.1	0.1	0.2
5/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	562	562	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	25	25	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	148	148	-	-	-	0.8	0.3	-	1.1	26.3	1.9	0.3	2.2
8/2	150	150	-	-	-	0.8	0.3	-	1.1	26.2	2.0	0.3	2.4
9/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	536	536	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	12	12	-	-	-	0.1	0.0	-	0.1	30.6	0.2	0.0	0.2
10/2	3	3	-	-	-	0.0	0.0	-	0.0	30.8	0.0	0.0	0.0
11/1	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	151	151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	120	120	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**237**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	86	86	86	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	43	43	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	158	158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	176	176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	151	151	151	0	0	0.0	0.1	-	0.1	2.2	0.9	0.1	1.0
6/2	120	120	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

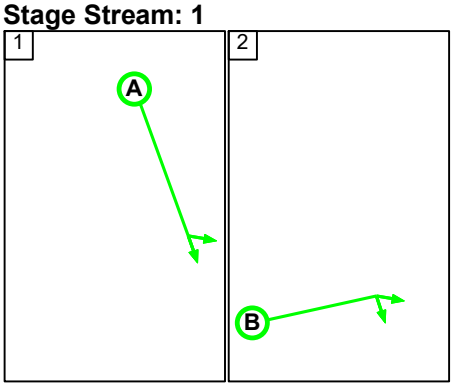
C1	Stream: 1 PRC for Signalled Lanes (%):	129.3	Total Delay for Signalled Lanes (pcuHr):	4.00	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	75.0	Total Delay for Signalled Lanes (pcuHr):	1.54	Cycle Time (s):	60
	PRC Over All Lanes (%):	75.0	Total Delay Over All Lanes(pcuHr):	5.85		

Full Input Data And Results

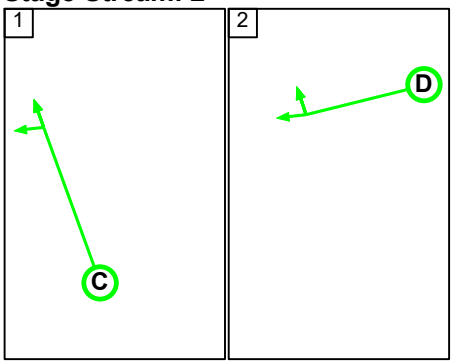
Scenario 12: '28PC 07:00-08:00' (FG82: '28PC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

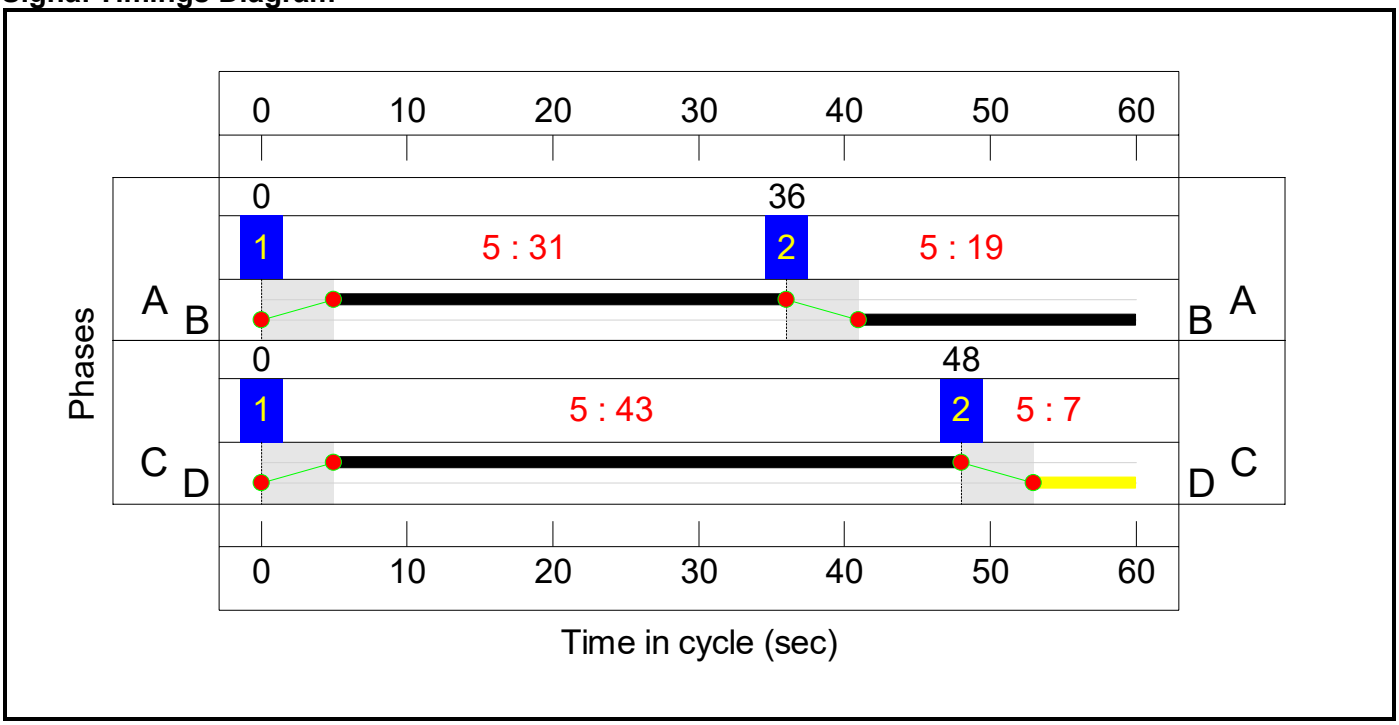
Stage	1	2
Duration	31	19
Change Point	0	36

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	0	48

Full Input Data And Results

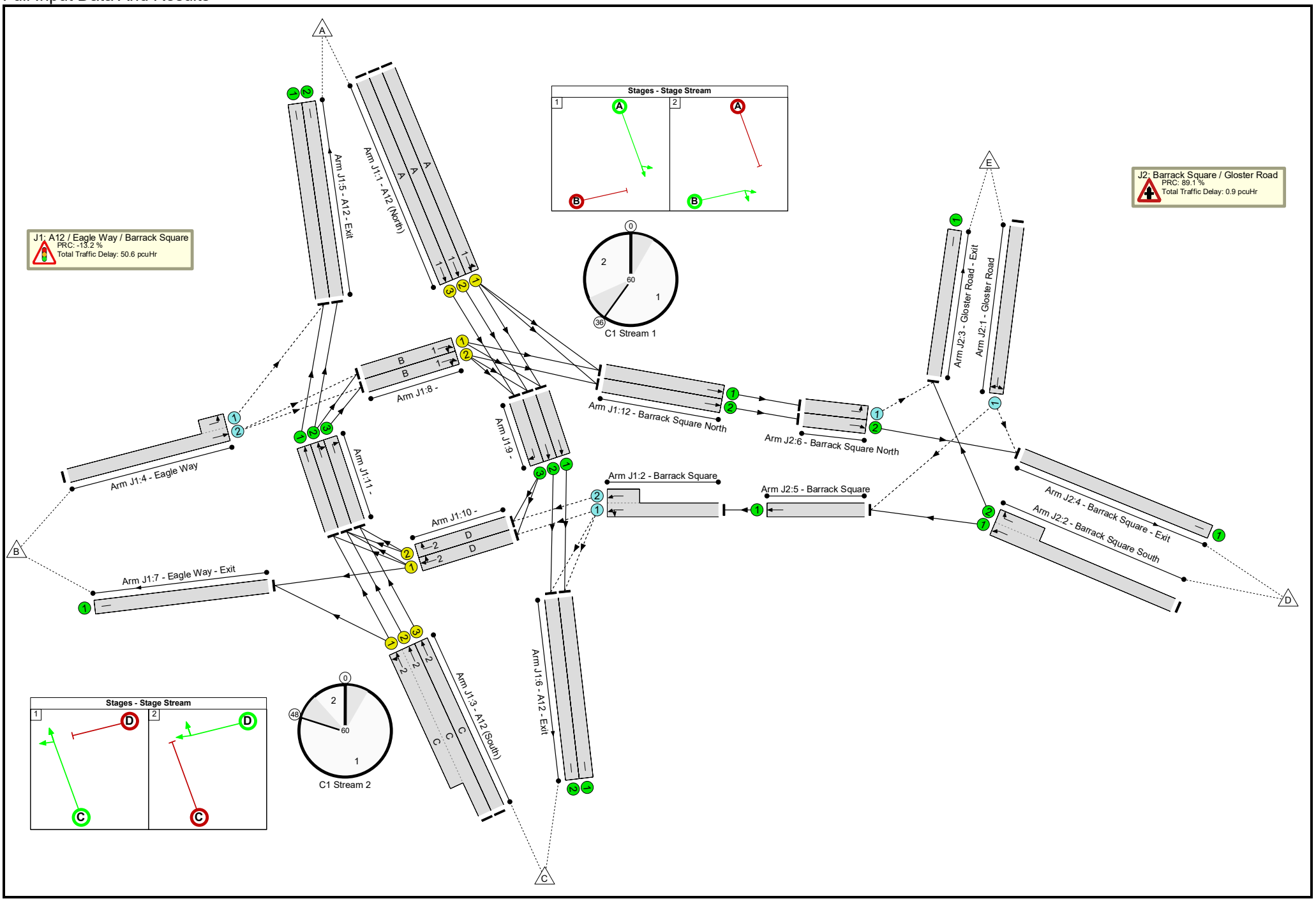
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	31	-	695	1840	981	70.8%
1/2	A12 (North) Ahead	U	1	N/A	A		1	31	-	753	1958	1044	72.1%
1/3	A12 (North) Ahead	U	1	N/A	A		1	31	-	4	1828	975	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	320	1994:1862	527+119	49.5 : 49.5%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1862	1828:1828	914+914	101.9 : 101.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	367	1828	1341	27.4%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	232	Inf :1821	338+98	53.2 : 53.2%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	967	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	740	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	797	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	953	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	19	-	390	1764	588	65.5%
8/2	Right Ahead	U	1	N/A	B		1	19	-	425	1764	588	72.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	693	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	850	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	58	1764	235	24.7%
10/2	Right	U	2	N/A	D		1	7	-	59	1764	235	25.1%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	915	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1008	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**47.6%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	246	Inf	517	47.6%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	127	1800:1800	1715+85	7.1 : 7.1%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	412	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	320	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	355	Inf	998	35.1%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1700**	**0**	**0**	**12.9**	**38.7**	**0.0**	**51.6**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1104**	**0**	**0**	**12.7**	**38.0**	**0.0**	**50.6**	**-**	**-**	**-**	**-**
1/1	695	695	-	-	-	2.0	1.2	-	3.2	16.7	8.5	1.2	9.7
1/2	753	753	-	-	-	2.2	1.3	-	3.5	16.7	9.4	1.3	10.7
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.6	0.0	0.0	0.0
2/1+2/2	320	320	640	0	0	0.4	0.5	-	0.9	9.8	2.3	0.5	2.8
3/2+3/1	1862	1828	-	-	-	3.4	31.7	-	35.1	67.9	40.8	31.7	72.5
3/3	367	367	-	-	-	0.3	0.2	-	0.5	4.5	2.0	0.2	2.2
4/2+4/1	232	232	464	0	0	0.4	0.6	-	1.0	15.2	2.2	0.6	2.8
5/1	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	728	728	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	797	797	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	953	953	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	385	385	-	-	-	1.5	0.9	-	2.4	22.6	5.2	0.9	6.1
8/2	425	425	-	-	-	1.8	1.3	-	3.1	26.0	6.1	1.3	7.4
9/1	693	693	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	850	850	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	58	58	-	-	-	0.3	0.2	-	0.5	29.4	0.8	0.2	1.0
10/2	59	59	-	-	-	0.3	0.2	-	0.5	31.2	0.9	0.2	1.0
11/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	350	350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**596**	**0**	**0**	**0.2**	**0.8**	**0.0**	**0.9**	**-**	**-**	**-**	**-**
1/1	246	246	246	0	0	0.0	0.5	-	0.5	6.6	0.0	0.5	0.5
2/1+2/2	127	127	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	412	412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	320	320	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	350	350	350	0	0	0.2	0.3	-	0.4	4.6	4.6	0.3	4.9
6/2	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

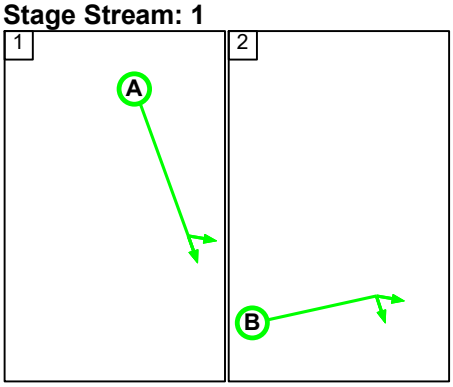
C1	Stream: 1 PRC for Signalled Lanes (%):	24.5	Total Delay for Signalled Lanes (pcuHr):	12.23	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-13.2	Total Delay for Signalled Lanes (pcuHr):	36.57	Cycle Time (s): 60
	PRC Over All Lanes (%):	-13.2	Total Delay Over All Lanes(pcuHr):	51.59	

Full Input Data And Results

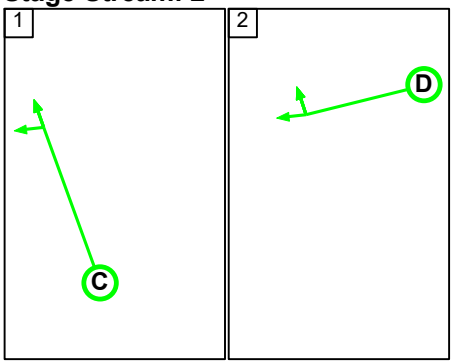
Scenario 13: '28PC 08:00-09:00' (FG83: '28PC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

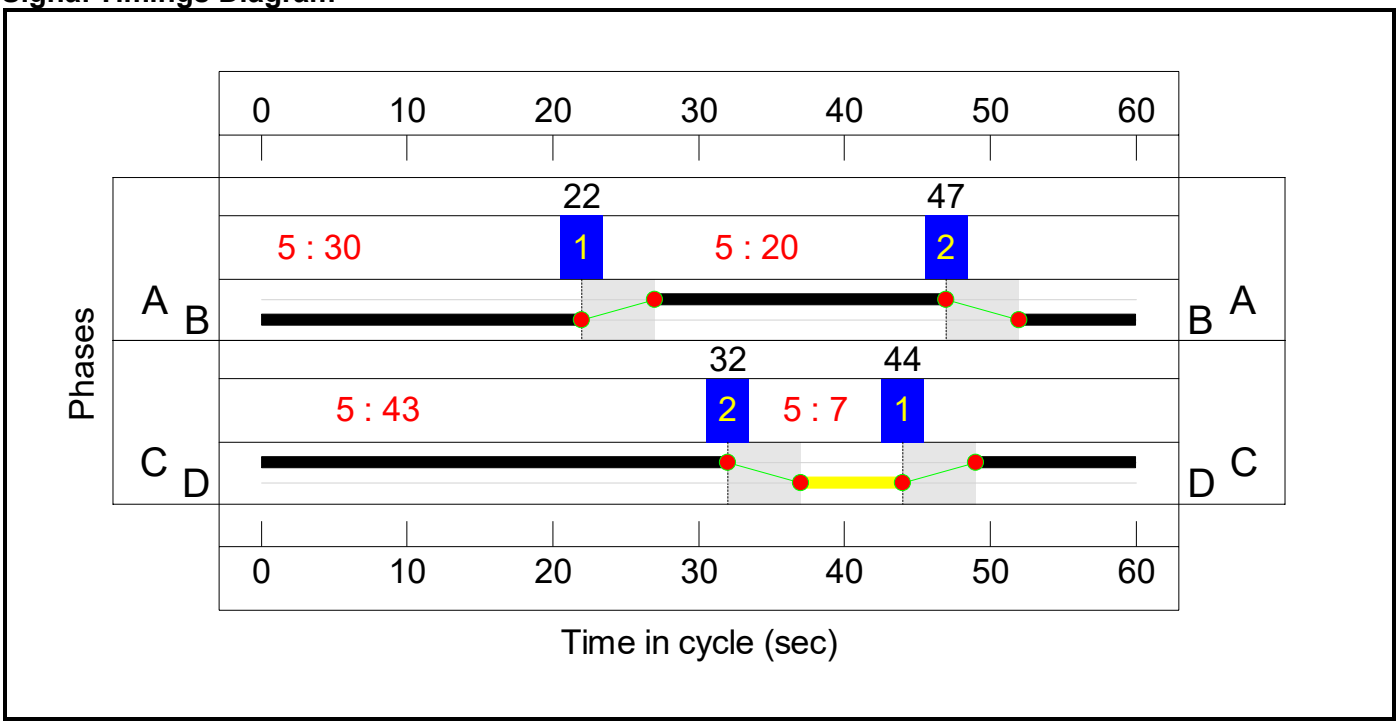
Stage	1	2
Duration	20	30
Change Point	22	47

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	44	32

Full Input Data And Results

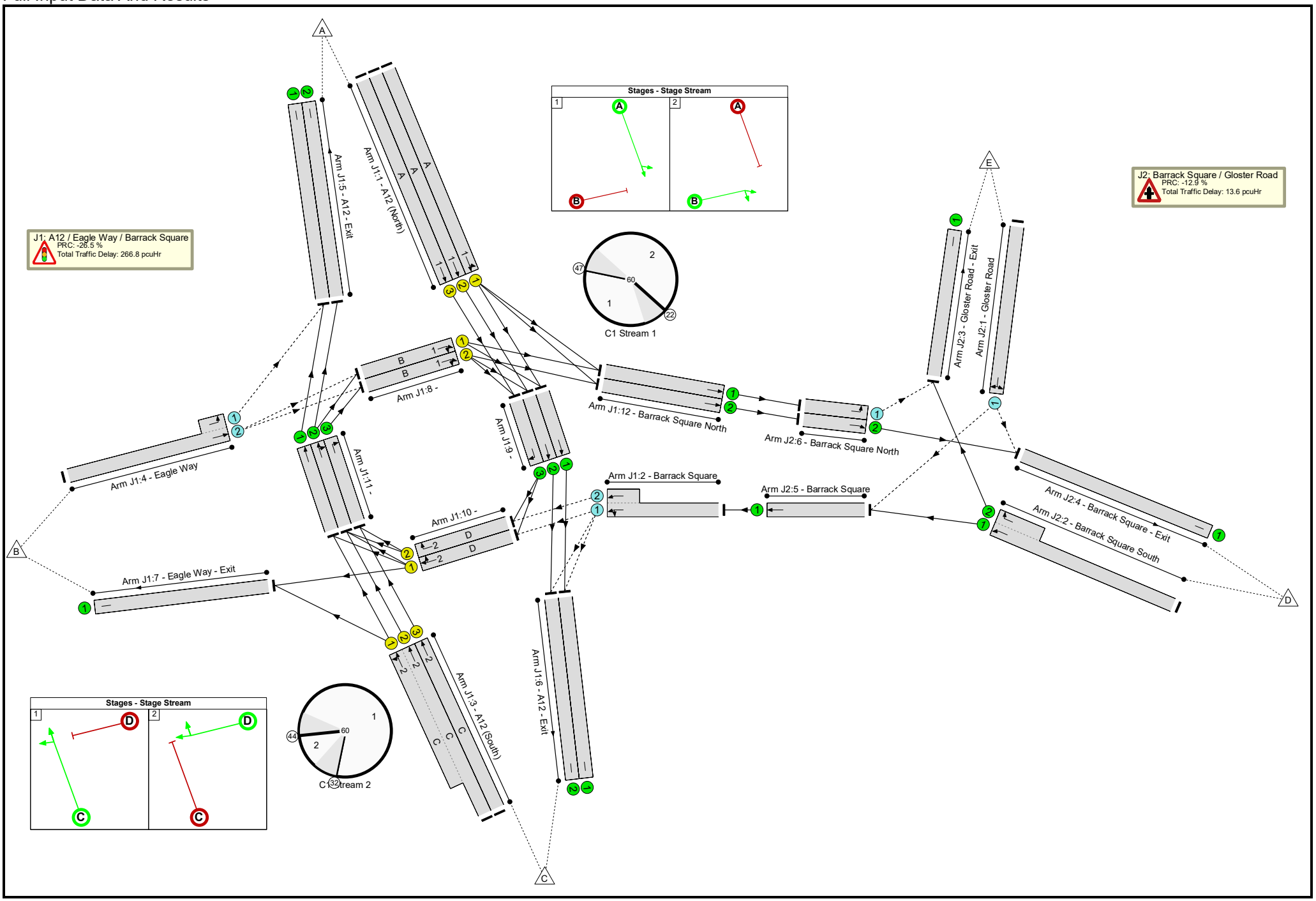
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**113.8%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**113.8%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	20	-	730	1844	645	113.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	20	-	780	1958	685	113.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	20	-	22	1828	640	3.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	627	1994:1862	568+89	94.4 : 95.2%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2075	1828:1828	916+912	113.5 : 113.5%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	597	1828	1341	44.5%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	256	Inf :1821	275+84	71.2 : 71.2%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1072	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	871	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	904	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1106	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	30	-	415	1764	911	41.5%
8/2	Right Ahead	U	1	N/A	B		1	30	-	687	1764	911	75.4%
9/1	Ahead	U	N/A	N/A	-		-	-	-	700	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	902	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	156	1764	235	66.1%
10/2	Right	U	2	N/A	D		1	7	-	85	1764	235	36.1%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1012	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1180	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	389	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**101.6%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	441	Inf	434	101.6%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	272	1800:1800	1734+66	15.1 : 15.1%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	627	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	389	Inf	996	35.0%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2537**	**0**	**0**	**31.6**	**248.8**	**0.0**	**280.4**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1754**	**0**	**0**	**30.8**	**236.0**	**0.0**	**266.8**	**-**	**-**	**-**	**-**
1/1	730	645	-	-	-	5.9	46.2	-	52.1	257.0	13.6	46.2	59.8
1/2	780	685	-	-	-	6.4	51.2	-	57.5	265.5	14.6	51.2	65.7
1/3	22	22	-	-	-	0.1	0.0	-	0.1	15.9	0.2	0.0	0.3
2/1+2/2	621	621	1242	0	0	1.9	6.3	-	8.2	47.7	8.2	6.3	14.6
3/2+3/1	2075	1828	-	-	-	11.4	127.6	-	139.0	241.1	50.4	127.6	177.9
3/3	597	597	-	-	-	0.5	0.4	-	0.9	5.6	3.8	0.4	4.2
4/2+4/1	256	256	512	0	0	0.7	1.2	-	1.9	26.2	2.8	1.2	4.0
5/1	958	958	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	784	784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	827	827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1009	1009	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	114	114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	378	378	-	-	-	0.9	0.4	-	1.3	12.2	3.5	0.4	3.8
8/2	687	687	-	-	-	1.8	1.5	-	3.3	17.5	7.9	1.5	9.4
9/1	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	807	807	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	155	155	-	-	-	0.7	1.0	-	1.7	38.9	2.5	1.0	3.5
10/2	85	85	-	-	-	0.5	0.3	-	0.8	33.9	1.3	0.3	1.6
11/1	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1056	1056	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	348	348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**782**	**0**	**0**	**0.8**	**12.7**	**0.0**	**13.6**	**-**	**-**	**-**	**-**
1/1	441	434	434	0	0	0.8	12.4	-	13.2	107.7	21.8	12.4	34.2
2/1+2/2	272	272	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
3/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	348	348	348	0	0	0.0	0.3	-	0.3	3.0	2.1	0.3	2.4
6/2	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

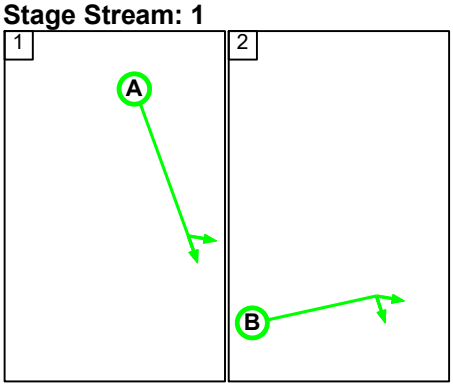
C1	Stream: 1 PRC for Signalled Lanes (%):	-26.5	Total Delay for Signalled Lanes (pcuHr):	114.35	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-26.1	Total Delay for Signalled Lanes (pcuHr):	142.37	Cycle Time (s): 60
	PRC Over All Lanes (%):	-26.5	Total Delay Over All Lanes(pcuHr):	280.38	

Full Input Data And Results

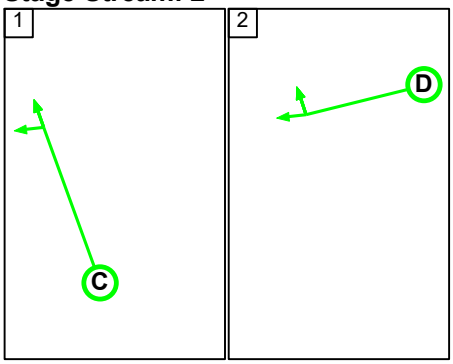
Scenario 14: '28PC 15:00-16:00' (FG84: '28PC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

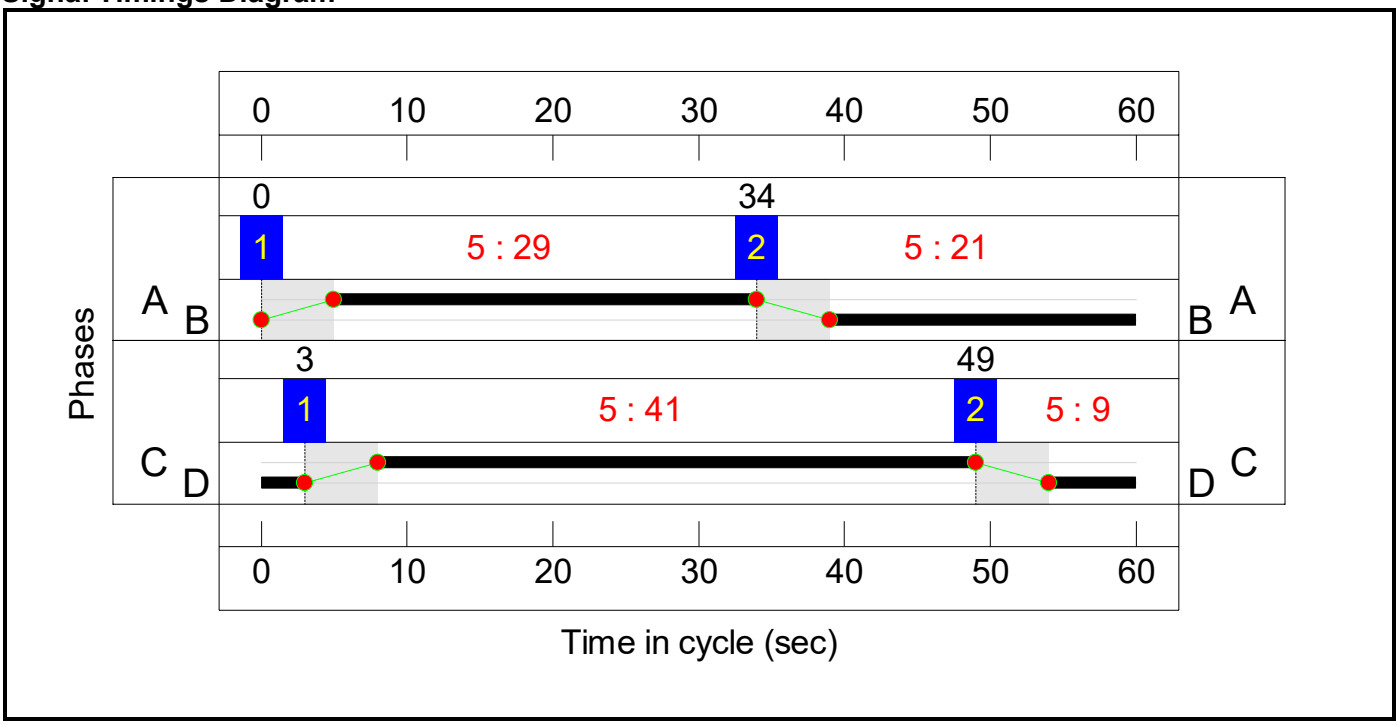
Stage	1	2
Duration	29	21
Change Point	0	34

Stage Stream: 2

Stage	1	2
Duration	41	9
Change Point	3	49

Full Input Data And Results

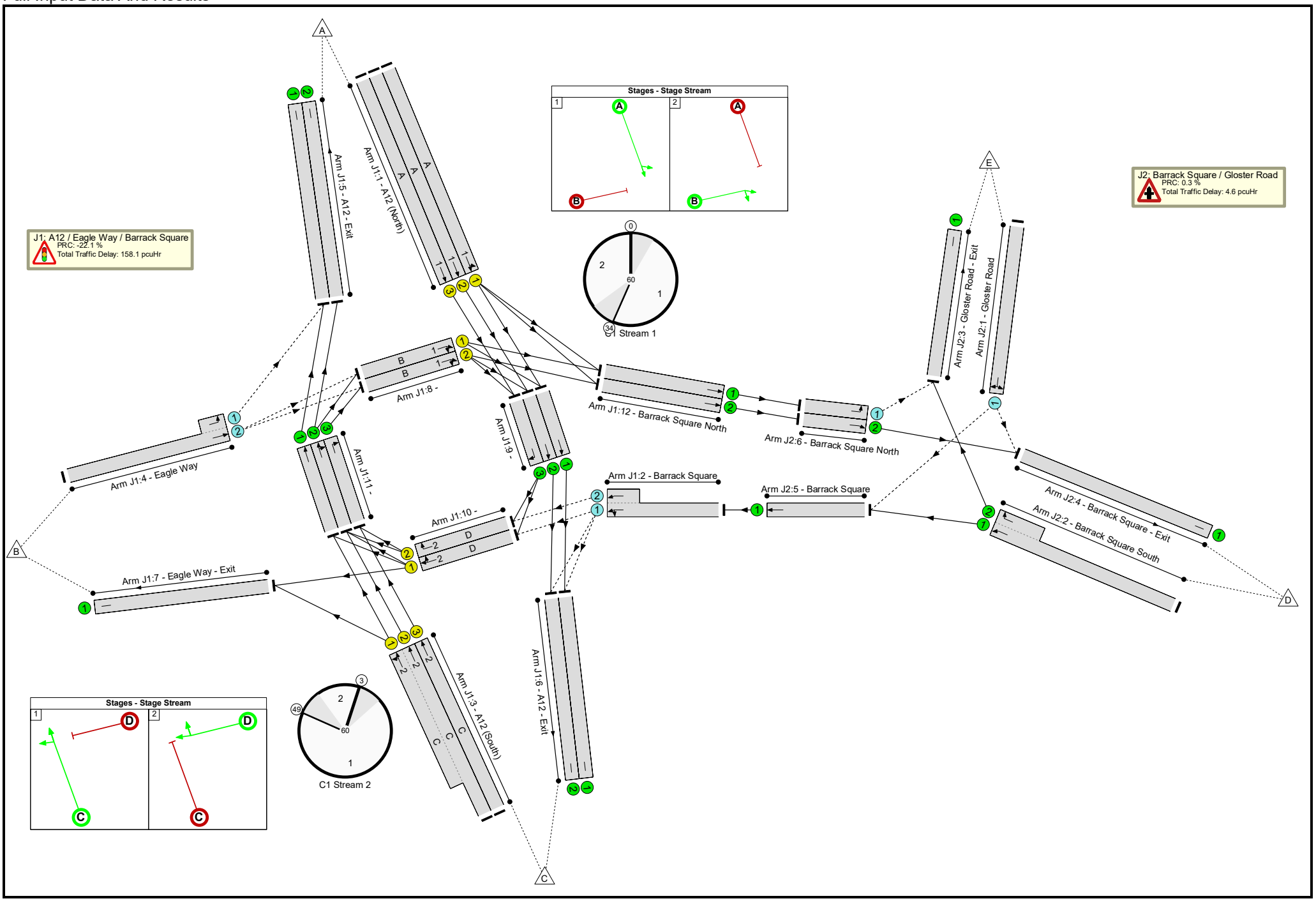
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	29	-	735	1856	928	79.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	29	-	785	1958	979	80.2%
1/3	A12 (North) Ahead	U	1	N/A	A		1	29	-	56	1828	914	6.1%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	780	1994:1862	529+195	107.7 : 107.7%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	41	-	2009	1828:1828	918+910	109.9 : 109.9%
3/3	A12 (South) Ahead	U	2	N/A	C		1	41	-	121	1828	1280	9.5%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	224	Inf :1821	364+152	43.4 : 43.4%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	958	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	915	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1161	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	205	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	21	-	395	1764	647	56.8%
8/2	Right Ahead	U	1	N/A	B		1	21	-	188	1764	647	29.1%
9/1	Ahead	U	N/A	N/A	-		-	-	-	578	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	897	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	9	-	97	1764	294	32.0%
10/2	Right	U	2	N/A	D		1	9	-	210	1764	294	66.8%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	892	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1219	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	121	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	439	Inf	489	89.7%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	411	1800:1800	1577+223	22.8 : 22.8%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	453	Inf	983	43.3%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2764**	**0**	**0**	**22.6**	**140.1**	**0.0**	**162.7**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1899**	**0**	**0**	**22.3**	**135.8**	**0.0**	**158.1**	**-**	**-**	**-**	**-**
1/1	735	735	-	-	-	2.5	1.9	-	4.4	21.6	10.0	1.9	11.9
1/2	785	785	-	-	-	2.7	2.0	-	4.7	21.6	10.9	2.0	12.9
1/3	56	56	-	-	-	0.1	0.0	-	0.2	9.8	0.5	0.0	0.5
2/1+2/2	780	726	1451	0	0	3.7	33.7	-	37.4	172.7	25.7	33.7	59.3
3/2+3/1	2009	1828	-	-	-	9.5	95.7	-	105.3	188.6	44.4	95.7	140.1
3/3	121	121	-	-	-	0.1	0.1	-	0.2	4.5	0.6	0.1	0.7
4/2+4/1	224	224	448	0	0	0.3	0.4	-	0.7	10.6	1.4	0.4	1.8
5/1	878	878	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1142	1142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	368	368	-	-	-	1.0	0.7	-	1.7	16.6	4.5	0.7	5.1
8/2	188	188	-	-	-	0.6	0.2	-	0.8	14.6	1.8	0.2	2.0
9/1	578	578	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	897	897	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	94	94	-	-	-	0.7	0.2	-	0.9	35.4	1.4	0.2	1.7
10/2	196	196	-	-	-	1.0	1.0	-	2.0	36.8	2.8	1.0	3.8
11/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1115	1115	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**865**	**0**	**0**	**0.3**	**4.3**	**0.0**	**4.6**	**-**	**-**	**-**	**-**
1/1	439	439	439	0	0	0.0	3.8	-	3.8	31.2	0.7	3.8	4.5
2/1+2/2	411	411	-	-	-	0.0	0.1	-	0.1	1.3	0.0	0.1	0.1
3/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	426	426	426	0	0	0.3	0.4	-	0.6	5.5	5.5	0.4	5.9
6/2	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

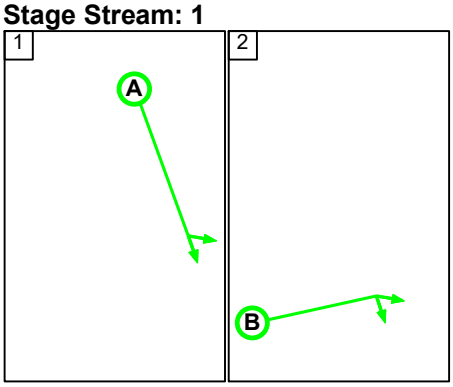
C1	Stream: 1 PRC for Signalled Lanes (%):	12.2	Total Delay for Signalled Lanes (pcuHr):	11.72	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-22.1	Total Delay for Signalled Lanes (pcuHr):	108.33	Cycle Time (s):	60
	PRC Over All Lanes (%):	-22.1	Total Delay Over All Lanes(pcuHr):	162.73		

Full Input Data And Results

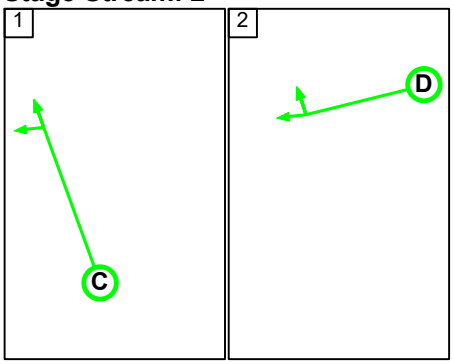
Scenario 15: '28PC 17:00-18:00' (FG85: '28PC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

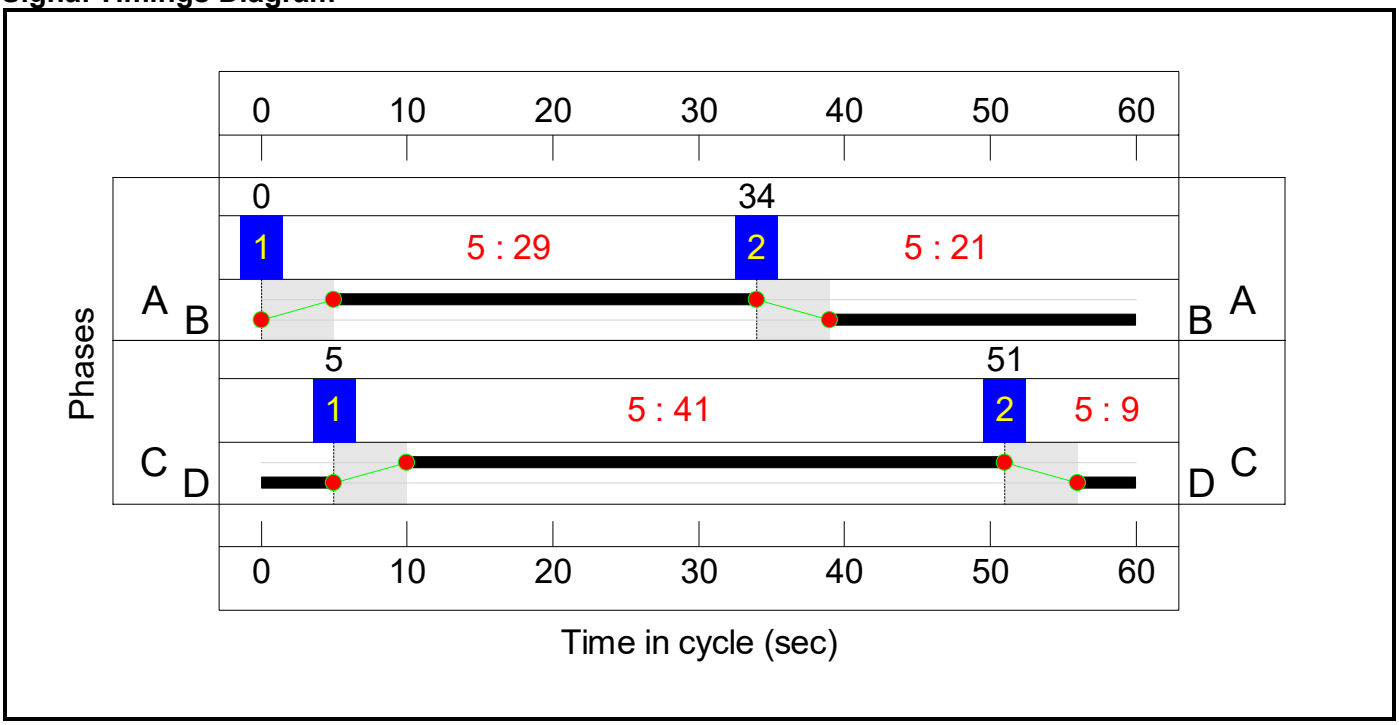
Stage	1	2
Duration	29	21
Change Point	0	34

Stage Stream: 2

Stage	1	2
Duration	41	9
Change Point	5	51

Full Input Data And Results

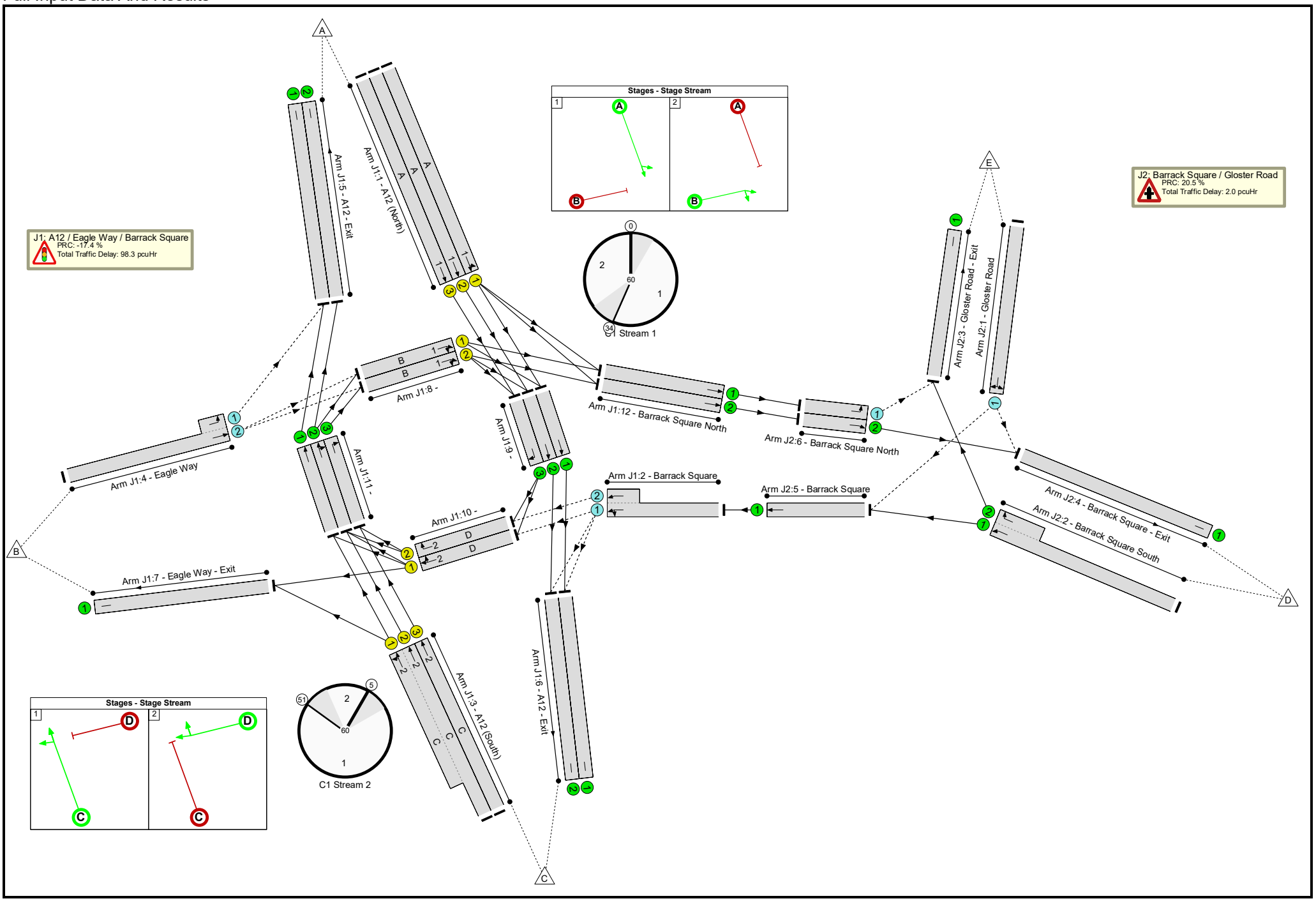
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**105.7%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**105.7%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	29	-	732	1854	927	79.0%
1/2	A12 (North) Ahead	U	1	N/A	A		1	29	-	783	1958	979	80.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	29	-	70	1828	914	7.7%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	761	1994:1862	528+192	105.7 : 105.7%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	41	-	1902	1828:1828	914+914	104.0 : 104.0%
3/3	A12 (South) Ahead	U	2	N/A	C		1	41	-	99	1828	1280	7.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	174	Inf :1821	376+139	33.8 : 33.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	914	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	837	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1140	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	21	-	307	1764	647	46.0%
8/2	Right Ahead	U	1	N/A	B		1	21	-	159	1764	647	24.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	891	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	70	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	9	-	129	1764	294	42.8%
10/2	Right	U	2	N/A	D		1	9	-	203	1764	294	68.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	799	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1154	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	99	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	137	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.7%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	365	Inf	489	74.7%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	440	1800:1800	1649+151	24.4 : 24.4%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	144	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	761	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	366	Inf	988	36.1%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	137	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2526**	**0**	**0**	**17.8**	**82.5**	**0.0**	**100.3**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1804**	**0**	**0**	**17.7**	**80.6**	**0.0**	**98.3**	**-**	**-**	**-**	**-**
1/1	732	732	-	-	-	2.5	1.8	-	4.4	21.5	10.0	1.8	11.8
1/2	783	783	-	-	-	2.7	2.0	-	4.7	21.5	10.7	2.0	12.6
1/3	70	70	-	-	-	0.2	0.0	-	0.2	10.0	0.6	0.0	0.6
2/1+2/2	761	728	1456	0	0	3.3	27.4	-	30.7	145.2	25.6	27.4	53.0
3/2+3/1	1902	1828	-	-	-	5.5	47.1	-	52.6	99.6	41.1	47.1	88.2
3/3	99	99	-	-	-	0.1	0.0	-	0.1	4.4	0.5	0.0	0.6
4/2+4/1	174	174	348	0	0	0.2	0.3	-	0.4	8.7	0.9	0.3	1.2
5/1	815	815	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	883	883	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1127	1127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	298	298	-	-	-	0.8	0.4	-	1.2	14.8	3.4	0.4	3.9
8/2	159	159	-	-	-	0.5	0.2	-	0.6	14.4	1.6	0.2	1.7
9/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	891	891	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	70	70	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	126	126	-	-	-	0.9	0.4	-	1.3	37.6	1.9	0.4	2.3
10/2	200	200	-	-	-	1.0	1.0	-	2.0	36.3	3.0	1.0	4.1
11/1	768	768	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1114	1114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	99	99	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	137	137	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**722**	**0**	**0**	**0.1**	**1.9**	**0.0**	**2.0**	**-**	**-**	**-**	**-**
1/1	365	365	365	0	0	0.0	1.4	-	1.4	14.2	0.0	1.4	1.4
2/1+2/2	440	440	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/1	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	144	144	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	761	761	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	357	357	357	0	0	0.1	0.3	-	0.4	4.1	3.9	0.3	4.1
6/2	137	137	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

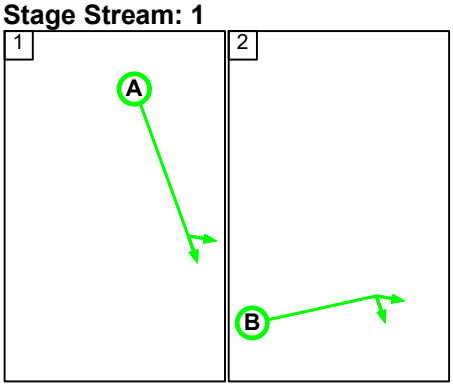
C1	Stream: 1 PRC for Signalled Lanes (%):	12.5	Total Delay for Signalled Lanes (pcuHr):	11.10	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-15.6	Total Delay for Signalled Lanes (pcuHr):	56.06	Cycle Time (s): 60
	PRC Over All Lanes (%):	-17.4	Total Delay Over All Lanes(pcuHr):	100.27	

Full Input Data And Results

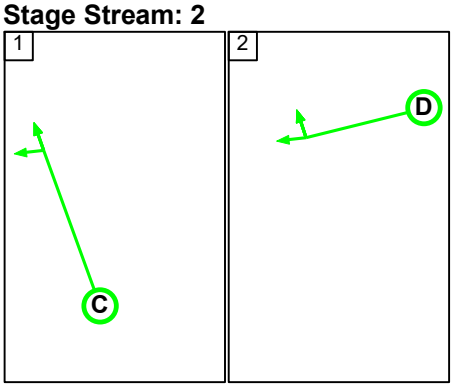
Scenario 16: '34RC 06:00-07:00' (FG86: '34RC 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

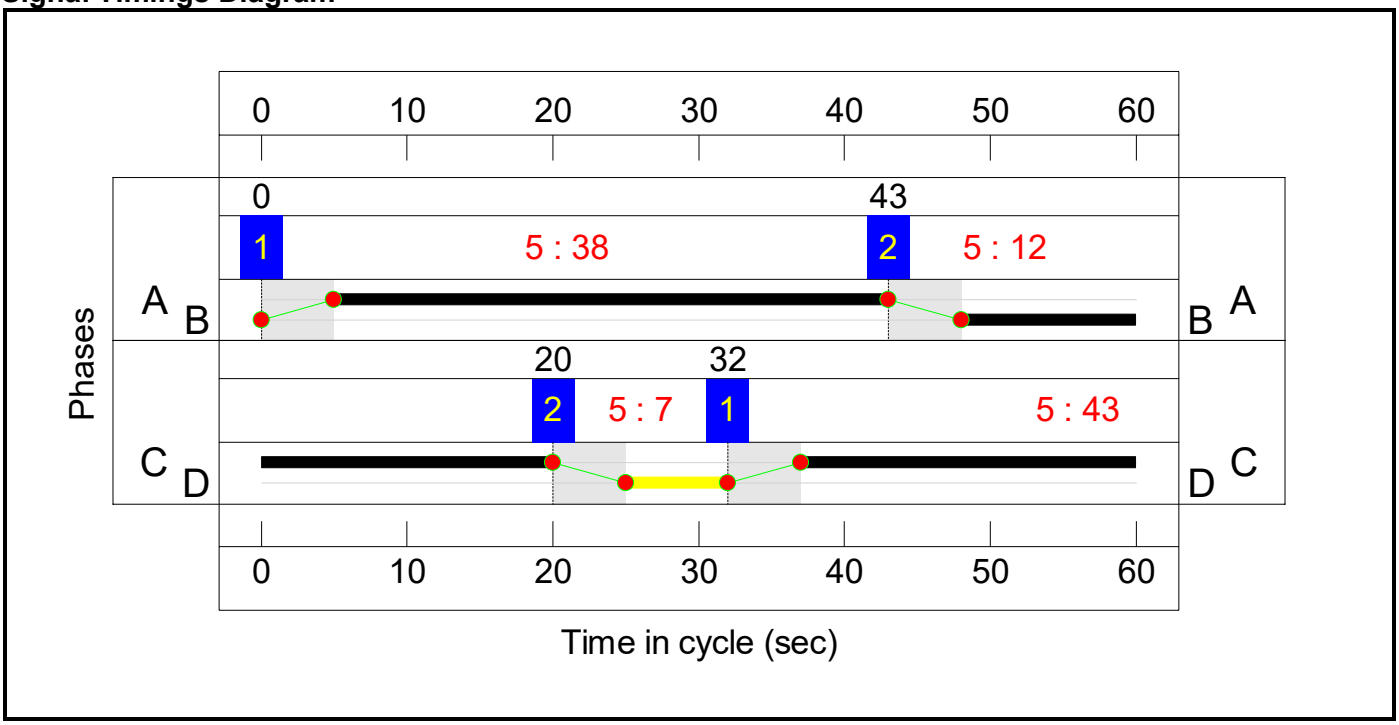
Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	32	20

Full Input Data And Results

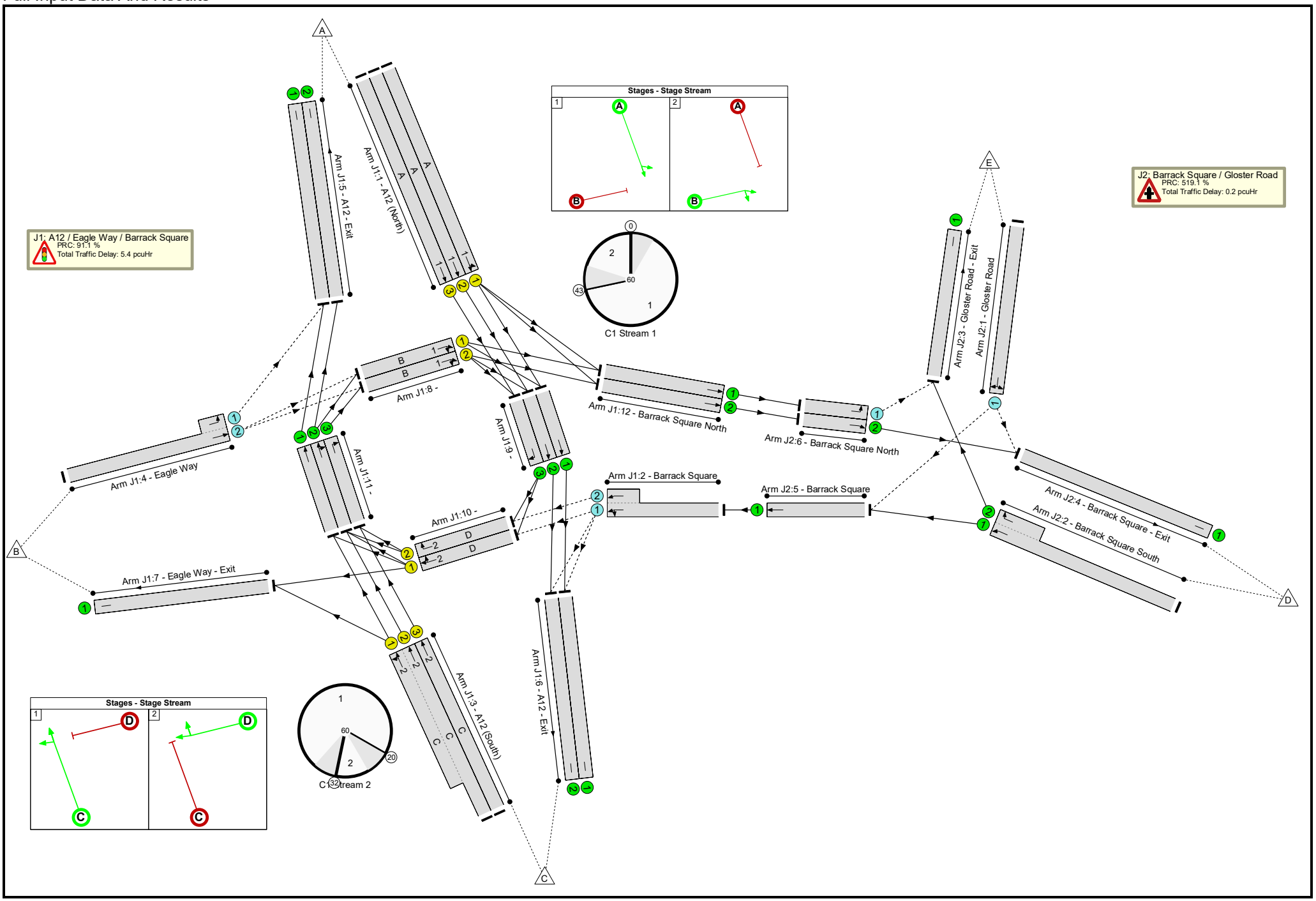
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.1%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.1%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	38	-	443	1841	1197	37.0%
1/2	A12 (North) Ahead	U	1	N/A	A		1	38	-	495	1958	1273	38.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	38	-	2	1828	1188	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	62	1994:1862	685+35	8.6 : 8.6%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	861	1828:1828	915+913	47.1 : 47.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	117	1828	1341	8.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	92	Inf :1821	684+166	10.8 : 10.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	570	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	12	-	141	1764	382	36.9%
8/2	Right Ahead	U	1	N/A	B		1	12	-	144	1764	382	37.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	11	1764	235	4.7%
10/2	Right	U	2	N/A	D		1	7	-	3	1764	235	1.3%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	417	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	117	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	82	Inf	643	12.8%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	41	1800:1800	1493+307	2.3 : 2.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	62	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	145	Inf	997	14.5%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**535**	**0**	**0**	**3.6**	**2.0**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**308**	**0**	**0**	**3.6**	**1.8**	**0.0**	**5.4**	**-**	**-**	**-**	**-**
1/1	443	443	-	-	-	0.6	0.3	-	0.9	7.2	3.3	0.3	3.6
1/2	495	495	-	-	-	0.7	0.3	-	1.0	7.2	3.9	0.3	4.2
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.4	0.0	0.0	0.0
2/1+2/2	62	62	124	0	0	0.0	0.0	-	0.1	2.9	0.1	0.0	0.1
3/2+3/1	861	861	-	-	-	0.7	0.4	-	1.1	4.7	2.4	0.4	2.8
3/3	117	117	-	-	-	0.1	0.0	-	0.1	3.8	0.6	0.0	0.6
4/2+4/1	92	92	184	0	0	0.0	0.1	-	0.1	2.5	0.1	0.1	0.1
5/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	24	24	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	141	141	-	-	-	0.7	0.3	-	1.0	26.6	1.7	0.3	2.0
8/2	144	144	-	-	-	0.7	0.3	-	1.1	26.3	1.8	0.3	2.1
9/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	11	11	-	-	-	0.1	0.0	-	0.1	30.2	0.2	0.0	0.2
10/2	3	3	-	-	-	0.0	0.0	-	0.0	30.6	0.0	0.0	0.0
11/1	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	117	117	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**227**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	82	82	82	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	41	41	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	62	62	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	145	145	145	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

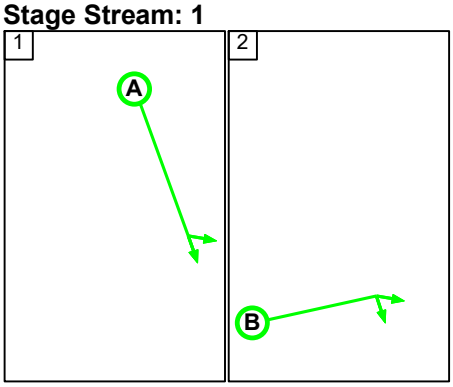
C1	Stream: 1 PRC for Signalled Lanes (%):	131.4	Total Delay for Signalled Lanes (pcuHr):	3.98	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	91.1	Total Delay for Signalled Lanes (pcuHr):	1.35	Cycle Time (s):	60
	PRC Over All Lanes (%):	91.1	Total Delay Over All Lanes(pcuHr):	5.62		

Full Input Data And Results

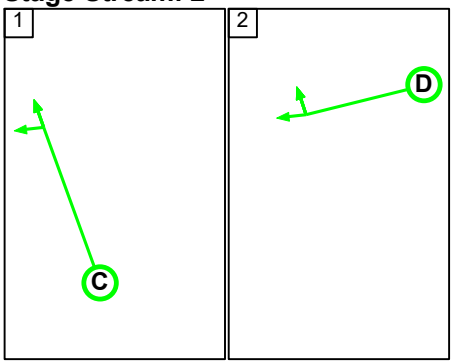
Scenario 17: '34RC 07:00-08:00' (FG87: '34RC 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

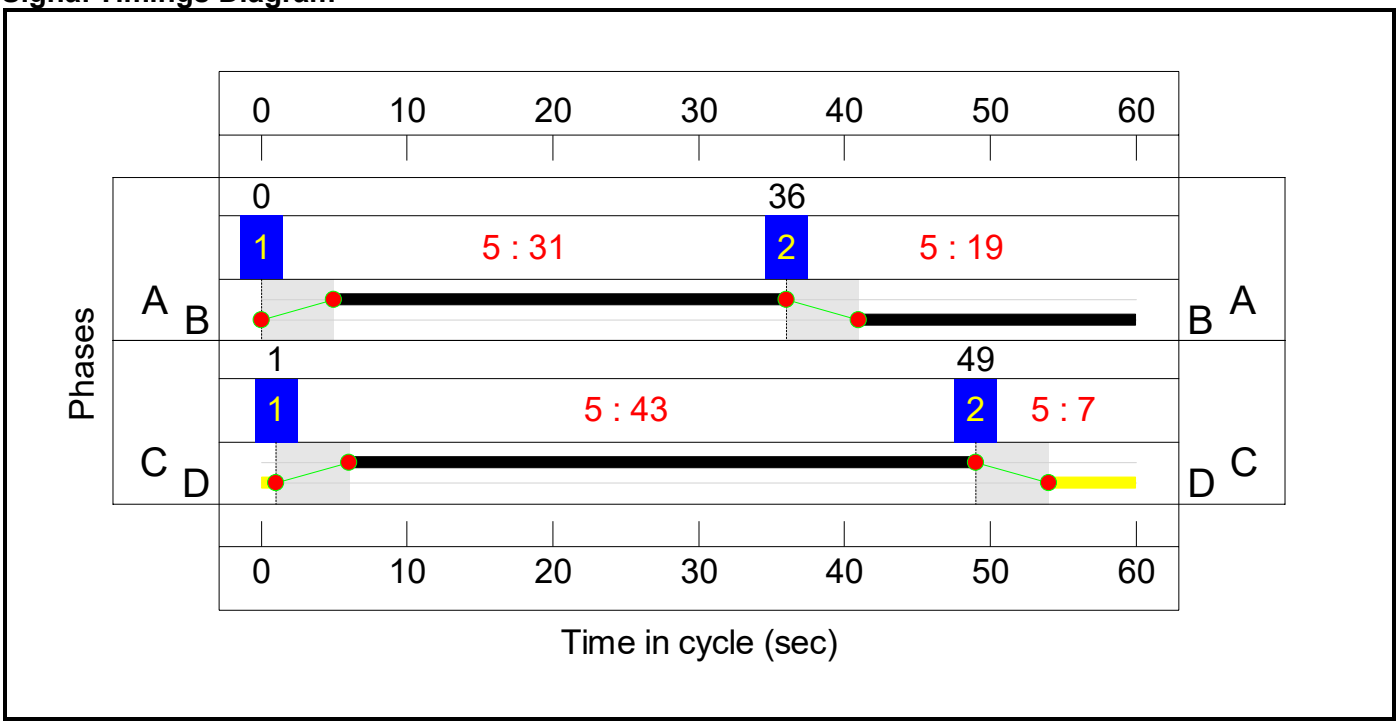
Stage	1	2
Duration	31	19
Change Point	0	36

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	1	49

Full Input Data And Results

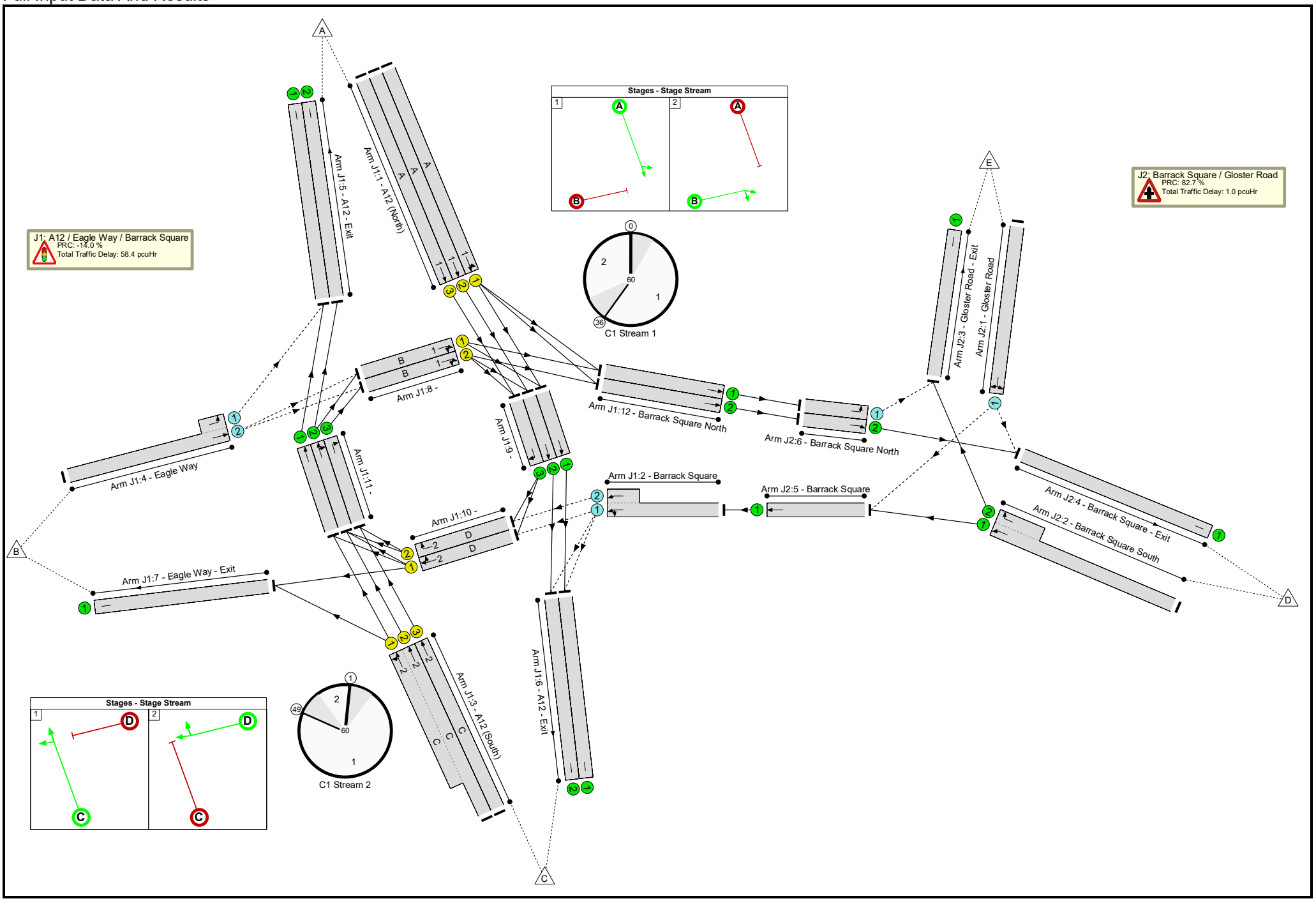
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.6%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.6%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	31	-	731	1840	981	74.5%
1/2	A12 (North) Ahead	U	1	N/A	A		1	31	-	790	1958	1044	75.7%
1/3	A12 (North) Ahead	U	1	N/A	A		1	31	-	4	1828	975	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	378	1994:1862	508+152	57.3 : 57.3%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1876	1828:1828	914+914	102.6 : 102.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	372	1828	1341	27.8%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	242	Inf :1821	320+92	58.8 : 58.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	785	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	836	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	993	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	19	-	399	1764	588	66.7%
8/2	Right Ahead	U	1	N/A	B		1	19	-	432	1764	588	73.5%
9/1	Ahead	U	N/A	N/A	-		-	-	-	730	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	888	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	84	1764	235	35.7%
10/2	Right	U	2	N/A	D		1	7	-	87	1764	235	37.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	934	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1056	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**49.3%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	249	Inf	505	49.3%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	183	1800:1800	1741+59	10.2 : 10.2%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	359	Inf	998	35.3%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1841**	**0**	**0**	**14.4**	**45.0**	**0.0**	**59.4**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1240**	**0**	**0**	**14.2**	**44.2**	**0.0**	**58.4**	**-**	**-**	**-**	**-**
1/1	731	731	-	-	-	2.2	1.4	-	3.6	18.0	9.3	1.4	10.8
1/2	790	790	-	-	-	2.4	1.5	-	3.9	17.9	10.1	1.5	11.6
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.6	0.0	0.0	0.0
2/1+2/2	378	378	756	0	0	0.6	0.7	-	1.2	11.7	2.9	0.7	3.6
3/2+3/1	1876	1828	-	-	-	4.0	36.8	-	40.7	78.1	41.2	36.8	78.0
3/3	372	372	-	-	-	0.3	0.2	-	0.5	4.5	2.1	0.2	2.3
4/2+4/1	242	242	484	0	0	0.5	0.7	-	1.2	17.3	2.4	0.7	3.1
5/1	965	965	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	768	768	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	836	836	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	993	993	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	392	392	-	-	-	1.6	1.0	-	2.6	23.4	5.3	1.0	6.3
8/2	432	432	-	-	-	1.8	1.4	-	3.2	26.7	6.2	1.4	7.5
9/1	730	730	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	888	888	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	84	84	-	-	-	0.4	0.3	-	0.7	30.1	1.2	0.3	1.5
10/2	87	87	-	-	-	0.5	0.3	-	0.8	32.7	1.3	0.3	1.6
11/1	911	911	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**601**	**0**	**0**	**0.2**	**0.8**	**0.0**	**1.0**	**-**	**-**	**-**	**-**
1/1	249	249	249	0	0	0.0	0.5	-	0.5	7.0	0.0	0.5	0.5
2/1+2/2	183	183	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	352	352	352	0	0	0.2	0.3	-	0.4	4.6	4.8	0.3	5.0
6/2	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

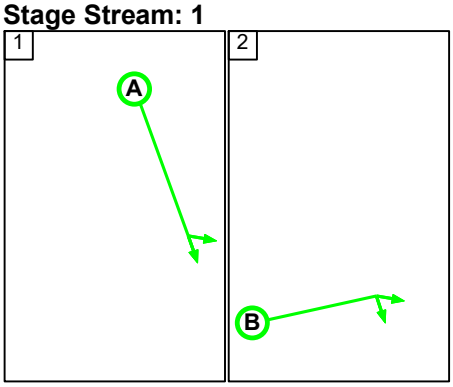
C1	Stream: 1 PRC for Signalled Lanes (%):	19.0	Total Delay for Signalled Lanes (pcuHr):	13.35	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-14.0	Total Delay for Signalled Lanes (pcuHr):	42.68	Cycle Time (s): 60
	PRC Over All Lanes (%):	-14.0	Total Delay Over All Lanes(pcuHr):	59.42	

Full Input Data And Results

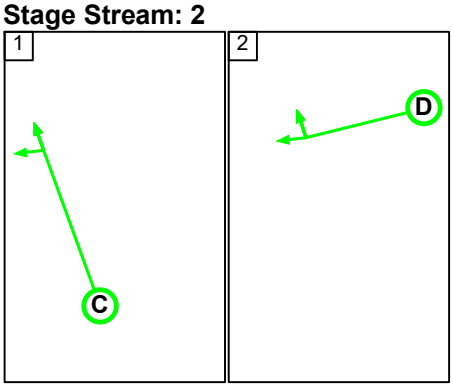
Scenario 18: '34RC 08:00-09:00' (FG88: '34RC 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

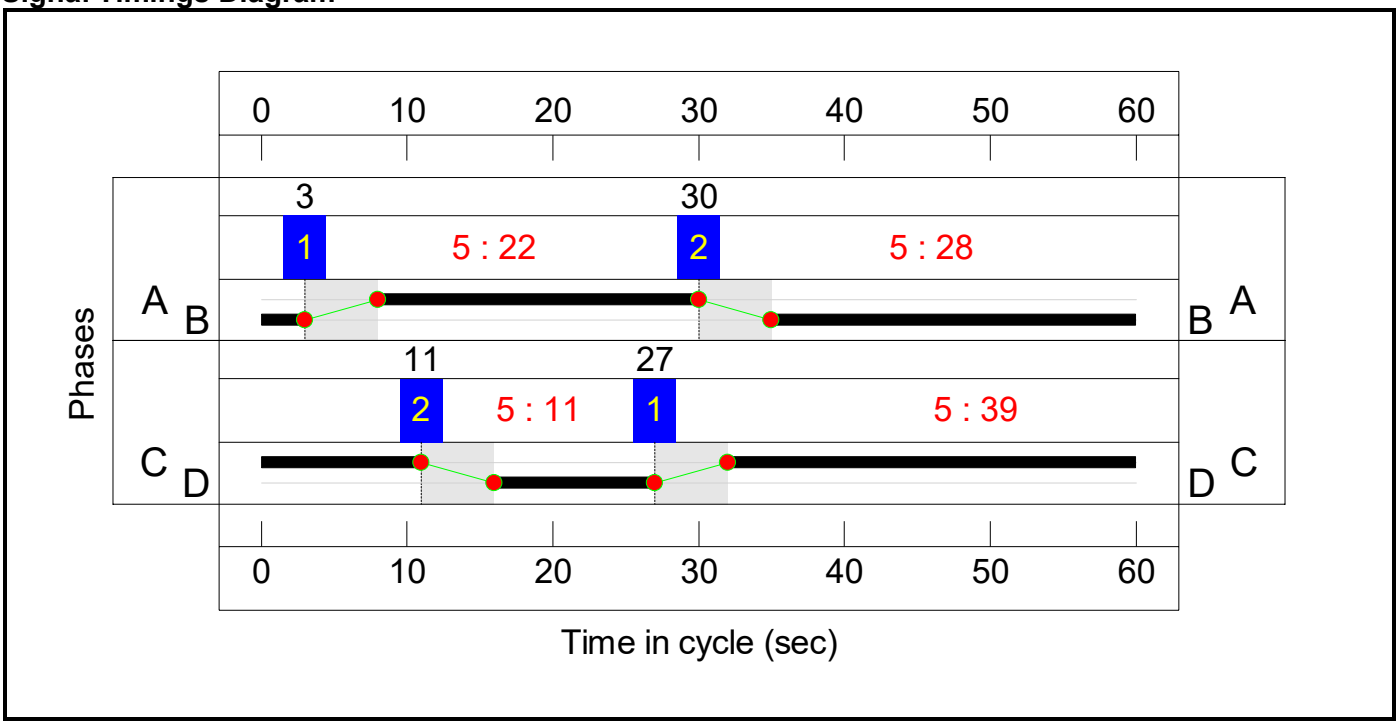
Stage	1	2
Duration	22	28
Change Point	3	30

Stage Stream: 2

Stage	1	2
Duration	39	11
Change Point	27	11

Full Input Data And Results

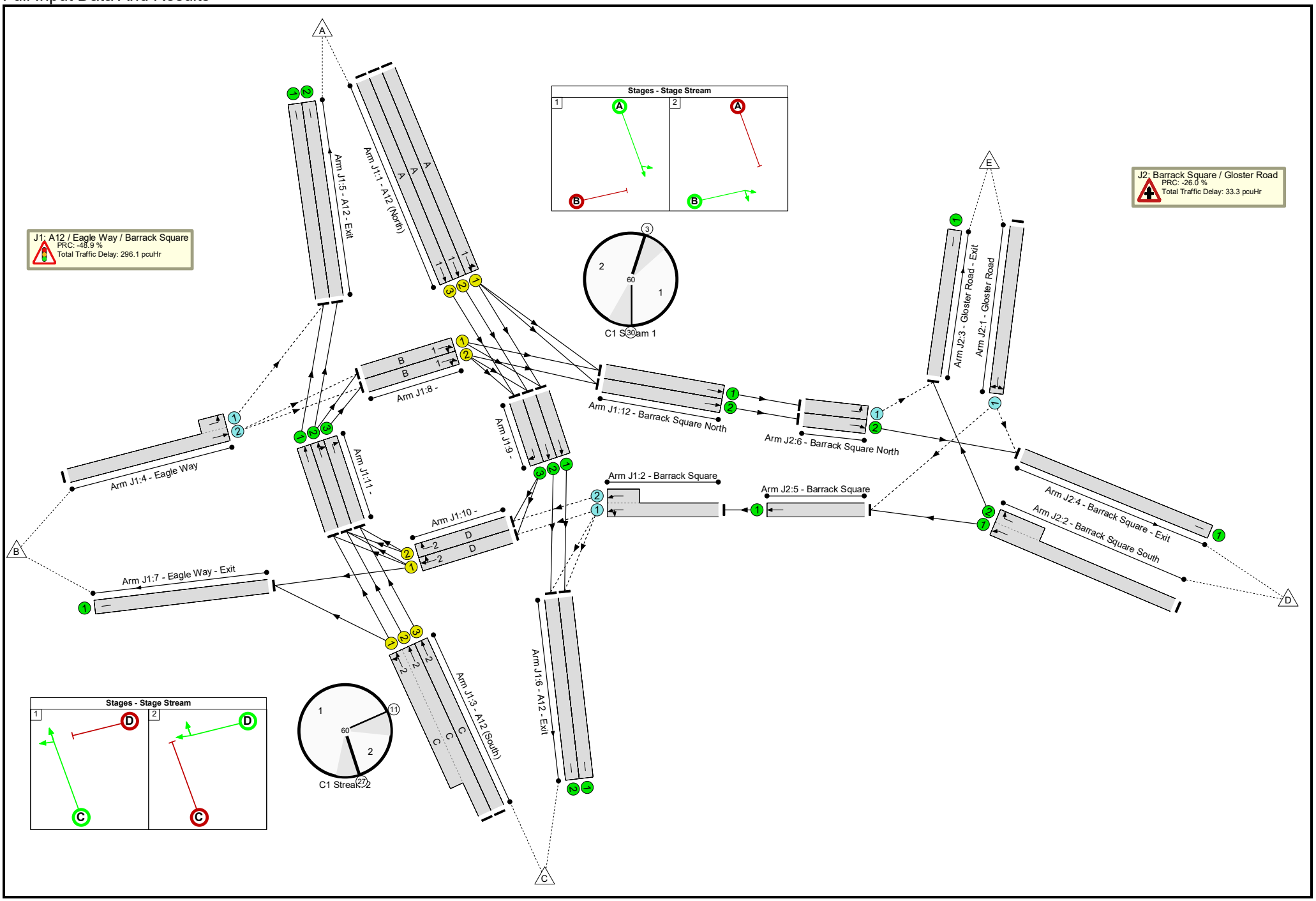
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**134.0%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**134.0%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	22	-	718	1845	707	101.5%
1/2	A12 (North) Ahead	U	1	N/A	A		1	22	-	768	1958	751	102.3%
1/3	A12 (North) Ahead	U	1	N/A	A		1	22	-	22	1828	701	3.1%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	778	1994:1862	532+27	131.2 : 134.0%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	39	-	2080	1828:1828	915+913	113.8 : 113.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	39	-	614	1828	1219	50.4%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	272	Inf :1821	296+89	70.5 : 70.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1162	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	903	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1109	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	130	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	28	-	436	1764	853	46.6%
8/2	Right Ahead	U	1	N/A	B		1	28	-	707	1764	853	82.9%
9/1	Ahead	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	894	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	11	-	332	1764	353	71.4%
10/2	Right	U	2	N/A	D		1	11	-	37	1764	353	7.8%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1099	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1220	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	614	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	644	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**113.4%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	457	Inf	403	113.4%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	410	1800:1800	1752+48	22.8 : 22.8%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	778	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	404	Inf	996	36.6%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	644	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2430**	**0**	**0**	**37.8**	**291.7**	**0.0**	**329.4**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1662**	**0**	**0**	**35.6**	**260.5**	**0.0**	**296.1**	**-**	**-**	**-**	**-**
1/1	718	707	-	-	-	4.0	16.4	-	20.3	102.0	12.1	16.4	28.5
1/2	768	751	-	-	-	4.4	18.9	-	23.3	109.3	13.1	18.9	32.0
1/3	22	22	-	-	-	0.1	0.0	-	0.1	14.4	0.2	0.0	0.2
2/1+2/2	733	559	1118	0	0	8.5	89.5	-	98.0	481.1	25.2	89.5	114.7
3/2+3/1	2080	1828	-	-	-	12.8	130.0	-	142.8	247.2	47.1	130.0	177.1
3/3	614	614	-	-	-	0.9	0.5	-	1.4	8.0	5.1	0.5	5.6
4/2+4/1	272	272	544	0	0	0.8	1.2	-	2.0	26.5	3.0	1.2	4.1
5/1	1010	1010	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	829	829	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1027	1027	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	397	397	-	-	-	1.1	0.4	-	1.5	13.9	3.7	0.4	4.2
8/2	707	707	-	-	-	1.9	2.4	-	4.3	21.8	6.9	2.4	9.2
9/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	877	877	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	252	252	-	-	-	1.1	1.2	-	2.3	32.9	4.1	1.2	5.3
10/2	27	27	-	-	-	0.1	0.0	-	0.1	16.6	0.3	0.0	0.4
11/1	947	947	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1048	1048	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	614	614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**768**	**0**	**0**	**2.1**	**31.2**	**0.0**	**33.3**	**-**	**-**	**-**	**-**
1/1	457	403	403	0	0	2.1	30.7	-	32.8	258.7	17.3	30.7	48.0
2/1+2/2	410	410	-	-	-	0.0	0.1	-	0.1	1.3	0.0	0.1	0.1
3/1	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	733	733	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	365	365	365	0	0	0.0	0.3	-	0.3	3.1	2.3	0.3	2.6
6/2	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

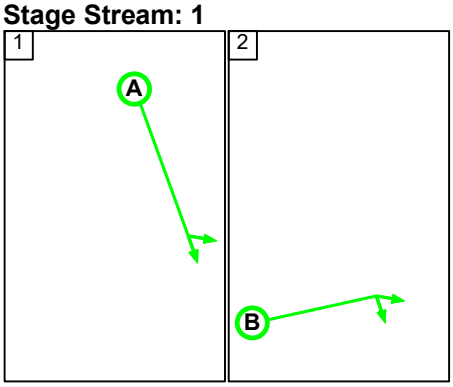
C1	Stream: 1 PRC for Signalled Lanes (%):	-13.7	Total Delay for Signalled Lanes (pcuHr):	49.54	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-26.4	Total Delay for Signalled Lanes (pcuHr):	146.59	Cycle Time (s):	60
	PRC Over All Lanes (%):	-48.9	Total Delay Over All Lanes(pcuHr):	329.44		

Full Input Data And Results

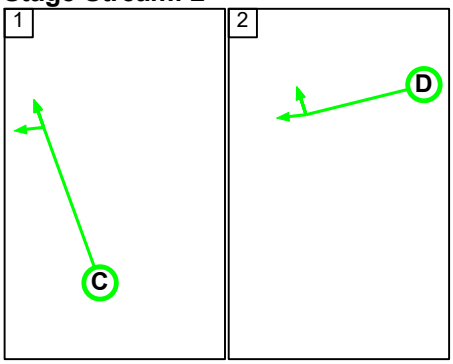
Scenario 19: '34RC 15:00-16:00' (FG89: '34RC 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

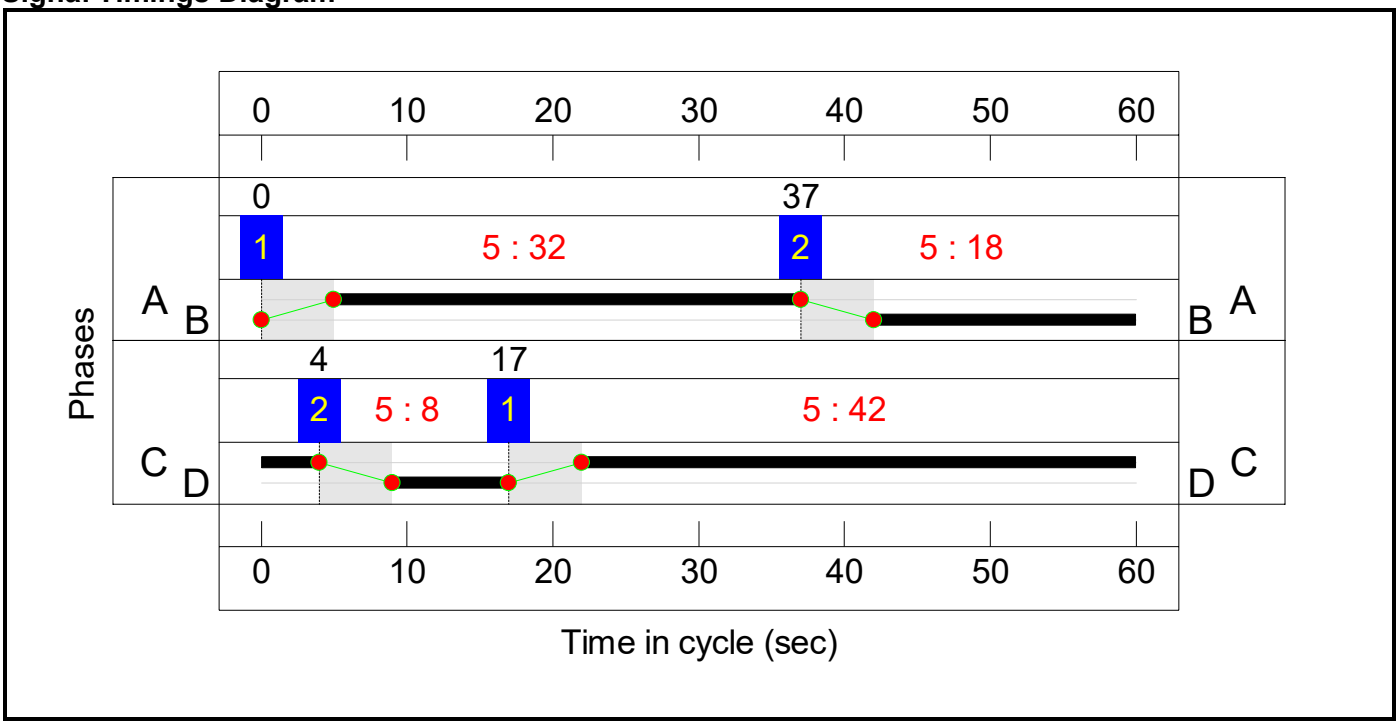
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	42	8
Change Point	17	4

Full Input Data And Results

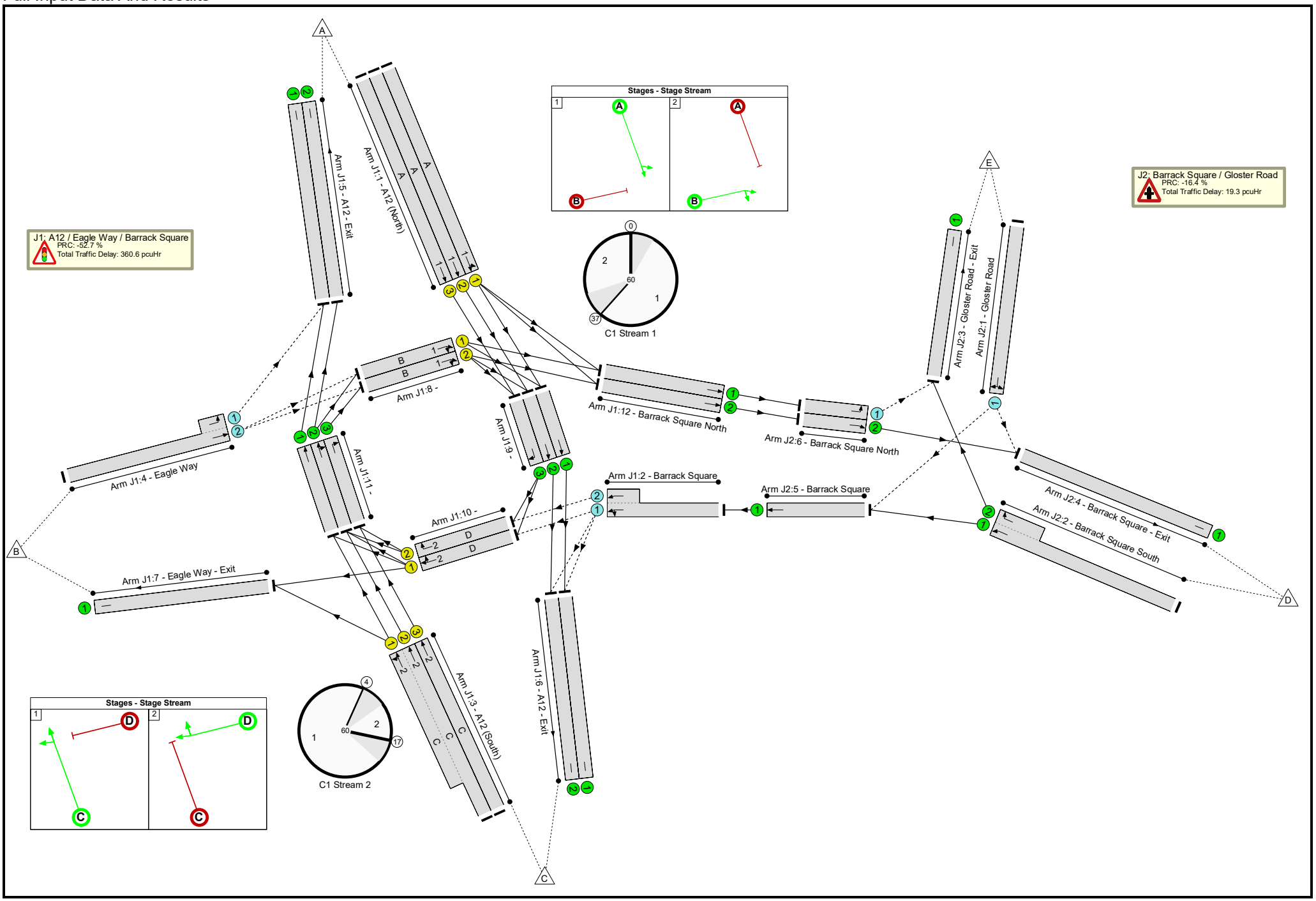
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.4%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.4%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	832	1865	1026	81.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	881	1958	1077	81.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	58	1828	1005	5.8%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	888	1994:1862	480+155	136.2 : 137.4%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	42	-	2219	1828:1828	937+891	121.4 : 121.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	42	-	150	1828	1310	11.4%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	245	Inf :1821	353+136	50.1 : 50.1%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1054	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	878	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1292	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	425	1764	559	65.8%
8/2	Right Ahead	U	1	N/A	B		1	18	-	229	1764	559	41.0%
9/1	Ahead	U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1006	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	58	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	8	-	157	1764	265	48.8%
10/2	Right	U	2	N/A	D		1	8	-	217	1764	265	59.2%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	997	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1381	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	150	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**104.8%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	472	Inf	451	104.8%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	491	1800:1800	1598+202	27.3 : 27.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	542	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	302	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	888	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	487	Inf	982	43.7%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2644**	**0**	**0**	**38.2**	**341.6**	**0.0**	**379.9**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1764**	**0**	**0**	**37.0**	**323.6**	**0.0**	**360.6**	**-**	**-**	**-**	**-**
1/1	832	832	-	-	-	2.5	2.1	-	4.6	20.1	11.1	2.1	13.2
1/2	881	881	-	-	-	2.7	2.2	-	4.9	20.0	12.0	2.2	14.2
1/3	58	58	-	-	-	0.1	0.0	-	0.1	8.2	0.4	0.0	0.5
2/1+2/2	867	637	1274	0	0	10.1	117.9	-	128.0	531.2	28.4	117.9	146.3
3/2+3/1	2219	1828	-	-	-	17.1	198.3	-	215.4	349.4	53.0	198.3	251.3
3/3	150	150	-	-	-	0.1	0.1	-	0.2	4.2	0.8	0.1	0.8
4/2+4/1	245	245	490	0	0	0.3	0.5	-	0.8	12.1	1.7	0.5	2.2
5/1	887	887	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	843	843	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1210	1210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	183	183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	367	367	-	-	-	1.7	1.0	-	2.6	25.8	5.0	1.0	6.0
8/2	229	229	-	-	-	1.1	0.3	-	1.4	22.6	3.1	0.3	3.4
9/1	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	1006	1006	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	58	58	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	129	129	-	-	-	0.7	0.5	-	1.2	33.5	1.7	0.5	2.2
10/2	157	157	-	-	-	0.6	0.7	-	1.3	29.7	2.2	0.7	2.9
11/1	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1113	1113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	150	150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	282	282	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**880**	**0**	**0**	**1.2**	**18.1**	**0.0**	**19.3**	**-**	**-**	**-**	**-**
1/1	472	451	451	0	0	0.9	17.5	-	18.4	140.1	21.5	17.5	39.0
2/1+2/2	491	491	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	867	867	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	429	429	429	0	0	0.3	0.4	-	0.7	5.9	5.7	0.4	6.1
6/2	282	282	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

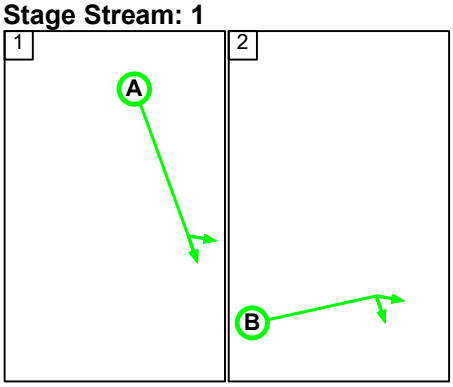
C1	Stream: 1 PRC for Signalled Lanes (%):	10.0	Total Delay for Signalled Lanes (pcuHr):	13.74	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-34.9	Total Delay for Signalled Lanes (pcuHr):	218.03	Cycle Time (s):	60
	PRC Over All Lanes (%):	-52.7	Total Delay Over All Lanes(pcuHr):	379.86		

Full Input Data And Results

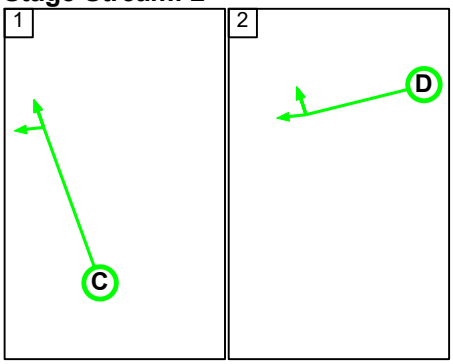
Scenario 20: '34RC 17:00-18:00' (FG90: '34RC 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

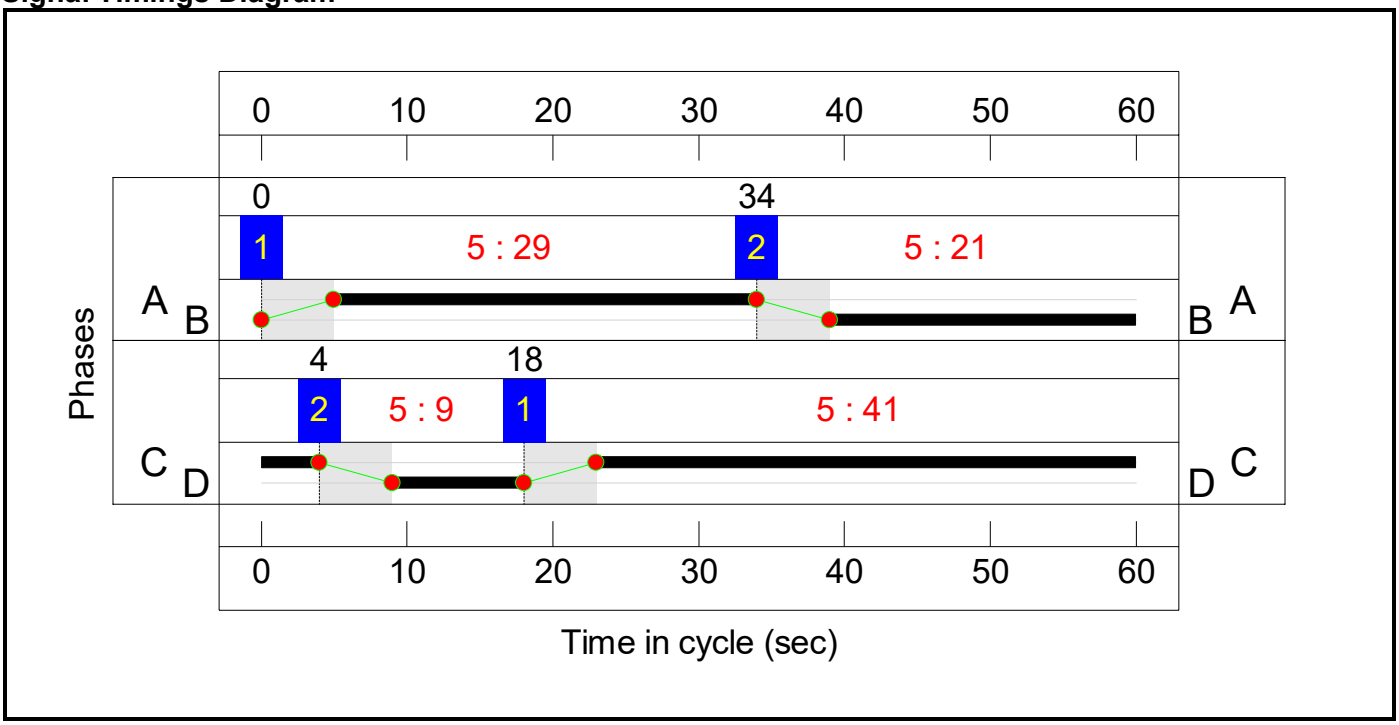
Stage	1	2
Duration	29	21
Change Point	0	34

Stage Stream: 2

Stage	1	2
Duration	41	9
Change Point	18	4

Full Input Data And Results

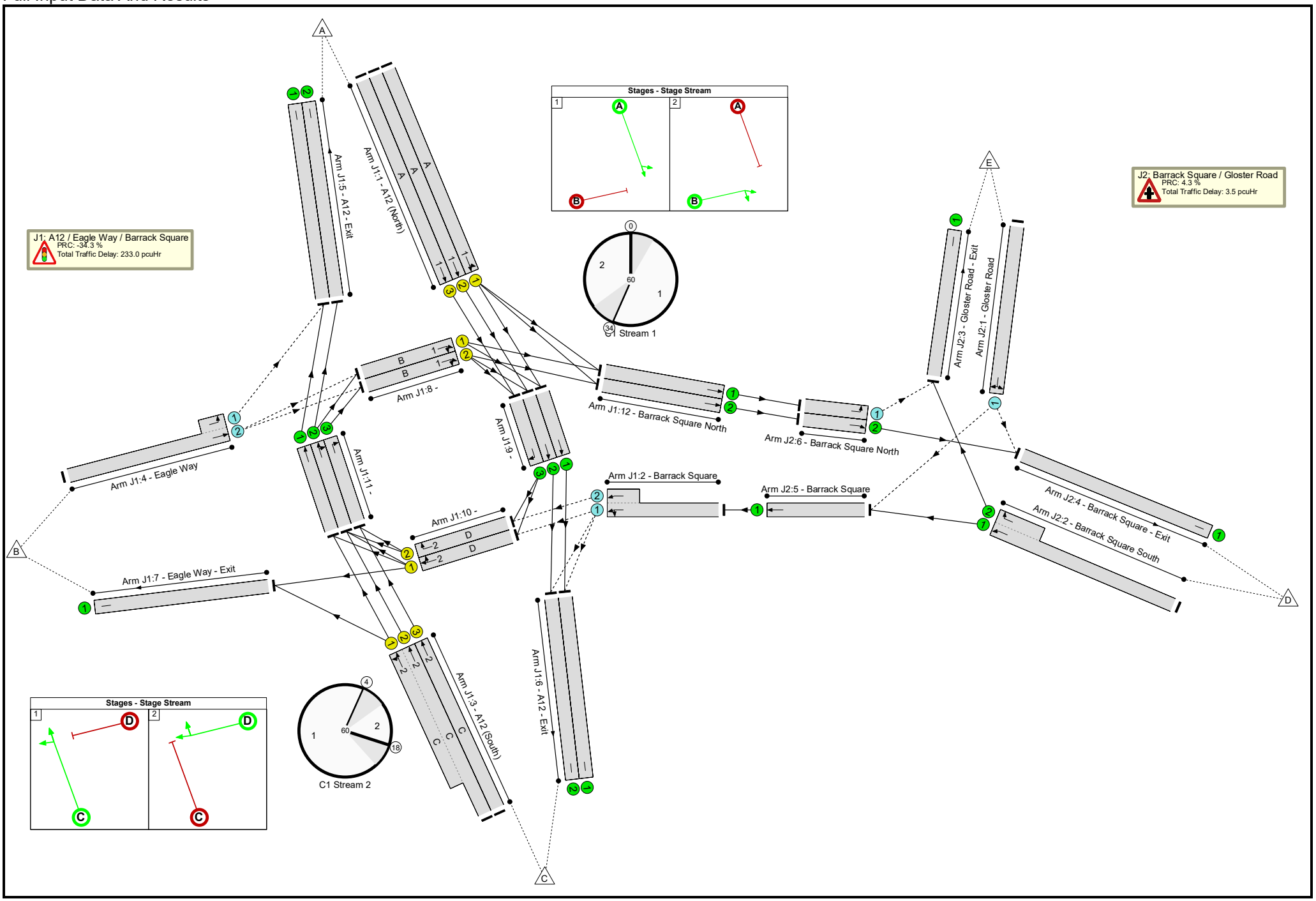
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**120.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**120.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	29	-	784	1863	932	84.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	29	-	832	1958	979	85.0%
1/3	A12 (North) Ahead	U	1	N/A	A		1	29	-	73	1828	914	8.0%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	867	1994:1862	505+213	120.9 : 120.9%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	41	-	2058	1828:1828	916+912	112.6 : 112.6%
3/3	A12 (South) Ahead	U	2	N/A	C		1	41	-	125	1828	1280	9.8%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	190	Inf :1821	363+126	38.8 : 38.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	922	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1033	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1221	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	295	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	21	-	331	1764	647	46.7%
8/2	Right Ahead	U	1	N/A	B		1	21	-	194	1764	647	30.0%
9/1	Ahead	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	953	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	73	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	9	-	145	1764	294	45.1%
10/2	Right	U	2	N/A	D		1	9	-	257	1764	294	72.3%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	873	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1292	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	125	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.3%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	393	Inf	455	86.3%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	521	1800:1800	1662+138	28.9 : 28.9%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	867	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	395	Inf	987	37.1%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2573**	**0**	**0**	**28.1**	**208.4**	**0.0**	**236.5**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1814**	**0**	**0**	**28.0**	**205.0**	**0.0**	**233.0**	**-**	**-**	**-**	**-**
1/1	784	784	-	-	-	2.8	2.6	-	5.4	24.7	11.1	2.6	13.7
1/2	832	832	-	-	-	3.0	2.7	-	5.7	24.8	12.0	2.7	14.7
1/3	73	73	-	-	-	0.2	0.0	-	0.2	10.0	0.6	0.0	0.7
2/1+2/2	867	717	1434	0	0	7.0	77.7	-	84.7	351.7	26.4	77.7	104.1
3/2+3/1	2058	1828	-	-	-	11.3	119.3	-	130.6	228.5	46.8	119.3	166.2
3/3	125	125	-	-	-	0.1	0.1	-	0.2	4.5	0.7	0.1	0.7
4/2+4/1	190	190	380	0	0	0.2	0.3	-	0.5	10.0	1.1	0.3	1.5
5/1	824	824	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1175	1175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	266	266	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	302	302	-	-	-	1.1	0.4	-	1.5	18.3	3.2	0.4	3.6
8/2	194	194	-	-	-	0.8	0.2	-	1.0	18.4	2.4	0.2	2.6
9/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	953	953	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	73	73	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	133	133	-	-	-	0.7	0.4	-	1.1	31.1	1.6	0.4	2.0
10/2	213	213	-	-	-	0.7	1.3	-	2.0	33.5	3.1	1.3	4.4
11/1	775	775	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1132	1132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	125	125	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**759**	**0**	**0**	**0.1**	**3.4**	**0.0**	**3.5**	**-**	**-**	**-**	**-**
1/1	393	393	393	0	0	0.0	2.9	-	2.9	26.4	0.3	2.9	3.2
2/1+2/2	521	521	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	867	867	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	366	366	366	0	0	0.1	0.3	-	0.4	4.0	3.7	0.3	4.0
6/2	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

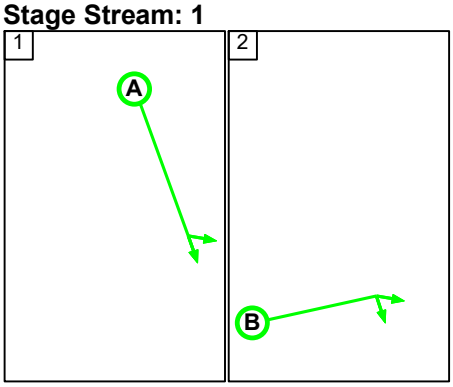
C1	Stream: 1 PRC for Signalled Lanes (%):	5.9	Total Delay for Signalled Lanes (pcuHr):	13.87	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-25.1	Total Delay for Signalled Lanes (pcuHr):	133.93	Cycle Time (s):	60
	PRC Over All Lanes (%):	-34.3	Total Delay Over All Lanes(pcuHr):	236.50		

Full Input Data And Results

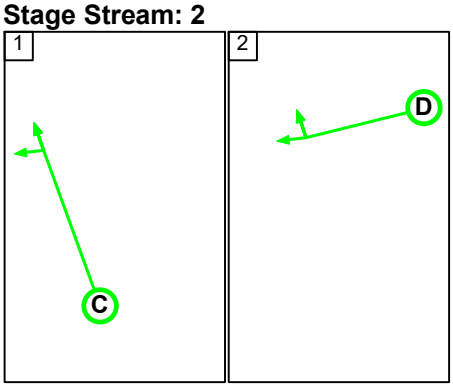
Scenario 21: '34OP 06:00-07:00' (FG91: '34OP 06:00-07:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

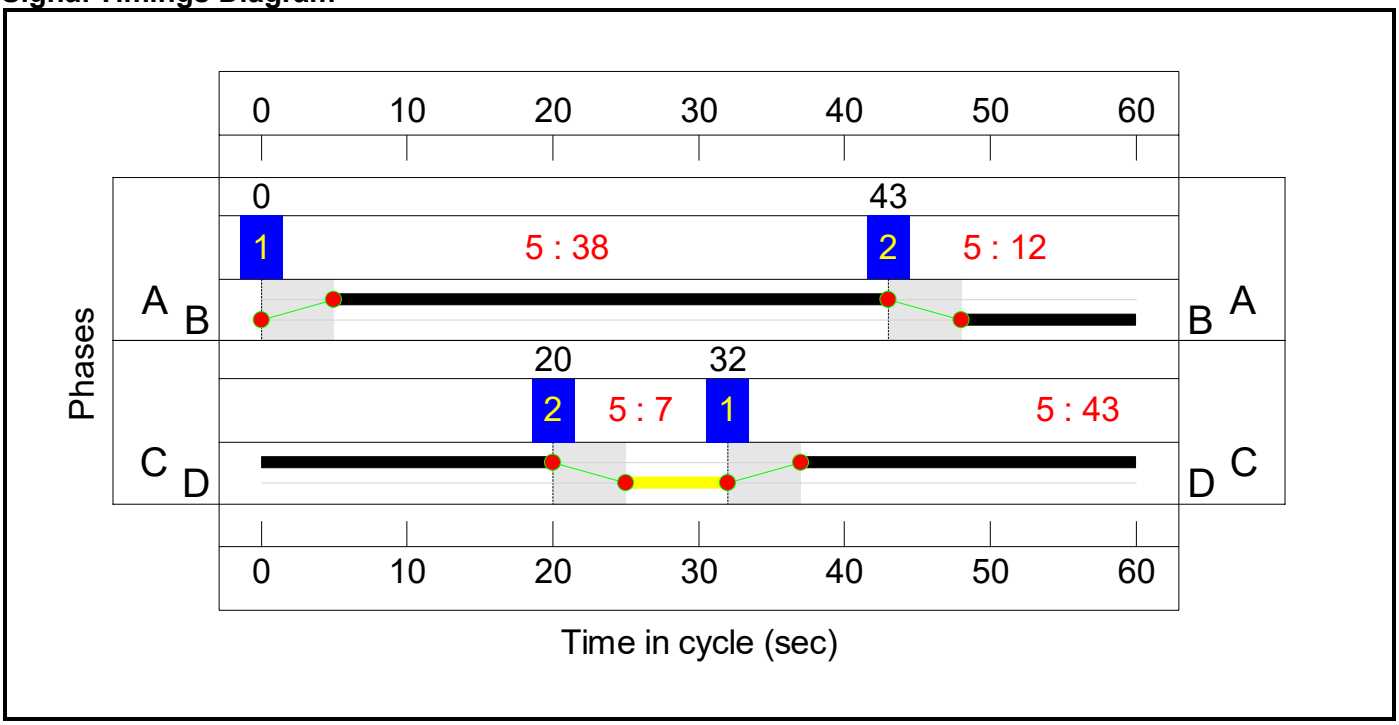
Stage	1	2
Duration	38	12
Change Point	0	43

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	32	20

Full Input Data And Results

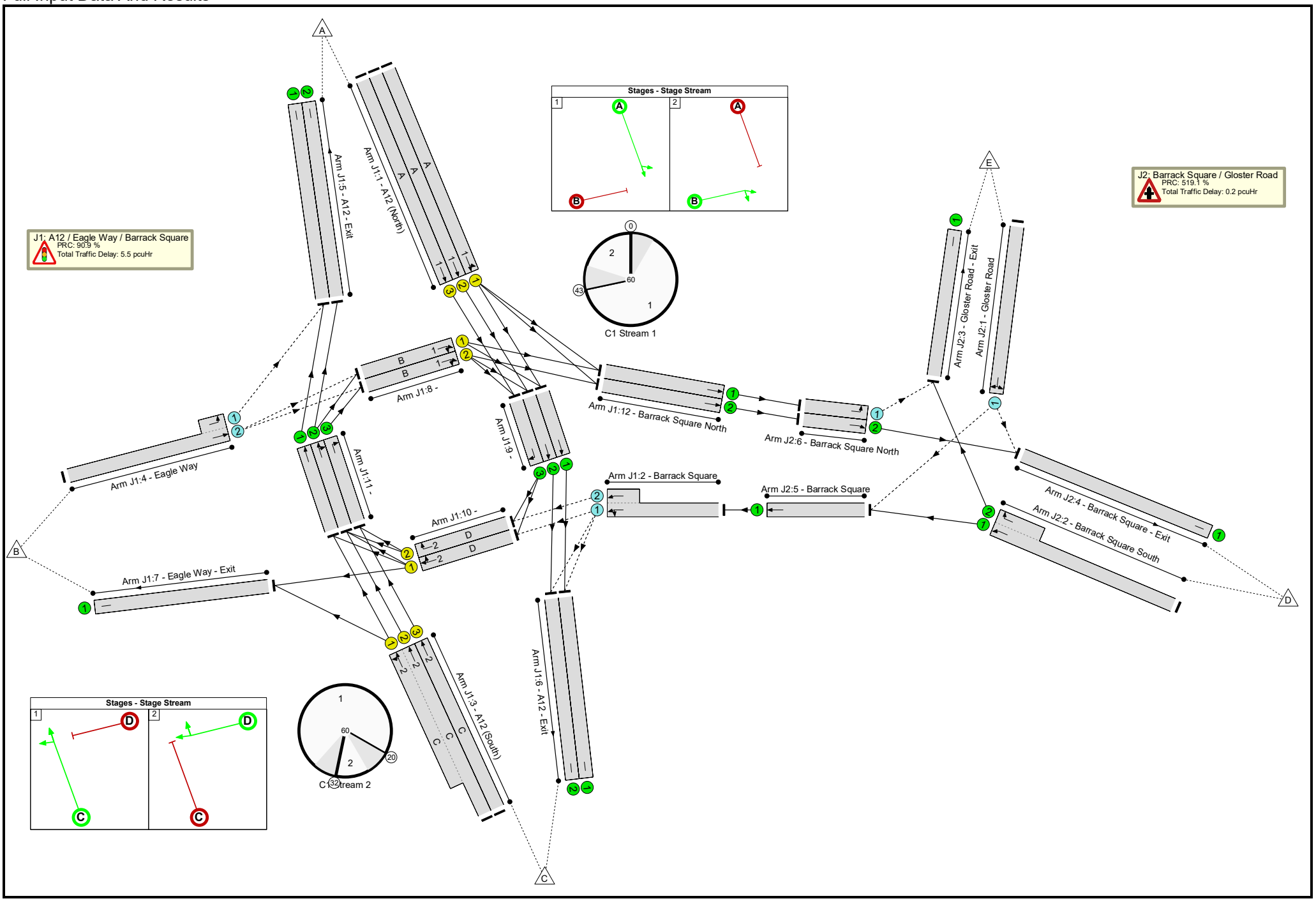
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.2%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.2%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	38	-	444	1841	1197	37.1%
1/2	A12 (North) Ahead	U	1	N/A	A		1	38	-	495	1958	1273	38.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	38	-	2	1828	1188	0.2%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	62	1994:1862	685+35	8.6 : 8.6%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	862	1828:1828	916+912	47.2 : 47.2%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	117	1828	1341	8.7%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	92	Inf :1821	683+166	10.8 : 10.8%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	341	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	447	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	570	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	12	-	141	1764	382	36.9%
8/2	Right Ahead	U	1	N/A	B		1	12	-	144	1764	382	37.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	11	1764	235	4.7%
10/2	Right	U	2	N/A	D		1	7	-	3	1764	235	1.3%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	417	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	117	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**14.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	82	Inf	643	12.8%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	41	1800:1800	1493+307	2.3 : 2.3%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	152	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	62	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	145	Inf	997	14.5%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**535**	**0**	**0**	**3.6**	**2.0**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**308**	**0**	**0**	**3.6**	**1.8**	**0.0**	**5.5**	**-**	**-**	**-**	**-**
1/1	444	444	-	-	-	0.6	0.3	-	0.9	7.2	3.3	0.3	3.6
1/2	495	495	-	-	-	0.7	0.3	-	1.0	7.2	3.9	0.3	4.2
1/3	2	2	-	-	-	0.0	0.0	-	0.0	5.4	0.0	0.0	0.0
2/1+2/2	62	62	124	0	0	0.0	0.0	-	0.1	2.9	0.1	0.0	0.1
3/2+3/1	862	862	-	-	-	0.7	0.4	-	1.1	4.7	2.4	0.4	2.8
3/3	117	117	-	-	-	0.1	0.0	-	0.1	3.8	0.6	0.0	0.6
4/2+4/1	92	92	184	0	0	0.0	0.1	-	0.1	2.5	0.1	0.1	0.1
5/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	447	447	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	24	24	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	141	141	-	-	-	0.7	0.3	-	1.0	26.6	1.7	0.3	2.0
8/2	144	144	-	-	-	0.7	0.3	-	1.1	26.3	1.8	0.3	2.1
9/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	11	11	-	-	-	0.1	0.0	-	0.1	30.2	0.2	0.0	0.2
10/2	3	3	-	-	-	0.0	0.0	-	0.0	30.6	0.0	0.0	0.0
11/1	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	117	117	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**227**	**0**	**0**	**0.0**	**0.2**	**0.0**	**0.2**	**-**	**-**	**-**	**-**
1/1	82	82	82	0	0	0.0	0.1	-	0.1	3.2	0.0	0.1	0.1
2/1+2/2	41	41	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	152	152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	62	62	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	145	145	145	0	0	0.0	0.1	-	0.1	2.1	0.6	0.1	0.7
6/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

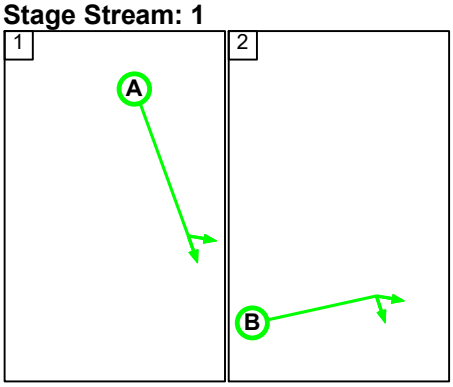
C1	Stream: 1 PRC for Signalled Lanes (%):	131.4	Total Delay for Signalled Lanes (pcuHr):	3.98	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	90.9	Total Delay for Signalled Lanes (pcuHr):	1.35	Cycle Time (s):	60
	PRC Over All Lanes (%):	90.9	Total Delay Over All Lanes(pcuHr):	5.62		

Full Input Data And Results

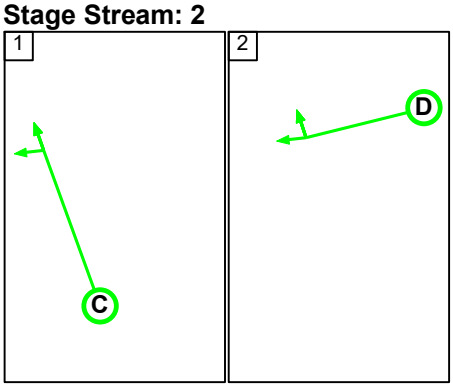
Scenario 22: '34OP 07:00-08:00' (FG92: '34OP 07:00-08:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

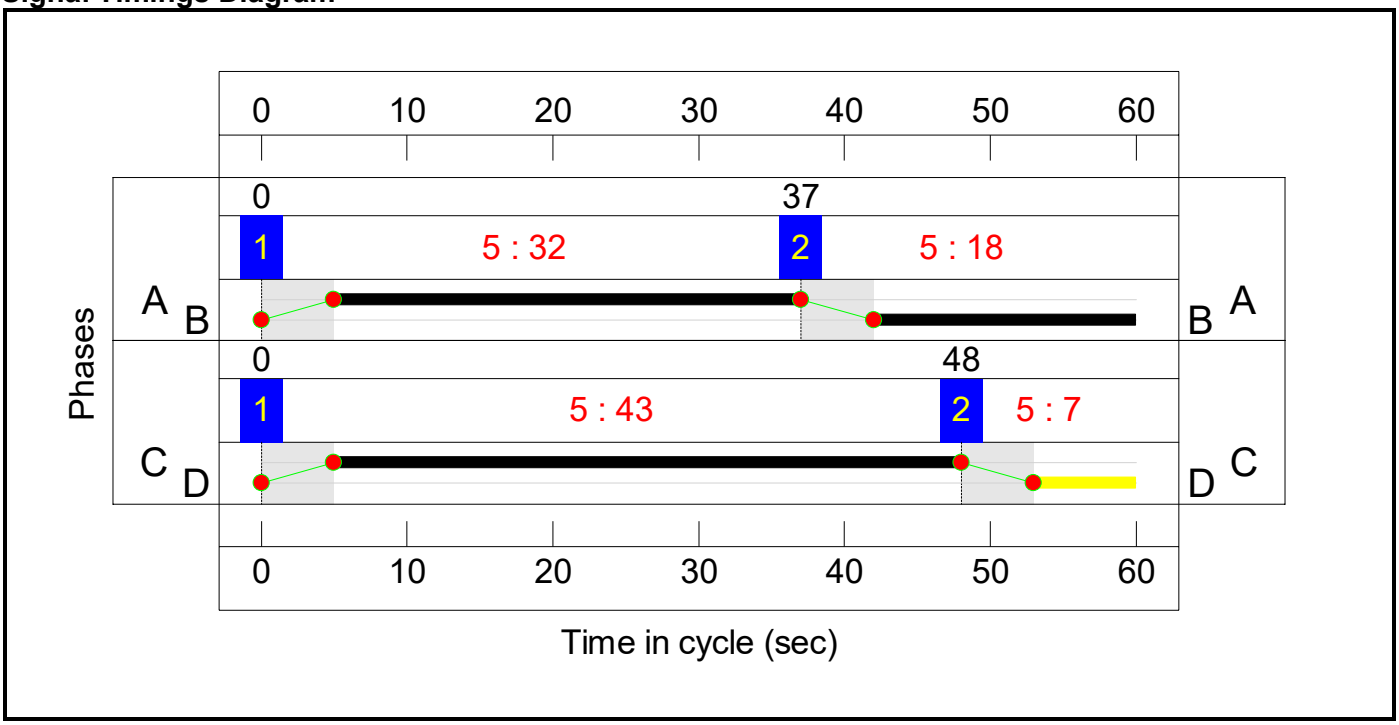
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	0	48

Full Input Data And Results

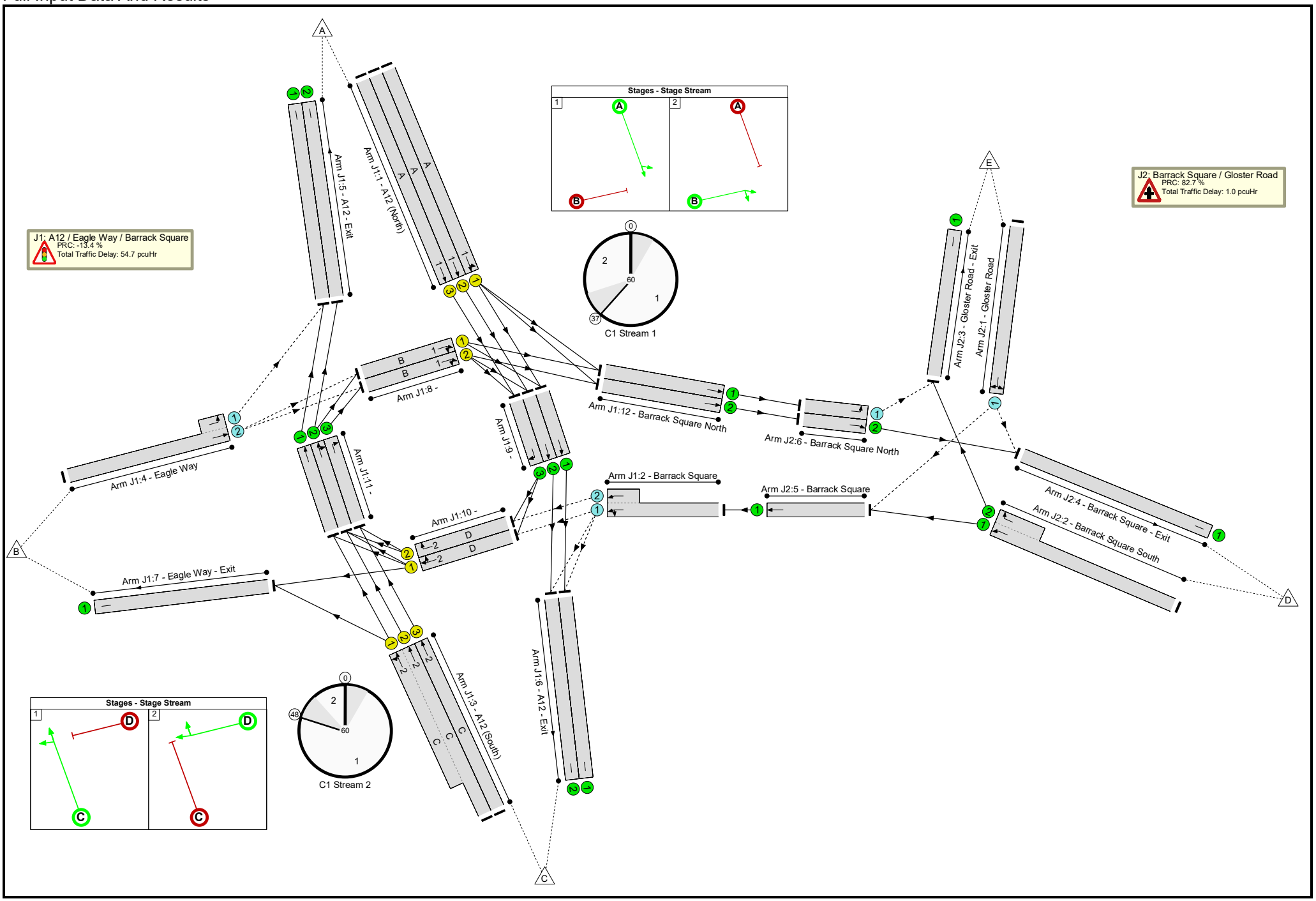
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.1%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.1%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	741	1840	1012	73.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	801	1958	1077	74.4%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	4	1828	1005	0.4%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	378	1994:1862	500+149	58.2 : 58.2%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	1866	1828:1828	914+914	102.1 : 102.1%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	372	1828	1341	27.8%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	242	Inf :1821	320+92	58.7 : 58.7%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	983	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1004	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	57	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	399	1764	559	70.4%
8/2	Right Ahead	U	1	N/A	B		1	18	-	432	1764	559	77.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	740	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	4	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	84	1764	235	35.7%
10/2	Right	U	2	N/A	D		1	7	-	87	1764	235	37.0%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	929	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1051	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**49.3%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	249	Inf	505	49.3%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	183	1800:1800	1741+59	10.2 : 10.2%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	359	Inf	998	35.4%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1842**	**0**	**0**	**14.0**	**41.7**	**0.0**	**55.7**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1240**	**0**	**0**	**13.8**	**40.9**	**0.0**	**54.7**	**-**	**-**	**-**	**-**
1/1	741	741	-	-	-	2.1	1.4	-	3.4	16.7	9.3	1.4	10.6
1/2	801	801	-	-	-	2.3	1.4	-	3.7	16.7	10.0	1.4	11.4
1/3	4	4	-	-	-	0.0	0.0	-	0.0	8.1	0.0	0.0	0.0
2/1+2/2	378	378	756	0	0	0.6	0.7	-	1.3	12.0	3.0	0.7	3.7
3/2+3/1	1866	1828	-	-	-	3.6	33.1	-	36.7	70.8	40.9	33.1	74.0
3/3	372	372	-	-	-	0.3	0.2	-	0.5	4.5	2.1	0.2	2.3
4/2+4/1	242	242	484	0	0	0.5	0.7	-	1.2	17.3	2.4	0.7	3.1
5/1	965	965	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	393	393	-	-	-	1.7	1.2	-	2.8	25.9	5.5	1.2	6.7
8/2	432	432	-	-	-	2.0	1.7	-	3.6	30.1	6.4	1.7	8.1
9/1	740	740	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	84	84	-	-	-	0.4	0.3	-	0.7	30.2	1.2	0.3	1.5
10/2	87	87	-	-	-	0.5	0.3	-	0.8	32.8	1.3	0.3	1.6
11/1	911	911	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**602**	**0**	**0**	**0.2**	**0.8**	**0.0**	**1.0**	**-**	**-**	**-**	**-**
1/1	249	249	249	0	0	0.0	0.5	-	0.5	7.0	0.0	0.5	0.5
2/1+2/2	183	183	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
3/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	353	0	0	0.2	0.3	-	0.5	4.8	4.9	0.3	5.1
6/2	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

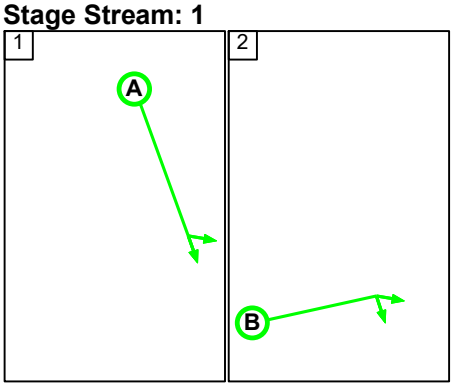
C1	Stream: 1 PRC for Signalled Lanes (%):	16.4	Total Delay for Signalled Lanes (pcuHr):	13.62	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-13.4	Total Delay for Signalled Lanes (pcuHr):	38.65	Cycle Time (s):	60
	PRC Over All Lanes (%):	-13.4	Total Delay Over All Lanes(pcuHr):	55.70		

Full Input Data And Results

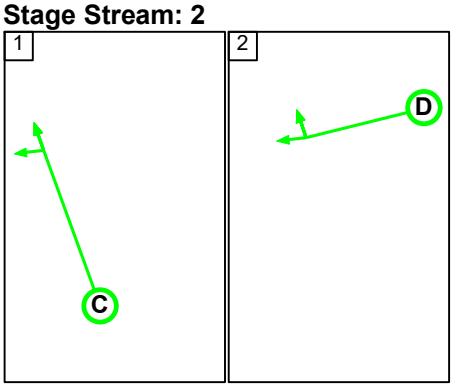
Scenario 23: '34OP 08:00-09:00' (FG93: '34OP 08:00-09:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

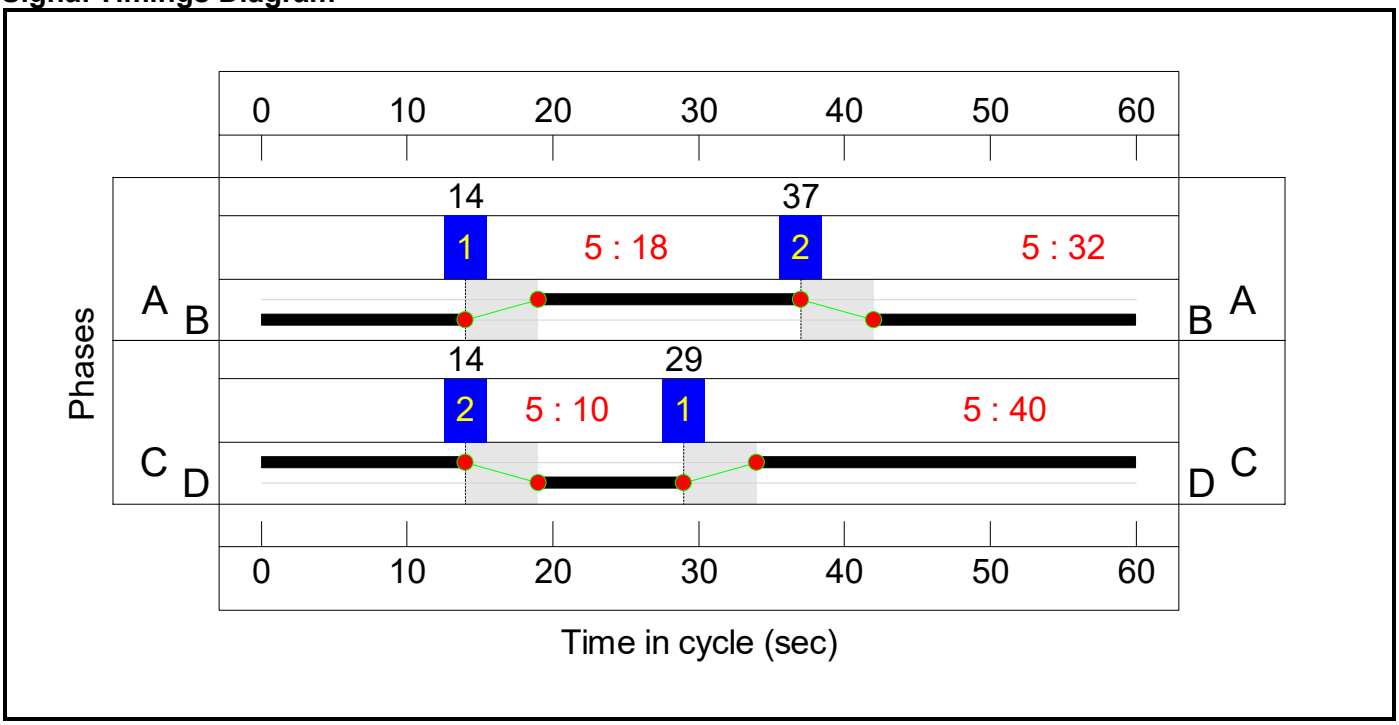
Stage	1	2
Duration	18	32
Change Point	14	37

Stage Stream: 2

Stage	1	2
Duration	40	10
Change Point	29	14

Full Input Data And Results

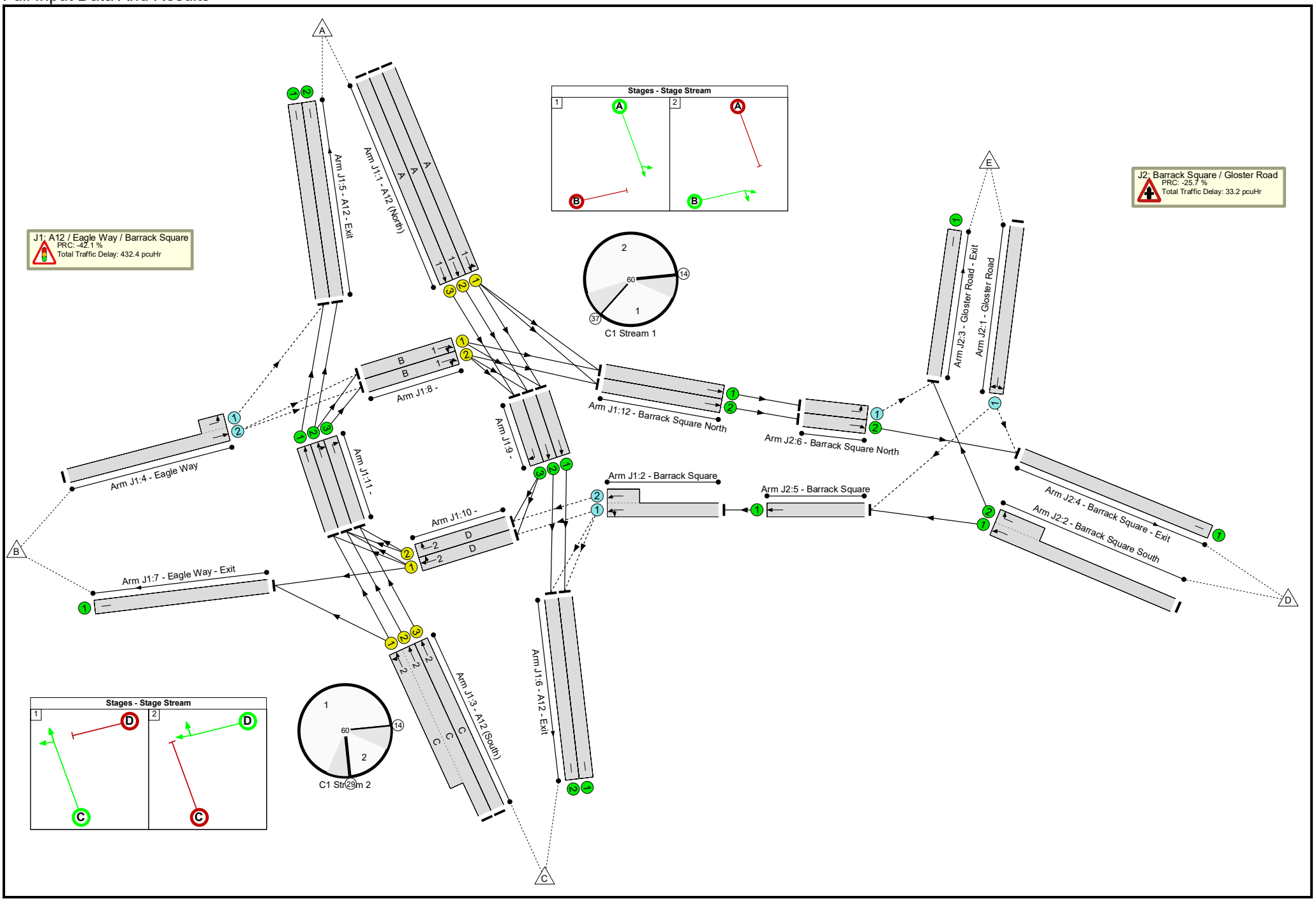
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.9%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**127.9%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	18	-	743	1845	584	127.2%
1/2	A12 (North) Ahead	U	1	N/A	A		1	18	-	793	1958	620	127.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	18	-	22	1828	579	3.8%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	780	1994:1862	598+34	116.4 : 118.7%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	40	-	2136	1828:1828	914+914	116.8 : 116.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	40	-	616	1828	1249	49.3%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	273	Inf :1821	276+83	76.2 : 76.2%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1189	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	928	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	928	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1135	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	130	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	32	-	438	1764	970	40.4%
8/2	Right Ahead	U	1	N/A	B		1	32	-	709	1764	970	73.1%
9/1	Ahead	U	N/A	N/A	-		-	-	-	711	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	919	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	22	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	10	-	327	1764	323	87.0%
10/2	Right	U	2	N/A	D		1	10	-	42	1764	323	10.8%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	1126	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1249	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	648	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**113.1%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	458	Inf	405	113.1%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	411	1800:1800	1752+48	22.8 : 22.8%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	726	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	405	Inf	996	35.3%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	648	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2567**	**0**	**0**	**44.9**	**420.7**	**0.0**	**465.6**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1811**	**0**	**0**	**42.5**	**389.9**	**0.0**	**432.4**	**-**	**-**	**-**	**-**
1/1	743	584	-	-	-	8.2	81.6	-	89.8	435.3	15.0	81.6	96.7
1/2	793	620	-	-	-	8.8	88.7	-	97.6	442.9	16.1	88.7	104.8
1/3	22	22	-	-	-	0.1	0.0	-	0.1	17.6	0.3	0.0	0.3
2/1+2/2	736	633	1265	0	0	5.4	55.4	-	60.8	297.7	25.7	55.4	81.1
3/2+3/1	2136	1828	-	-	-	14.6	157.4	-	172.0	289.8	49.9	157.4	207.3
3/3	616	616	-	-	-	0.8	0.5	-	1.3	7.4	4.8	0.5	5.3
4/2+4/1	273	273	546	0	0	0.8	1.5	-	2.4	31.1	3.0	1.5	4.5
5/1	1027	1027	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	793	793	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	743	743	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	915	915	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	113	113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	392	392	-	-	-	0.8	0.3	-	1.1	10.2	3.0	0.3	3.4
8/2	709	709	-	-	-	1.4	1.3	-	2.8	14.1	8.9	1.3	10.2
9/1	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	22	22	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	281	281	-	-	-	1.5	2.9	-	4.4	56.2	4.4	2.9	7.3
10/2	35	35	-	-	-	0.1	0.1	-	0.2	19.6	0.4	0.1	0.5
11/1	964	964	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1068	1068	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**756**	**0**	**0**	**2.4**	**30.8**	**0.0**	**33.2**	**-**	**-**	**-**	**-**
1/1	458	405	405	0	0	2.4	30.4	-	32.8	257.6	22.9	30.4	53.3
2/1+2/2	411	411	-	-	-	0.0	0.1	-	0.1	1.3	0.0	0.1	0.1
3/1	362	362	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	703	703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	351	351	351	0	0	0.0	0.3	-	0.3	2.8	1.1	0.3	1.4
6/2	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

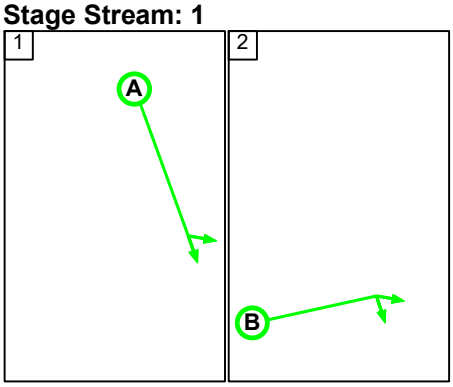
C1	Stream: 1 PRC for Signalled Lanes (%):	-42.1	Total Delay for Signalled Lanes (pcuHr):	191.41	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-29.8	Total Delay for Signalled Lanes (pcuHr):	177.80	Cycle Time (s): 60
	PRC Over All Lanes (%):	-42.1	Total Delay Over All Lanes(pcuHr):	465.62	

Full Input Data And Results

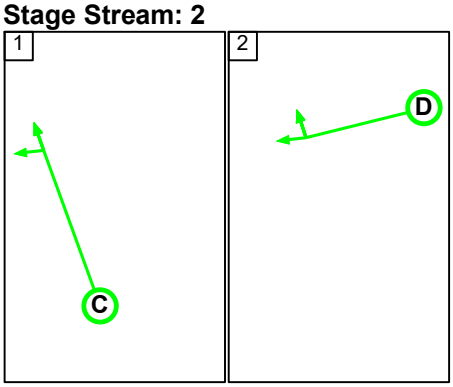
Scenario 24: '34OP 15:00-16:00' (FG94: '34OP 15:00-16:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

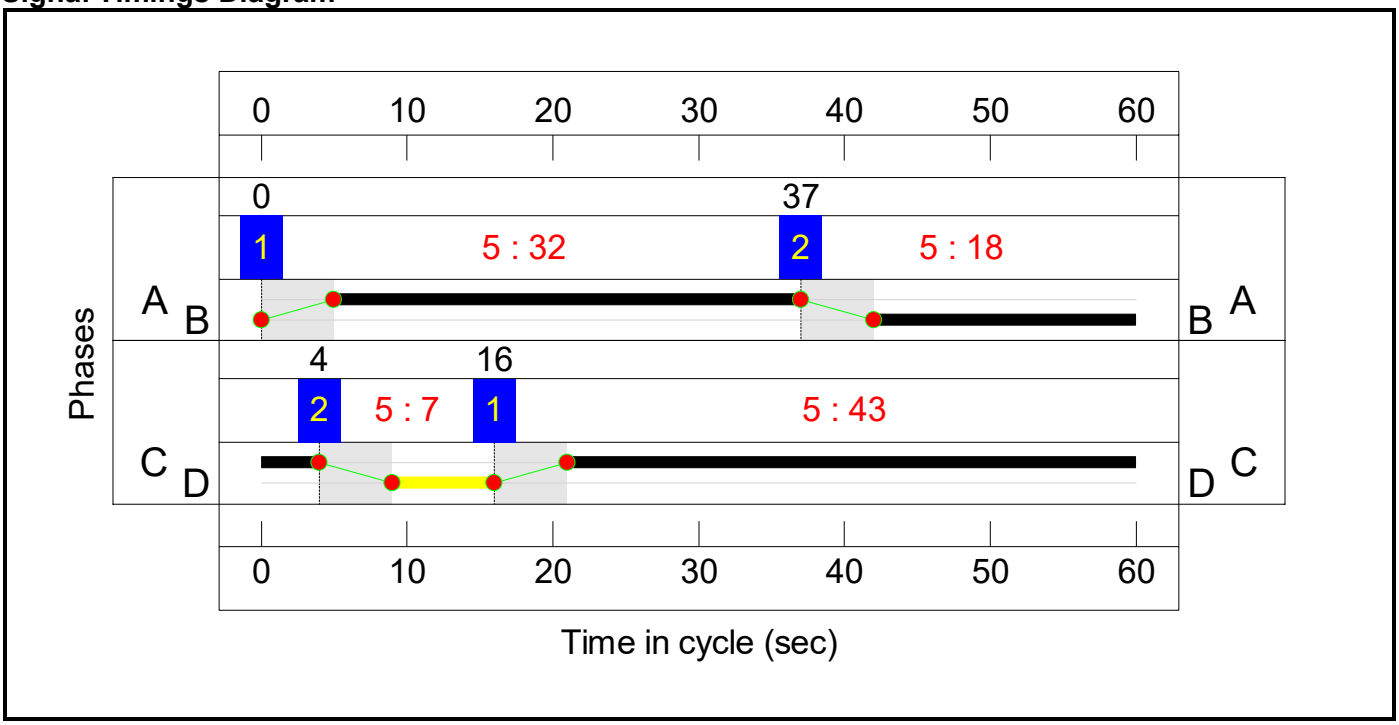
Stage	1	2
Duration	32	18
Change Point	0	37

Stage Stream: 2

Stage	1	2
Duration	43	7
Change Point	16	4

Full Input Data And Results

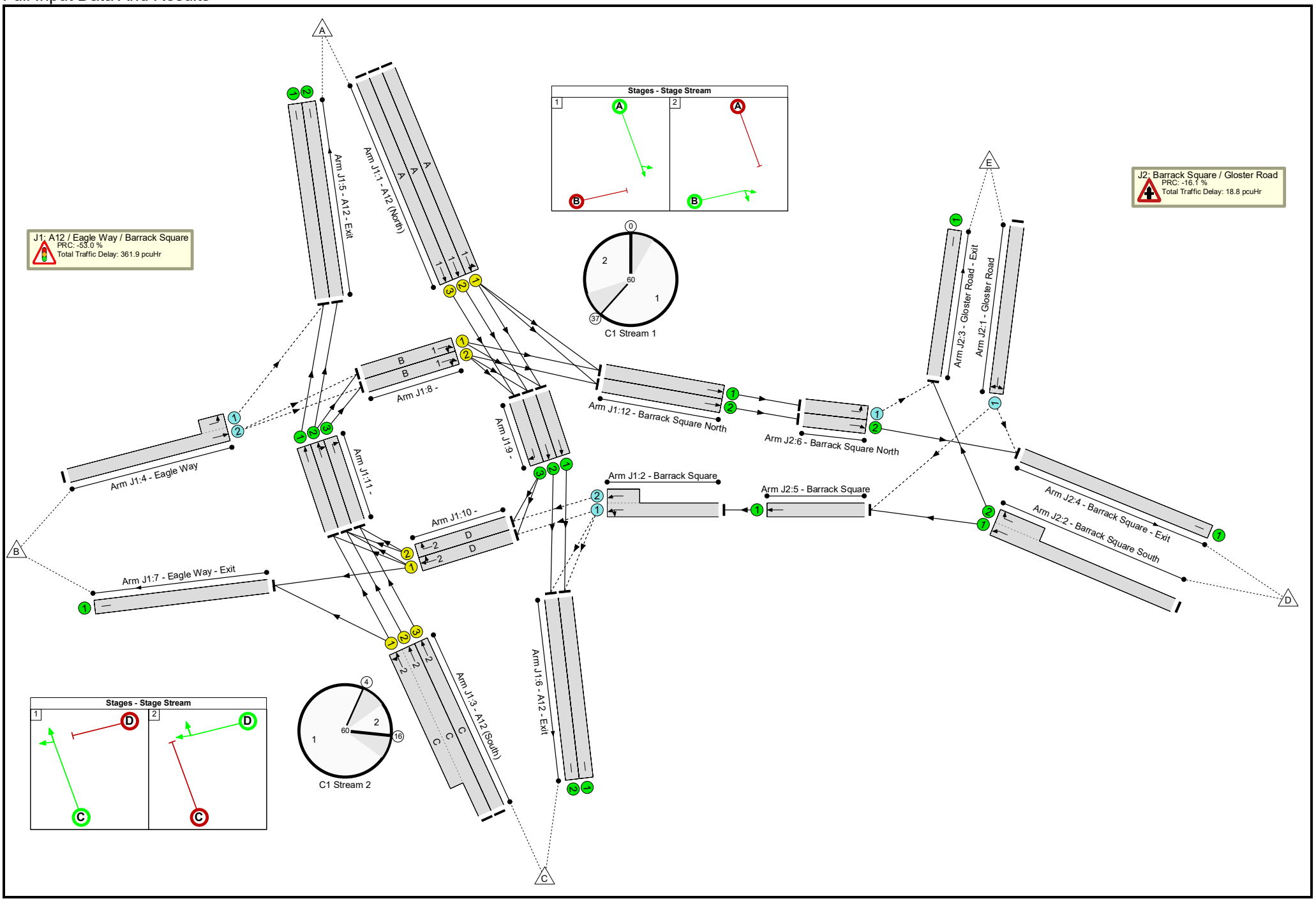
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.7%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**137.7%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	32	-	836	1865	1026	81.5%
1/2	A12 (North) Ahead	U	1	N/A	A		1	32	-	882	1958	1077	81.9%
1/3	A12 (North) Ahead	U	1	N/A	A		1	32	-	58	1828	1005	5.8%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	885	1994:1862	479+153	136.6 : 137.7%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	43	-	2220	1828:1828	938+890	121.4 : 121.4%
3/3	A12 (South) Ahead	U	2	N/A	C		1	43	-	148	1828	1341	11.0%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	244	Inf :1821	351+135	50.2 : 50.2%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1055	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	881	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1290	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	215	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	18	-	423	1764	559	65.4%
8/2	Right Ahead	U	1	N/A	B		1	18	-	227	1764	559	40.6%
9/1	Ahead	U	N/A	N/A	-		-	-	-	595	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	1006	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	58	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	7	-	159	1764	235	55.5%
10/2	Right	U	2	N/A	D		1	7	-	214	1764	235	65.6%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	997	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1381	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	148	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	283	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**104.5%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	471	Inf	451	104.5%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	489	1800:1800	1598+202	27.2 : 27.2%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	885	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	484	Inf	982	43.4%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	283	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2632**	**0**	**0**	**38.1**	**342.7**	**0.0**	**380.7**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1755**	**0**	**0**	**36.9**	**325.0**	**0.0**	**361.9**	**-**	**-**	**-**	**-**
1/1	836	836	-	-	-	2.6	2.2	-	4.7	20.3	11.1	2.2	13.3
1/2	882	882	-	-	-	2.7	2.2	-	4.9	20.1	12.0	2.2	14.2
1/3	58	58	-	-	-	0.1	0.0	-	0.1	8.2	0.4	0.0	0.5
2/1+2/2	866	634	1267	0	0	10.2	118.4	-	128.6	534.9	28.3	118.4	146.8
3/2+3/1	2220	1828	-	-	-	16.8	198.8	-	215.6	349.6	53.6	198.8	252.4
3/3	148	148	-	-	-	0.1	0.1	-	0.2	3.9	0.7	0.1	0.8
4/2+4/1	244	244	488	0	0	0.3	0.5	-	0.8	11.6	1.6	0.5	2.1
5/1	886	886	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1209	1209	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	365	365	-	-	-	1.6	0.9	-	2.6	25.4	5.0	0.9	5.9
8/2	227	227	-	-	-	1.1	0.3	-	1.4	22.1	3.0	0.3	3.3
9/1	595	595	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	1006	1006	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	58	58	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	131	131	-	-	-	0.8	0.6	-	1.5	40.0	1.8	0.6	2.5
10/2	154	154	-	-	-	0.6	0.9	-	1.6	36.8	2.2	0.9	3.2
11/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1112	1112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	148	148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	283	283	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**877**	**0**	**0**	**1.2**	**17.6**	**0.0**	**18.8**	**-**	**-**	**-**	**-**
1/1	471	451	451	0	0	0.8	17.1	-	17.9	136.8	21.5	17.1	38.5
2/1+2/2	489	489	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	481	481	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	866	866	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	426	426	426	0	0	0.3	0.4	-	0.7	5.9	5.6	0.4	6.0
6/2	283	283	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

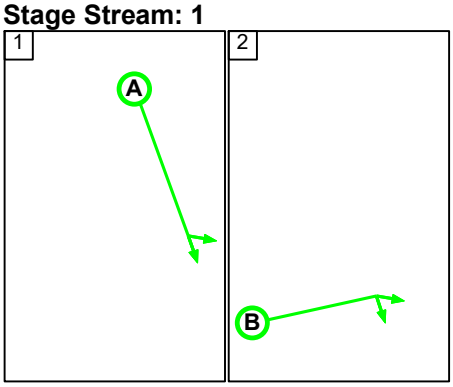
C1	Stream: 1 PRC for Signalled Lanes (%):	9.9	Total Delay for Signalled Lanes (pcuHr):	13.73	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%):	-34.9	Total Delay for Signalled Lanes (pcuHr):	218.79	Cycle Time (s): 60
	PRC Over All Lanes (%):	-53.0	Total Delay Over All Lanes(pcuHr):	380.71	

Full Input Data And Results

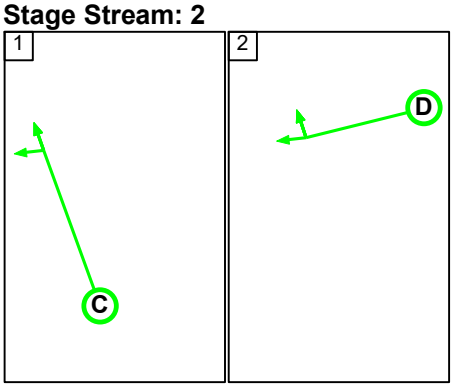
Scenario 25: '34OP 17:00-18:00' (FG95: '34OP 17:00-18:00 (Aldi+Growth)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

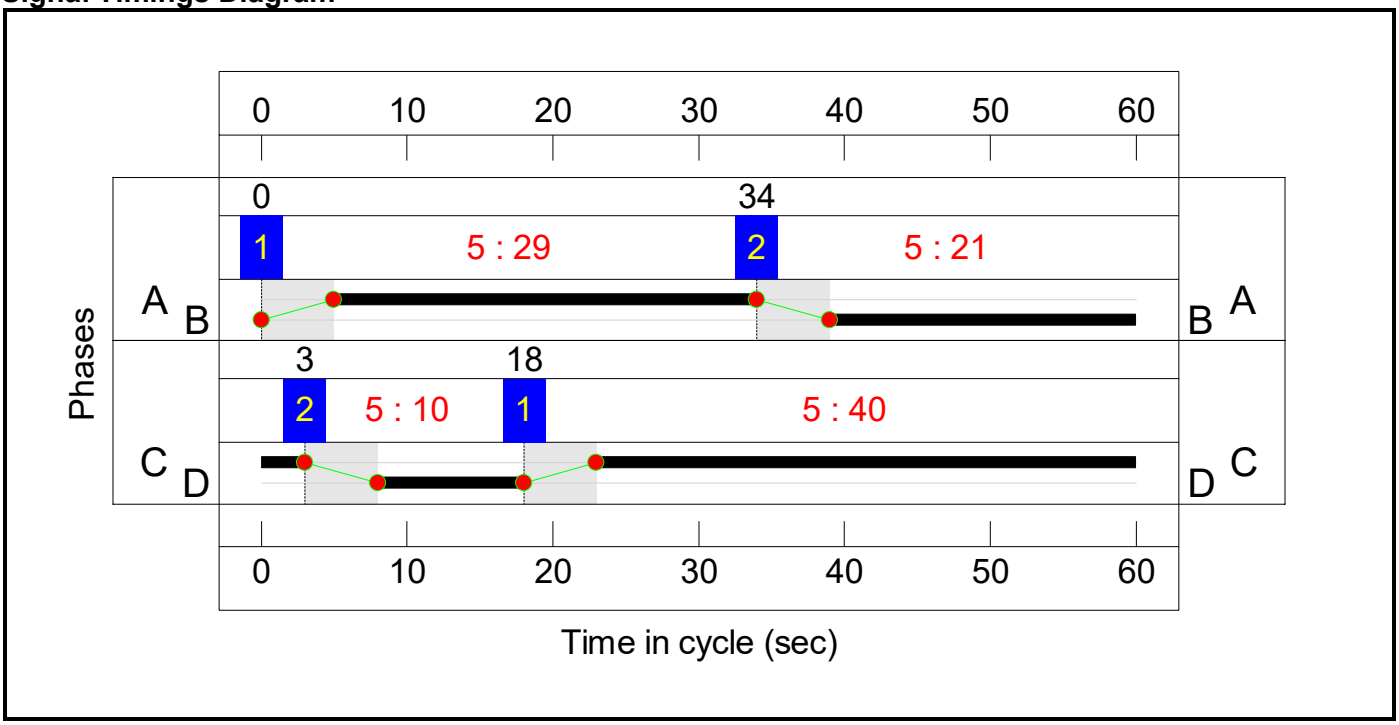
Stage	1	2
Duration	29	21
Change Point	0	34

Stage Stream: 2

Stage	1	2
Duration	40	10
Change Point	18	3

Full Input Data And Results

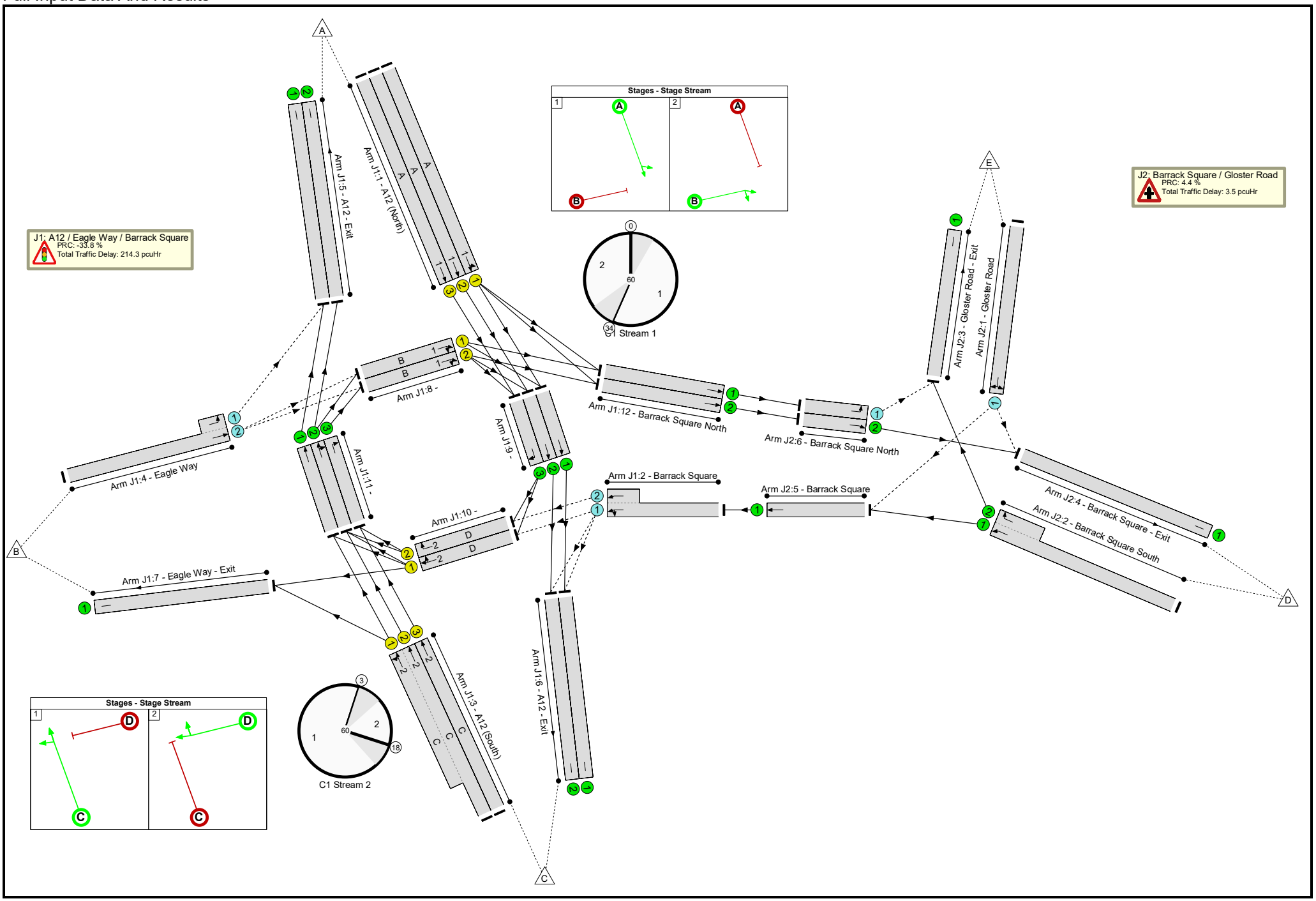
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**120.4%**
J1: A12 / Eagle Way / Barrack Square	-	-	**N/A**	-	-		-	-	-	-	-	-	**120.4%**
1/1	A12 (North) Ahead Left	U	1	N/A	A		1	29	-	789	1862	931	84.7%
1/2	A12 (North) Ahead	U	1	N/A	A		1	29	-	830	1958	979	84.8%
1/3	A12 (North) Ahead	U	1	N/A	A		1	29	-	73	1828	914	8.0%
2/1+2/2	Barrack Square Left Ahead	O	N/A	N/A	-		-	-	-	866	1994:1862	504+215	120.4 : 120.4%
3/2+3/1	A12 (South) Left Ahead	U	2	N/A	C		1	40	-	2025	1828:1828	914+914	110.8 : 110.8%
3/3	A12 (South) Ahead	U	2	N/A	C		1	40	-	124	1828	1249	9.9%
4/2+4/1	Eagle Way Left Ahead	O	N/A	N/A	-		-	-	-	190	Inf :1821	366+127	38.5 : 38.5%
5/1	A12 - Exit	U	N/A	N/A	-		-	-	-	906	Inf	Inf	0.0%
5/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1016	Inf	Inf	0.0%
6/1	A12 - Exit	U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
6/2	A12 - Exit	U	N/A	N/A	-		-	-	-	1219	Inf	Inf	0.0%
7/1	Eagle Way - Exit	U	N/A	N/A	-		-	-	-	295	Inf	Inf	0.0%
8/1	Right Ahead	U	1	N/A	B		1	21	-	331	1764	647	47.3%
8/2	Right Ahead	U	1	N/A	B		1	21	-	193	1764	647	29.8%
9/1	Ahead	U	N/A	N/A	-		-	-	-	580	Inf	Inf	0.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	951	Inf	Inf	0.0%
9/3	Right	U	N/A	N/A	-		-	-	-	73	Inf	Inf	0.0%
10/1	Ahead Right	U	2	N/A	D		1	10	-	143	1764	323	40.6%
10/2	Right	U	2	N/A	D		1	10	-	259	1764	323	66.5%

Full Input Data And Results

11/1	Ahead	U	N/A	N/A	-		-	-	-	857	Inf	Inf	0.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1275	Inf	Inf	0.0%
11/3	Right	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
12/1	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
12/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	217	Inf	Inf	0.0%
J2: Barrack Square / Gloster Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.2%**
1/1	Gloster Road Left Right	O	N/A	N/A	-		-	-	-	393	Inf	456	86.2%
2/1+2/2	Barrack Square South Right Ahead	U	N/A	N/A	-		-	-	-	520	1800:1800	1662+138	28.9 : 28.9%
3/1	Gloster Road - Exit	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
4/1	Barrack Square - Exit	U	N/A	N/A	-		-	-	-	224	Inf	Inf	0.0%
5/1	Barrack Square Ahead	U	N/A	N/A	-		-	-	-	866	Inf	Inf	0.0%
6/1	Barrack Square North Left	O	N/A	N/A	-		-	-	-	395	Inf	987	37.5%
6/2	Barrack Square North Ahead	U	N/A	N/A	-		-	-	-	217	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**2581**	**0**	**0**	**27.1**	**190.7**	**0.0**	**217.8**	**-**	**-**	**-**	**-**
J1: A12 / Eagle Way / Barrack Square	**-**	**-**	**1819**	**0**	**0**	**26.9**	**187.3**	**0.0**	**214.3**	**-**	**-**	**-**	**-**
1/1	789	789	-	-	-	2.9	2.7	-	5.5	25.2	11.4	2.7	14.1
1/2	830	830	-	-	-	3.0	2.7	-	5.7	24.7	12.0	2.7	14.7
1/3	73	73	-	-	-	0.2	0.0	-	0.2	10.0	0.6	0.0	0.7
2/1+2/2	866	719	1439	0	0	6.9	76.2	-	83.1	345.3	26.4	76.2	102.5
3/2+3/1	2025	1828	-	-	-	10.4	103.4	-	113.8	202.3	45.1	103.4	148.5
3/3	124	124	-	-	-	0.1	0.1	-	0.2	4.9	0.7	0.1	0.7
4/2+4/1	190	190	380	0	0	0.2	0.3	-	0.5	10.4	1.2	0.3	1.5
5/1	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	803	803	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1174	1174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	269	269	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	306	306	-	-	-	1.1	0.4	-	1.6	18.4	3.2	0.4	3.6
8/2	193	193	-	-	-	0.8	0.2	-	1.0	18.7	2.5	0.2	2.7
9/1	580	580	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	951	951	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/3	73	73	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	131	131	-	-	-	0.7	0.3	-	1.0	28.7	1.6	0.3	1.9
10/2	215	215	-	-	-	0.7	1.0	-	1.6	27.6	3.0	1.0	4.0
11/1	773	773	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1132	1132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/3	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

12/2	217	217	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Barrack Square / Gloster Road	**-**	**-**	**763**	**0**	**0**	**0.1**	**3.4**	**0.0**	**3.5**	**-**	**-**	**-**	**-**
1/1	393	393	393	0	0	0.0	2.9	-	2.9	26.3	0.2	2.9	3.1
2/1+2/2	520	520	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
3/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	866	866	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	370	370	370	0	0	0.1	0.3	-	0.4	4.0	3.7	0.3	4.0
6/2	217	217	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	6.2	Total Delay for Signalled Lanes (pcuHr):	13.98	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-23.1	Total Delay for Signalled Lanes (pcuHr):	116.67	Cycle Time (s):	60
	PRC Over All Lanes (%):	-33.8	Total Delay Over All Lanes(pcuHr):	217.76		

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: 2020.07.23_J23_Model_CV_v16 SENS.j9
Path: C:\Users\UKVXG007\Desktop\SZC\v16a No FI Sensitivity\J23_sens\Model
Report generation date: 17/12/2020 17:51:24

»Base Year, 6-7 AM
»Base Year, 7-8 AM
»Base Year, 8-9 AM
»Base Year, 3-4 PM
»Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM
»2023 Reference Case [Adjusted flows], 6-7 AM
»2023 Reference Case [Adjusted flows], 7-8 AM
»2023 Reference Case [Adjusted flows], 8-9 AM
»2023 Reference Case [Adjusted flows], 3-4 PM
»2023 Reference Case [Adjusted flows], 5-6 PM
»2023 Early Years [Adjusted flows], 6-7 AM
»2023 Early Years [Adjusted flows], 7-8 AM
»2023 Early Years [Adjusted flows], 8-9 AM
»2023 Early Years [Adjusted flows], 3-4 PM
»2023 Early Years [Adjusted flows], 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
	Base Year																								
A - A12 North	0.7	2.7	2.84	0.40	A	3.5	12.4	9.00	0.78	A	7.6	38.4	19.65	0.89	C	2.7	5.4	6.83	0.73	A	2.7	5.5	6.30	0.73	A
B - Eagle Way West	0.1	0.5	3.49	0.07	A	0.5	2.0	9.42	0.33	A	1.7	9.0	30.31	0.64	D	0.5	1.9	9.71	0.33	A	0.3	1.3	7.70	0.24	A
C - A12 South	0.4	1.5	1.81	0.28	A	2.0	4.5	3.94	0.67	A	6.6	32.3	10.15	0.87	B	2.3	5.3	4.38	0.70	A	2.2	4.8	4.07	0.69	A
D - Barrack Square East	0.1	0.5	3.41	0.07	A	0.3	1.4	6.18	0.25	A	1.0	3.9	9.54	0.50	A	2.6	11.6	16.23	0.73	C	2.8	12.7	17.06	0.74	C
	2023 Reference Case																								
A - A12 North	0.7	2.4	2.93	0.42	A	3.9	16.2	10.02	0.80	B	7.8	40.2	20.44	0.90	C	2.9	6.4	7.30	0.75	A	3.2	8.1	7.35	0.77	A
B - Eagle Way West	0.1	0.5	3.59	0.07	A	0.7	3.2	11.61	0.41	B	4.8	22.4	79.26	0.87	F	0.6	3.0	11.36	0.39	B	0.4	1.5	8.17	0.27	A
C - A12 South	0.4	1.4	1.84	0.29	A	2.4	5.7	4.48	0.71	A	10.5	53.4	15.66	0.92	C	2.7	6.3	4.92	0.73	A	2.3	5.3	4.32	0.70	A
D - Barrack Square East	0.1	0.5	3.50	0.07	A	0.4	1.4	6.43	0.26	A	1.0	4.0	9.71	0.51	A	2.9	13.5	17.83	0.75	C	3.5	17.6	21.60	0.79	C
	2023 Early Years																								
A - A12 North	0.7	2.3	2.96	0.43	A	4.9	23.6	12.17	0.84	B	7.8	40.7	20.67	0.90	C	2.9	7.0	7.54	0.75	A	3.2	8.3	7.52	0.76	A
B - Eagle Way West	0.1	0.5	3.77	0.08	A	1.0	4.8	16.72	0.50	C	11.4	33.8	166.15	1.04	F	0.7	3.3	12.28	0.41	B	0.4	1.0	8.41	0.28	A
C - A12 South	0.5	2.1	1.97	0.33	A	3.5	8.1	6.07	0.78	A	16.7	90.9	24.64	0.96	C	3.0	6.9	5.36	0.75	A	2.4	5.5	4.47	0.71	A
D - Barrack Square East	0.1	0.5	3.52	0.07	A	0.4	1.0	6.80	0.27	A	1.0	3.9	9.70	0.51	A	2.9	13.7	18.01	0.75	C	3.5	17.5	21.52	0.79	C
	2028 Reference Case																								
A - A12 North	0.8	2.3	2.98	0.43	A	4.6	21.1	11.38	0.83	B	9.1	49.7	23.15	0.91	C	4.2	17.6	9.78	0.81	A	4.5	19.3	9.71	0.82	A
B - Eagle Way West	0.1	0.5	3.64	0.08	A	0.9	4.6	15.10	0.48	C	34.1	59.1	434.73	1.40	F	0.9	4.5	15.44	0.48	C	0.5	1.8	10.10	0.33	B
C - A12 South	0.4	1.5	1.86	0.30	A	2.9	6.7	5.13	0.74	A	21.3	106.2	31.18	0.97	D	3.5	7.8	6.02	0.78	A	2.9	6.6	5.17	0.75	A
D - Barrack Square East	0.1	0.5	3.54	0.07	A	0.6	2.6	7.40	0.36	A	2.8	12.6	17.86	0.74	C	5.5	30.0	31.05	0.86	D	9.0	46.1	49.54	0.92	E
	2028 Peak Construction																								
A - A12 North	0.8	2.3	2.98	0.43	A	4.2	18.5	10.70	0.81	B	8.9	48.3	22.78	0.91	C	4.3	18.1	10.04	0.81	B	4.2	16.6	9.27	0.81	A
B - Eagle Way West	0.1	0.5	3.99	0.09	A	1.4	7.0	23.03	0.59	C	38.8	63.9	502.05	1.50	F	1.0	4.8	16.27	0.49	C	0.5	1.9	10.29	0.33	B
C - A12 South	0.6	2.7	2.06	0.36	A	4.1	12.0	6.90	0.81	A	27.4	119.5	39.33	0.99	E	3.7	8.5	6.42	0.79	A	3.0	6.8	5.31	0.75	A
D - Barrack Square East	0.1	0.5	3.55	0.07	A	0.6	2.5	7.24	0.36	A	2.5	10.7	16.46	0.72	C	5.6	30.6	31.67	0.86	D	8.0	42.4	44.10	0.91	E
	2034 Reference Case																								

A - A12 North	0.8	2.0	3.05	0.44	A	5.4	26.8	12.98	0.85	B	6.3	32.5	16.06	0.87	C	7.8	39.6	16.58	0.89	C	4.9	22.1	10.28	0.83	B
B - Eagle Way West	0.1	0.5	3.80	0.09	A	1.5	7.7	24.27	0.61	C	54.3	80.7	698.58	1.81	F	1.7	8.8	28.25	0.64	D	0.7	3.1	13.54	0.40	B
C - A12 South	0.5	2.1	1.93	0.33	A	3.8	9.7	6.46	0.80	A	28.3	120.8	40.50	0.99	E	5.5	23.7	8.87	0.85	A	4.0	11.0	6.74	0.80	A
D - Barrack Square East	0.1	0.5	3.60	0.07	A	0.8	3.6	8.68	0.45	A	5.0	26.1	27.18	0.85	D	15.5	60.8	77.51	0.98	F	15.5	61.5	75.49	0.98	F
	2034 Operational Led																								
A - A12 North	0.8	2.0	3.06	0.44	A	5.9	30.4	14.15	0.86	B	7.9	40.4	19.78	0.90	C	8.1	41.0	17.22	0.90	C	4.9	22.6	10.39	0.84	B
B - Eagle Way West	0.1	0.5	3.80	0.09	A	1.5	7.5	23.64	0.60	C	61.7	88.7	849.31	2.02	F	1.7	8.8	28.34	0.64	D	0.6	2.8	12.74	0.39	B
C - A12 South	0.5	2.1	1.93	0.33	A	3.8	9.1	6.37	0.79	A	43.1	139.1	56.74	1.01	F	5.5	23.9	8.89	0.85	A	3.7	8.4	6.32	0.79	A
D - Barrack Square East	0.1	0.5	3.60	0.07	A	0.8	3.7	8.93	0.45	A	5.9	32.2	32.33	0.87	D	15.9	61.3	79.42	0.99	F	15.8	61.9	76.69	0.98	F
	2023 Reference Case [Adjusted flows]																								
A - A12 North	0.7	2.4	2.93	0.42	A	3.9	16.2	10.02	0.80	B	7.8	40.2	20.44	0.90	C	2.9	6.4	7.30	0.75	A	3.2	8.1	7.35	0.77	A
B - Eagle Way West	0.1	0.5	3.59	0.07	A	0.7	3.2	11.61	0.41	B	4.8	22.4	79.26	0.87	F	0.6	3.0	11.36	0.39	B	0.4	1.5	8.17	0.27	A
C - A12 South	0.4	1.4	1.84	0.29	A	2.4	5.7	4.48	0.71	A	10.5	53.4	15.66	0.92	C	2.7	6.3	4.92	0.73	A	2.3	5.3	4.32	0.70	A
D - Barrack Square East	0.1	0.5	3.50	0.07	A	0.4	1.4	6.43	0.26	A	1.0	4.0	9.71	0.51	A	2.9	13.5	17.83	0.75	C	3.5	17.6	21.60	0.79	C
	2023 Early Years [Adjusted flows]																								
A - A12 North	0.7	2.3	2.96	0.43	A	4.9	23.6	12.17	0.84	B	7.8	40.7	20.67	0.90	C	2.9	7.0	7.54	0.75	A	3.2	8.3	7.52	0.76	A
B - Eagle Way West	0.1	0.5	3.77	0.08	A	1.0	4.8	16.72	0.50	C	11.4	33.8	166.15	1.04	F	0.7	3.3	12.28	0.41	B	0.4	1.0	8.41	0.28	A
C - A12 South	0.5	2.1	1.97	0.33	A	3.5	8.1	6.07	0.78	A	16.7	90.9	24.64	0.96	C	3.0	6.9	5.36	0.75	A	2.4	5.5	4.47	0.71	A
D - Barrack Square East	0.1	0.5	3.52	0.07	A	0.4	1.0	6.80	0.27	A	1.0	3.9	9.70	0.51	A	2.9	13.7	18.01	0.75	C	3.5	17.5	21.52	0.79	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Eagle Way / Barrack Square
Location	52° 3'36.26"N, 1°16'35.87"E
Site number	23
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Barrack Square East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.00	7.00	0.0	33.0	75.3	5.0	
B - Eagle Way West	3.50	5.63	12.7	29.9	75.3	26.0	
C - A12 South	7.60	7.60	0.0	27.3	75.3	6.5	
D - Barrack Square East	3.70	6.90	22.6	24.1	75.3	30.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	50
B - Eagle Way West	None		
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	500
D - Barrack Square East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-150

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.607	2396
B - Eagle Way West	0.466	1524
C - A12 South	0.631	3021
D - Barrack Square East	0.503	1653

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	768	100.000
B - Eagle Way West		ONE HOUR	✓	66	100.000
C - A12 South		ONE HOUR	✓	695	100.000
D - Barrack Square East		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	727	39
	B - Eagle Way West	14	0	47	5
	C - A12 South	524	8	0	163
	D - Barrack Square East	0	6	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	7	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2

	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.84	0.7	2.7	A	705	1057
B - Eagle Way West	0.07	3.49	0.1	0.5	A	61	91
C - A12 South	0.28	1.81	0.4	1.5	A	638	957
D - Barrack Square East	0.07	3.41	0.1	0.5	A	62	94

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	578	145	162	2155	0.268	577	404	0.0	0.4	2.278	A
B - Eagle Way West	50	12	516	1224	0.041	50	12	0.0	0.0	3.065	A
C - A12 South	523	131	6	2751	0.190	522	628	0.0	0.2	1.615	A
D - Barrack Square East	51	13	583	1267	0.040	51	156	0.0	0.0	2.959	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	690	173	193	2137	0.323	690	483	0.4	0.5	2.488	A
B - Eagle Way West	59	15	617	1174	0.051	59	14	0.0	0.1	3.229	A
C - A12 South	625	156	7	2750	0.227	625	751	0.2	0.3	1.693	A
D - Barrack Square East	61	15	697	1209	0.051	61	186	0.0	0.1	3.134	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	846	211	237	2111	0.400	845	592	0.5	0.7	2.841	A
B - Eagle Way West	73	18	756	1105	0.066	73	18	0.1	0.1	3.486	A
C - A12 South	765	191	9	2749	0.278	765	920	0.3	0.4	1.814	A
D - Barrack Square East	75	19	854	1130	0.066	75	228	0.1	0.1	3.409	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	846	211	237	2111	0.400	846	592	0.7	0.7	2.843	A
B - Eagle Way West	73	18	756	1105	0.066	73	18	0.1	0.1	3.487	A
C - A12 South	765	191	9	2749	0.278	765	920	0.4	0.4	1.814	A
D - Barrack Square East	75	19	854	1130	0.066	75	228	0.1	0.1	3.410	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	690	173	193	2137	0.323	691	484	0.7	0.5	2.493	A
B - Eagle Way West	59	15	618	1173	0.051	59	14	0.1	0.1	3.231	A
C - A12 South	625	156	7	2750	0.227	625	752	0.4	0.3	1.693	A
D - Barrack Square East	61	15	698	1209	0.051	61	186	0.1	0.1	3.136	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	578	145	162	2155	0.268	579	405	0.5	0.4	2.285	A
B - Eagle Way West	50	12	517	1223	0.041	50	12	0.1	0.0	3.069	A
C - A12 South	523	131	6	2751	0.190	523	630	0.3	0.2	1.618	A
D - Barrack Square East	51	13	585	1266	0.040	51	156	0.1	0.0	2.964	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.48	0.00	0.00	0.48	0.48			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.66	0.03	0.25	0.66	0.66			N/A	N/A
B - Eagle Way West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.38	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.67	0.03	0.28	0.89	2.66			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.39	0.03	0.34	1.24	1.47			N/A	N/A
D - Barrack Square East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.48	0.00	0.00	0.48	0.48			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	6.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1301	100.000
B - Eagle Way West		ONE HOUR	✓	173	100.000
C - A12 South		ONE HOUR	✓	1702	100.000
D - Barrack Square East		ONE HOUR	✓	181	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1259	41
	B - Eagle Way West	40	0	110	23
	C - A12 South	1161	26	0	515
	D - Barrack Square East	19	8	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	9.00	3.5	12.4	A	1194	1791
B - Eagle Way West	0.33	9.42	0.5	2.0	A	159	238
C - A12 South	0.67	3.94	2.0	4.5	A	1562	2343
D - Barrack Square East	0.25	6.18	0.3	1.4	A	166	249

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	979	245	487	1967	0.498	976	916	0.0	1.0	3.616	A
B - Eagle Way West	130	33	1273	862	0.151	130	26	0.0	0.2	4.913	A
C - A12 South	1281	320	22	2794	0.459	1278	1141	0.0	0.8	2.370	A
D - Barrack Square East	136	34	1027	1017	0.134	136	435	0.0	0.2	4.083	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	292	583	1910	0.612	1167	1096	1.0	1.6	4.833	A
B - Eagle Way West	156	39	1523	740	0.210	155	31	0.2	0.3	6.150	A
C - A12 South	1530	383	26	2791	0.548	1529	1366	0.8	1.2	2.850	A

D - Barrack Square East	163	41	1229	918	0.177	162	521	0.2	0.2	4.764	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1432	358	713	1832	0.782	1425	1341	1.6	3.4	8.678	A
B - Eagle Way West	190	48	1864	574	0.332	190	38	0.3	0.5	9.345	A
C - A12 South	1874	468	32	2787	0.672	1871	1668	1.2	2.0	3.915	A
D - Barrack Square East	199	50	1501	785	0.254	199	637	0.2	0.3	6.132	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1432	358	715	1831	0.782	1432	1343	3.4	3.5	8.997	A
B - Eagle Way West	190	48	1867	573	0.333	190	39	0.5	0.5	9.419	A
C - A12 South	1874	468	32	2787	0.672	1874	1675	2.0	2.0	3.943	A
D - Barrack Square East	199	50	1508	782	0.255	199	639	0.3	0.3	6.181	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1170	292	585	1909	0.613	1177	1099	3.5	1.6	4.973	A
B - Eagle Way West	156	39	1528	738	0.211	156	32	0.5	0.3	6.200	A
C - A12 South	1530	383	26	2791	0.548	1533	1377	2.0	1.2	2.871	A
D - Barrack Square East	163	41	1240	913	0.178	163	523	0.3	0.2	4.804	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	979	245	489	1966	0.498	982	920	1.6	1.0	3.670	A
B - Eagle Way West	130	33	1278	859	0.152	131	26	0.3	0.2	4.944	A
C - A12 South	1281	320	22	2794	0.459	1283	1149	1.2	0.9	2.384	A
D - Barrack Square East	136	34	1034	1013	0.134	137	437	0.2	0.2	4.107	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.98	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.84	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.15	0.00	0.00	0.15	0.15			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.05	0.46	4.04	6.57			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.21	0.05	0.48	2.90	4.48			N/A	N/A
D - Barrack Square East	0.21	0.00	0.00	0.21	0.21			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.43	0.03	0.29	3.43	12.36			N/A	N/A
B - Eagle Way West	0.49	0.03	0.26	0.49	0.49			N/A	N/A
C - A12 South	2.03	0.03	0.26	2.03	2.03			N/A	N/A
D - Barrack Square East	0.34	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.51	0.03	0.27	3.51	3.87			N/A	N/A
B - Eagle Way West	0.49	0.03	0.32	1.47	1.96			N/A	N/A
C - A12 South	2.04	0.03	0.26	2.04	2.04			N/A	N/A
D - Barrack Square East	0.34	0.03	0.32	1.14	1.40			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.06	0.90	3.76	5.42			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.22	0.30	1.15	1.74	1.95			N/A	N/A
D - Barrack Square East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.04	0.40	2.49	4.11			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.85	0.08	0.84	1.22	1.68			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	14.13	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1333	100.000
B - Eagle Way West		ONE HOUR	✓	193	100.000
C - A12 South		ONE HOUR	✓	2204	100.000
D - Barrack Square East		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	17	1283	33
	B - Eagle Way West	50	0	123	20
	C - A12 South	1376	62	1	765
	D - Barrack Square East	18	17	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	19.65	7.6	38.4	C	1223	1835
B - Eagle Way West	0.64	30.31	1.7	9.0	D	177	266
C - A12 South	0.87	10.15	6.6	32.3	B	2022	3034
D - Barrack Square East	0.50	9.54	1.0	3.9	A	319	479

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	682	1826	0.550	999	1083	0.0	1.2	4.327	A
B - Eagle Way West	145	36	1621	703	0.207	144	72	0.0	0.3	6.436	A
C - A12 South	1659	415	40	2789	0.595	1653	1288	0.0	1.5	3.155	A
D - Barrack Square East	262	65	1067	1013	0.259	261	614	0.0	0.3	4.774	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1198	300	816	1749	0.685	1195	1295	1.2	2.1	6.450	A
B - Eagle Way West	174	43	1939	546	0.318	173	86	0.3	0.5	9.622	A
C - A12 South	1981	495	48	2784	0.712	1977	1541	1.5	2.4	4.440	A

D - Barrack Square East	313	78	1276	907	0.345	312	735	0.3	0.5	6.044	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	993	1647	0.891	1448	1579	2.1	7.0	16.677	C
B - Eagle Way West	212	53	2364	337	0.631	208	105	0.5	1.6	27.078	D
C - A12 South	2427	607	58	2778	0.874	2411	1870	2.4	6.4	9.423	A
D - Barrack Square East	383	96	1546	770	0.498	381	895	0.5	1.0	9.224	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1468	367	1001	1643	0.893	1465	1589	7.0	7.6	19.646	C
B - Eagle Way West	212	53	2378	330	0.645	212	106	1.6	1.7	30.311	D
C - A12 South	2427	607	58	2778	0.874	2426	1890	6.4	6.6	10.153	B
D - Barrack Square East	383	96	1565	760	0.504	383	901	1.0	1.0	9.538	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1198	300	827	1743	0.688	1220	1310	7.6	2.3	7.154	A
B - Eagle Way West	174	43	1959	536	0.324	178	87	1.7	0.5	10.192	B
C - A12 South	1981	495	48	2784	0.712	1998	1571	6.6	2.5	4.671	A
D - Barrack Square East	313	78	1304	893	0.350	315	743	1.0	0.5	6.248	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1004	251	687	1823	0.550	1008	1090	2.3	1.2	4.435	A
B - Eagle Way West	145	36	1631	698	0.208	146	72	0.5	0.3	6.536	A
C - A12 South	1659	415	40	2789	0.595	1663	1299	2.5	1.5	3.209	A
D - Barrack Square East	262	65	1077	1008	0.260	263	618	0.5	0.4	4.835	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.55	1.12	1.50	1.76			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.46	0.58	1.36	1.83	1.96			N/A	N/A
D - Barrack Square East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.13	0.04	0.43	5.81	9.95			N/A	N/A
B - Eagle Way West	0.46	0.04	0.39	1.22	1.36			N/A	N/A
C - A12 South	2.43	0.04	0.39	6.49	12.26			N/A	N/A
D - Barrack Square East	0.52	0.06	0.60	1.32	1.41			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.96	0.04	0.41	18.23	37.87			N/A	N/A
B - Eagle Way West	1.58	0.03	0.29	1.58	7.06			N/A	N/A
C - A12 South	6.38	0.03	0.32	9.63	32.32			N/A	N/A
D - Barrack Square East	0.97	0.03	0.26	0.97	0.97			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.59	0.03	0.33	11.44	38.45			N/A	N/A
B - Eagle Way West	1.71	0.03	0.33	3.61	8.98			N/A	N/A
C - A12 South	6.63	0.03	0.29	6.63	17.68			N/A	N/A
D - Barrack Square East	1.00	0.03	0.28	1.07	3.92			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.25	0.04	0.44	6.18	10.58			N/A	N/A
B - Eagle Way West	0.49	0.04	0.40	1.30	1.45			N/A	N/A
C - A12 South	2.51	0.05	0.65	6.82	10.78			N/A	N/A
D - Barrack Square East	0.55	0.06	0.66	1.33	1.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.03	0.32	2.40	6.35			N/A	N/A
B - Eagle Way West	0.27	0.03	0.30	0.95	1.29			N/A	N/A
C - A12 South	1.48	0.04	0.35	3.68	7.49			N/A	N/A
D - Barrack Square East	0.35	0.03	0.29	0.74	1.12			N/A	N/A

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1318	100.000
B - Eagle Way West		ONE HOUR	✓	167	100.000
C - A12 South		ONE HOUR	✓	1761	100.000
D - Barrack Square East		ONE HOUR	✓	542	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	48	1255	14
	B - Eagle Way West	52	0	83	32
	C - A12 South	1367	89	0	305
	D - Barrack Square East	84	27	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	6.83	2.7	5.4	A	1209	1814
B - Eagle Way West	0.33	9.71	0.5	1.9	A	153	230
C - A12 South	0.70	4.38	2.3	5.3	A	1616	2424
D - Barrack Square East	0.73	16.23	2.6	11.6	C	497	746

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	992	248	316	2064	0.481	989	1129	0.0	0.9	3.337	A
B - Eagle Way West	126	31	1320	846	0.149	125	123	0.0	0.2	4.988	A
C - A12 South	1326	331	121	2795	0.474	1322	1325	0.0	0.9	2.437	A
D - Barrack Square East	408	102	1040	1071	0.381	406	264	0.0	0.6	5.388	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1185	296	378	2028	0.584	1183	1350	0.9	1.4	4.252	A
B - Eagle Way West	150	38	1579	724	0.208	150	147	0.2	0.3	6.270	A
C - A12 South	1583	396	144	2780	0.569	1581	1586	0.9	1.3	2.998	A

D - Barrack Square East	487	122	1245	964	0.505	486	316	0.6	1.0	7.495	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1451	363	462	1979	0.733	1446	1652	1.4	2.7	6.692	A
B - Eagle Way West	184	46	1931	557	0.330	183	180	0.3	0.5	9.611	A
C - A12 South	1939	485	176	2761	0.702	1935	1936	1.3	2.3	4.337	A
D - Barrack Square East	597	149	1522	820	0.728	591	387	1.0	2.5	15.312	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1451	363	463	1978	0.734	1451	1656	2.7	2.7	6.827	A
B - Eagle Way West	184	46	1935	554	0.332	184	181	0.5	0.5	9.712	A
C - A12 South	1939	485	177	2760	0.703	1939	1946	2.3	2.3	4.384	A
D - Barrack Square East	597	149	1527	817	0.730	596	388	2.5	2.6	16.233	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1185	296	380	2027	0.585	1190	1356	2.7	1.4	4.330	A
B - Eagle Way West	150	38	1585	720	0.208	151	148	0.5	0.3	6.332	A
C - A12 South	1583	396	146	2779	0.570	1587	1600	2.3	1.3	3.031	A
D - Barrack Square East	487	122	1252	961	0.507	494	317	2.6	1.0	7.809	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	992	248	317	2063	0.481	994	1134	1.4	0.9	3.376	A
B - Eagle Way West	126	31	1325	843	0.149	126	124	0.3	0.2	5.020	A
C - A12 South	1326	331	122	2795	0.474	1327	1334	1.3	0.9	2.458	A
D - Barrack Square East	408	102	1046	1068	0.382	410	265	1.0	0.6	5.480	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.90	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.61	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.05	0.48	3.50	5.43			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.31	0.04	0.45	3.33	5.32			N/A	N/A
D - Barrack Square East	1.00	0.06	0.75	1.92	2.72			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.68	0.03	0.27	2.68	4.71			N/A	N/A
B - Eagle Way West	0.49	0.03	0.26	0.49	0.49			N/A	N/A
C - A12 South	2.32	0.03	0.26	2.32	2.32			N/A	N/A
D - Barrack Square East	2.52	0.03	0.30	2.63	11.55			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.72	0.03	0.27	2.72	2.72			N/A	N/A
B - Eagle Way West	0.49	0.03	0.33	1.46	1.94			N/A	N/A
C - A12 South	2.34	0.03	0.26	2.34	2.34			N/A	N/A
D - Barrack Square East	2.61	0.03	0.29	2.61	9.20			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.09	1.09	2.81	3.77			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.33	0.18	1.20	1.99	2.63			N/A	N/A
D - Barrack Square East	1.05	0.05	0.61	2.24	3.24			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.05	0.48	1.98	2.96			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	0.91	0.07	0.79	1.60	1.98			N/A	N/A
D - Barrack Square East	0.62	0.04	0.36	1.41	2.42			N/A	N/A

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	6.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1400	100.000
B - Eagle Way West		ONE HOUR	✓	134	100.000
C - A12 South		ONE HOUR	✓	1754	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	60	1319	21
	B - Eagle Way West	38	0	80	16
	C - A12 South	1386	124	1	243
	D - Barrack Square East	82	39	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	6.30	2.7	5.5	A	1285	1927
B - Eagle Way West	0.24	7.70	0.3	1.3	A	123	184
C - A12 South	0.69	4.07	2.2	4.8	A	1609	2414
D - Barrack Square East	0.74	17.06	2.8	12.7	C	500	750

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1054	263	255	2186	0.482	1050	1131	0.0	0.9	3.160	A
B - Eagle Way West	101	25	1285	897	0.112	100	167	0.0	0.1	4.516	A
C - A12 South	1320	330	136	2856	0.462	1317	1367	0.0	0.9	2.334	A
D - Barrack Square East	410	103	1095	1067	0.385	408	210	0.0	0.6	5.442	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1259	315	305	2155	0.584	1257	1352	0.9	1.4	4.001	A
B - Eagle Way West	120	30	1537	778	0.155	120	200	0.1	0.2	5.468	A
C - A12 South	1577	394	162	2839	0.555	1575	1637	0.9	1.2	2.843	A

D - Barrack Square East	490	122	1311	959	0.511	488	251	0.6	1.0	7.626	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	385	373	2113	0.730	1536	1654	1.4	2.6	6.193	A
B - Eagle Way West	148	37	1881	617	0.239	147	245	0.2	0.3	7.654	A
C - A12 South	1931	483	198	2817	0.686	1928	1998	1.2	2.1	4.031	A
D - Barrack Square East	600	150	1602	812	0.739	594	308	1.0	2.7	16.019	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	385	374	2112	0.730	1541	1658	2.6	2.7	6.300	A
B - Eagle Way West	148	37	1885	615	0.240	148	245	0.3	0.3	7.702	A
C - A12 South	1931	483	199	2816	0.686	1931	2008	2.1	2.2	4.067	A
D - Barrack Square East	600	150	1607	810	0.741	600	308	2.7	2.8	17.063	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1259	315	307	2154	0.584	1264	1358	2.7	1.4	4.064	A
B - Eagle Way West	120	30	1543	776	0.155	121	201	0.3	0.2	5.505	A
C - A12 South	1577	394	164	2838	0.556	1580	1650	2.2	1.3	2.872	A
D - Barrack Square East	490	122	1318	955	0.513	497	252	2.8	1.1	7.965	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1054	263	256	2185	0.482	1056	1135	1.4	0.9	3.193	A
B - Eagle Way West	101	25	1291	895	0.113	101	168	0.2	0.1	4.539	A
C - A12 South	1320	330	137	2856	0.462	1322	1377	1.3	0.9	2.351	A
D - Barrack Square East	410	103	1101	1064	0.386	412	211	1.1	0.6	5.538	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.86	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.62	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.05	0.47	3.52	5.49			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	1.24	0.05	0.46	3.04	4.81			N/A	N/A
D - Barrack Square East	1.03	0.06	0.73	1.99	2.85			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.63	0.03	0.27	2.63	3.68			N/A	N/A
B - Eagle Way West	0.31	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.15	0.03	0.26	2.15	2.15			N/A	N/A
D - Barrack Square East	2.65	0.03	0.31	3.25	12.66			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.67	0.03	0.26	2.67	2.67			N/A	N/A
B - Eagle Way West	0.31	0.03	0.32	1.05	1.31			N/A	N/A
C - A12 South	2.17	0.03	0.26	2.17	2.17			N/A	N/A
D - Barrack Square East	2.76	0.03	0.29	2.76	10.23			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.10	1.12	2.73	3.63			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	1.26	0.25	1.17	1.82	2.13			N/A	N/A
D - Barrack Square East	1.07	0.05	0.56	2.39	3.50			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.05	0.51	1.94	2.88			N/A	N/A
B - Eagle Way West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C - A12 South	0.86	0.07	0.82	1.37	1.78			N/A	N/A
D - Barrack Square East	0.63	0.03	0.35	1.45	2.56			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	810	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	742	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	769	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	570	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.93	0.7	2.4	A	744	1115
B - Eagle Way West	0.07	3.59	0.1	0.5	A	67	101
C - A12 South	0.29	1.84	0.4	1.4	A	681	1021
D - Barrack Square East	0.07	3.50	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	610	153	166	2165	0.282	608	440	0.0	0.4	2.311	A
B - Eagle Way West	55	14	551	1209	0.046	55	13	0.0	0.0	3.119	A
C - A12 South	559	140	7	2776	0.201	558	663	0.0	0.3	1.622	A
D - Barrack Square East	52	13	618	1248	0.041	52	156	0.0	0.0	3.008	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	728	182	198	2146	0.339	728	526	0.4	0.5	2.539	A
B - Eagle Way West	66	16	659	1156	0.057	66	16	0.0	0.1	3.301	A
C - A12 South	667	167	8	2775	0.240	667	793	0.3	0.3	1.707	A

D - Barrack Square East	62	15	740	1187	0.052	62	187	0.0	0.1	3.198	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	892	223	243	2120	0.421	891	645	0.5	0.7	2.929	A
B - Eagle Way West	81	20	807	1084	0.074	81	20	0.1	0.1	3.588	A
C - A12 South	817	204	10	2774	0.295	817	972	0.3	0.4	1.838	A
D - Barrack Square East	76	19	906	1104	0.068	76	228	0.1	0.1	3.499	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	892	223	243	2120	0.421	892	645	0.7	0.7	2.932	A
B - Eagle Way West	81	20	807	1083	0.074	81	20	0.1	0.1	3.589	A
C - A12 South	817	204	10	2774	0.295	817	972	0.4	0.4	1.838	A
D - Barrack Square East	76	19	907	1104	0.069	76	229	0.1	0.1	3.501	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	728	182	199	2146	0.339	729	527	0.7	0.5	2.542	A
B - Eagle Way West	66	16	659	1156	0.057	66	16	0.1	0.1	3.302	A
C - A12 South	667	167	8	2775	0.240	667	795	0.4	0.3	1.710	A
D - Barrack Square East	62	15	741	1186	0.052	62	187	0.1	0.1	3.200	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	610	153	166	2165	0.282	611	441	0.5	0.4	2.316	A
B - Eagle Way West	55	14	552	1209	0.046	55	13	0.1	0.0	3.120	A
C - A12 South	559	140	7	2776	0.201	559	666	0.3	0.3	1.625	A
D - Barrack Square East	52	13	620	1247	0.041	52	156	0.1	0.0	3.014	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.51	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.25	0.72	0.72			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.28	0.72	2.43			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.42	0.03	0.33	1.32	1.38			N/A	N/A
D - Barrack Square East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1316	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1798	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1274	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1254	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	10.02	3.9	16.2	B	1208	1812
B - Eagle Way West	0.41	11.61	0.7	3.2	B	176	264
C - A12 South	0.71	4.48	2.4	5.7	A	1650	2474
D - Barrack Square East	0.26	6.43	0.4	1.4	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	991	248	498	1945	0.510	987	989	0.0	1.0	3.744	A
B - Eagle Way West	145	36	1343	827	0.175	144	29	0.0	0.2	5.263	A
C - A12 South	1353	338	22	2789	0.485	1350	1162	0.0	0.9	2.494	A
D - Barrack Square East	137	34	1048	1002	0.137	136	437	0.0	0.2	4.157	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1184	296	596	1887	0.627	1181	1183	1.0	1.7	5.081	A
B - Eagle Way West	173	43	1606	699	0.247	172	35	0.2	0.3	6.835	A
C - A12 South	1616	404	27	2786	0.580	1614	1390	0.9	1.4	3.068	A

D - Barrack Square East	164	41	1254	900	0.182	163	523	0.2	0.2	4.883	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	728	1809	0.801	1441	1447	1.7	3.8	9.568	A
B - Eagle Way West	212	53	1965	524	0.404	210	43	0.3	0.7	11.433	B
C - A12 South	1979	495	33	2782	0.711	1975	1696	1.4	2.4	4.439	A
D - Barrack Square East	200	50	1530	765	0.262	200	640	0.2	0.4	6.367	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	731	1807	0.802	1449	1450	3.8	3.9	10.017	B
B - Eagle Way West	212	53	1969	522	0.406	211	43	0.7	0.7	11.606	B
C - A12 South	1979	495	33	2782	0.712	1979	1706	2.4	2.4	4.483	A
D - Barrack Square East	200	50	1538	760	0.263	200	641	0.4	0.4	6.426	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1184	296	599	1885	0.628	1192	1188	3.9	1.7	5.263	A
B - Eagle Way West	173	43	1612	696	0.248	174	35	0.7	0.3	6.921	A
C - A12 South	1616	404	27	2786	0.580	1620	1403	2.4	1.4	3.100	A
D - Barrack Square East	164	41	1266	894	0.183	164	525	0.4	0.2	4.932	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	991	248	501	1943	0.510	994	993	1.7	1.0	3.804	A
B - Eagle Way West	145	36	1349	824	0.175	145	29	0.3	0.2	5.304	A
C - A12 South	1353	338	23	2789	0.485	1355	1170	1.4	0.9	2.514	A
D - Barrack Square East	137	34	1055	998	0.137	137	439	0.2	0.2	4.182	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	0.94	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.04	0.45	4.40	7.18			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.37	0.04	0.44	3.53	5.69			N/A	N/A
D - Barrack Square East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.83	0.03	0.30	3.83	16.18			N/A	N/A
B - Eagle Way West	0.66	0.03	0.26	0.66	0.66			N/A	N/A
C - A12 South	2.43	0.03	0.27	2.43	2.43			N/A	N/A
D - Barrack Square East	0.35	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.94	0.03	0.28	3.94	6.38			N/A	N/A
B - Eagle Way West	0.67	0.03	0.31	1.30	3.20			N/A	N/A
C - A12 South	2.45	0.03	0.26	2.45	2.45			N/A	N/A
D - Barrack Square East	0.36	0.03	0.33	1.19	1.44			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.06	0.80	4.22	6.26			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.39	0.16	1.22	2.27	2.85			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.04	0.38	2.65	4.66			N/A	N/A
B - Eagle Way West	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.95	0.07	0.78	1.73	2.31			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	19.75	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1315	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2321	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1264	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1486	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	20.44	7.8	40.2	C	1207	1811
B - Eagle Way West	0.87	79.26	4.8	22.4	F	197	295
C - A12 South	0.92	15.66	10.5	53.4	C	2129	3194
D - Barrack Square East	0.51	9.71	1.0	4.0	A	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	990	248	694	1797	0.551	985	1169	0.0	1.2	4.407	A
B - Eagle Way West	161	40	1703	662	0.244	160	80	0.0	0.3	7.155	A
C - A12 South	1747	437	43	2787	0.627	1740	1283	0.0	1.7	3.418	A
D - Barrack Square East	263	66	1063	1009	0.261	262	616	0.0	0.4	4.809	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1183	296	830	1720	0.687	1179	1398	1.2	2.1	6.600	A
B - Eagle Way West	193	48	2036	498	0.387	191	96	0.3	0.6	11.707	B
C - A12 South	2086	522	51	2782	0.750	2081	1535	1.7	2.9	5.101	A

D - Barrack Square East	315	79	1272	902	0.349	314	736	0.4	0.5	6.111	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	1001	1623	0.892	1429	1696	2.1	7.0	17.060	C
B - Eagle Way West	236	59	2474	282	0.835	224	116	0.6	3.6	53.589	F
C - A12 South	2555	639	62	2775	0.921	2528	1858	2.9	9.8	13.319	B
D - Barrack Square East	385	96	1537	766	0.503	383	893	0.5	1.0	9.360	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	1015	1615	0.897	1445	1714	7.0	7.8	20.436	C
B - Eagle Way West	236	59	2497	271	0.871	231	117	3.6	4.8	79.260	F
C - A12 South	2555	639	62	2774	0.921	2552	1880	9.8	10.5	15.663	C
D - Barrack Square East	385	96	1558	756	0.510	385	903	1.0	1.0	9.712	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1183	296	854	1706	0.693	1204	1425	7.8	2.3	7.469	A
B - Eagle Way West	193	48	2070	481	0.401	209	97	4.8	0.7	14.010	B
C - A12 South	2086	522	52	2781	0.750	2116	1573	10.5	3.1	5.646	A
D - Barrack Square East	315	79	1308	884	0.356	316	750	1.0	0.6	6.363	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	990	248	700	1794	0.552	995	1178	2.3	1.2	4.528	A
B - Eagle Way West	161	40	1715	656	0.246	163	81	0.7	0.3	7.318	A
C - A12 South	1747	437	43	2787	0.627	1753	1295	3.1	1.7	3.501	A
D - Barrack Square East	263	66	1074	1004	0.262	264	620	0.6	0.4	4.872	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.55	1.13	1.52	1.77			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.66	0.53	1.04	2.43	2.85			N/A	N/A
D - Barrack Square East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.04	0.44	5.87	10.02			N/A	N/A
B - Eagle Way West	0.62	0.04	0.45	1.47	1.57			N/A	N/A
C - A12 South	2.93	0.04	0.40	7.91	15.00			N/A	N/A
D - Barrack Square East	0.53	0.06	0.64	1.33	1.41			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.03	0.04	0.41	18.65	38.19			N/A	N/A
B - Eagle Way West	3.65	0.05	0.61	10.30	16.94			N/A	N/A
C - A12 South	9.76	0.04	0.42	25.85	53.42			N/A	N/A
D - Barrack Square East	0.99	0.03	0.26	0.99	0.99			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.77	0.03	0.33	12.63	40.21			N/A	N/A
B - Eagle Way West	4.80	0.06	0.88	13.71	22.41			N/A	N/A
C - A12 South	10.55	0.03	0.33	15.76	53.35			N/A	N/A
D - Barrack Square East	1.02	0.03	0.28	1.06	3.97			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.31	0.04	0.45	6.36	10.83			N/A	N/A
B - Eagle Way West	0.68	0.03	0.35	1.59	2.88			N/A	N/A
C - A12 South	3.07	0.05	0.47	8.61	14.66			N/A	N/A
D - Barrack Square East	0.56	0.07	0.70	1.34	1.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.03	0.32	2.39	6.39			N/A	N/A
B - Eagle Way West	0.33	0.03	0.28	0.57	1.25			N/A	N/A
C - A12 South	1.70	0.03	0.33	3.51	8.89			N/A	N/A
D - Barrack Square East	0.36	0.03	0.29	0.83	1.17			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1326	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1828	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1258	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1424	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	8	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	7	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	7.30	2.9	6.4	A	1217	1826
B - Eagle Way West	0.39	11.36	0.6	3.0	B	171	256
C - A12 South	0.73	4.92	2.7	6.3	A	1678	2517
D - Barrack Square East	0.75	17.83	2.9	13.5	C	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	999	250	326	2041	0.489	995	1176	0.0	1.0	3.429	A
B - Eagle Way West	140	35	1363	824	0.170	139	137	0.0	0.2	5.251	A
C - A12 South	1377	344	127	2782	0.495	1373	1334	0.0	1.0	2.546	A
D - Barrack Square East	410	103	1053	1060	0.387	408	267	0.0	0.6	5.501	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1192	298	390	2004	0.595	1190	1407	1.0	1.5	4.416	A
B - Eagle Way West	167	42	1630	697	0.240	167	164	0.2	0.3	6.788	A
C - A12 South	1644	411	152	2767	0.594	1642	1597	1.0	1.5	3.195	A

D - Barrack Square East	490	122	1261	951	0.515	488	319	0.6	1.0	7.756	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1461	365	476	1954	0.748	1455	1720	1.5	2.9	7.133	A
B - Eagle Way West	205	51	1993	524	0.391	203	200	0.3	0.6	11.187	B
C - A12 South	2013	503	185	2746	0.733	2008	1949	1.5	2.7	4.846	A
D - Barrack Square East	600	150	1541	804	0.747	593	390	1.0	2.8	16.611	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1461	365	478	1953	0.748	1460	1725	2.9	2.9	7.301	A
B - Eagle Way West	205	51	1999	521	0.393	205	201	0.6	0.6	11.365	B
C - A12 South	2013	503	186	2745	0.733	2013	1960	2.7	2.7	4.916	A
D - Barrack Square East	600	150	1547	800	0.750	600	392	2.8	2.9	17.827	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1192	298	392	2002	0.596	1198	1414	2.9	1.5	4.507	A
B - Eagle Way West	167	42	1638	693	0.241	168	165	0.6	0.3	6.882	A
C - A12 South	1644	411	154	2765	0.594	1649	1612	2.7	1.5	3.237	A
D - Barrack Square East	490	122	1269	946	0.518	497	321	2.9	1.1	8.138	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	999	250	327	2040	0.490	1001	1182	1.5	1.0	3.474	A
B - Eagle Way West	140	35	1369	821	0.170	140	138	0.3	0.2	5.295	A
C - A12 South	1377	344	128	2781	0.495	1379	1344	1.5	1.0	2.569	A
D - Barrack Square East	410	103	1060	1056	0.388	412	268	1.1	0.6	5.602	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.97	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.63	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.05	0.47	3.71	5.82			N/A	N/A
B - Eagle Way West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A12 South	1.45	0.04	0.43	3.79	6.30			N/A	N/A
D - Barrack Square East	1.05	0.06	0.72	2.07	2.94			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.87	0.03	0.28	2.87	6.45			N/A	N/A
B - Eagle Way West	0.63	0.03	0.26	0.63	0.63			N/A	N/A
C - A12 South	2.69	0.03	0.27	2.69	2.69			N/A	N/A
D - Barrack Square East	2.75	0.03	0.31	3.79	13.54			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.92	0.03	0.27	2.92	2.92			N/A	N/A
B - Eagle Way West	0.64	0.03	0.31	1.27	2.97			N/A	N/A
C - A12 South	2.72	0.03	0.26	2.72	2.72			N/A	N/A
D - Barrack Square East	2.88	0.03	0.29	2.88	11.15			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.49	0.08	1.06	3.08	4.26			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.48	0.12	1.22	2.68	3.45			N/A	N/A
D - Barrack Square East	1.09	0.05	0.52	2.50	3.68			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.05	0.46	2.20	3.38			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	0.99	0.06	0.68	1.93	2.78			N/A	N/A
D - Barrack Square East	0.64	0.03	0.35	1.47	2.67			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1448	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1775	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1361	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1393	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	7.35	3.2	8.1	A	1329	1993
B - Eagle Way West	0.27	8.17	0.4	1.5	A	137	205
C - A12 South	0.70	4.32	2.3	5.3	A	1628	2443
D - Barrack Square East	0.79	21.60	3.5	17.6	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	263	2158	0.505	1086	1139	0.0	1.0	3.347	A
B - Eagle Way West	112	28	1290	890	0.126	112	186	0.0	0.1	4.622	A
C - A12 South	1336	334	144	2830	0.472	1332	1405	0.0	0.9	2.397	A
D - Barrack Square East	414	103	1138	1039	0.398	411	212	0.0	0.7	5.707	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1302	326	315	2127	0.612	1300	1362	1.0	1.6	4.343	A
B - Eagle Way West	134	34	1543	770	0.174	134	223	0.1	0.2	5.654	A
C - A12 South	1595	399	172	2813	0.567	1594	1682	0.9	1.3	2.949	A

D - Barrack Square East	494	123	1362	926	0.534	492	253	0.7	1.1	8.267	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1595	399	385	2084	0.765	1588	1666	1.6	3.2	7.173	A
B - Eagle Way West	164	41	1887	607	0.270	164	272	0.2	0.4	8.106	A
C - A12 South	1954	488	209	2789	0.701	1950	2051	1.3	2.3	4.268	A
D - Barrack Square East	605	151	1664	772	0.783	596	310	1.1	3.3	19.572	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1595	399	386	2083	0.765	1594	1670	3.2	3.2	7.354	A
B - Eagle Way West	164	41	1892	605	0.271	164	273	0.4	0.4	8.170	A
C - A12 South	1954	488	211	2788	0.701	1954	2063	2.3	2.3	4.315	A
D - Barrack Square East	605	151	1670	769	0.787	604	310	3.3	3.5	21.599	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1302	326	316	2126	0.612	1308	1368	3.2	1.6	4.438	A
B - Eagle Way West	134	34	1550	767	0.175	135	224	0.4	0.2	5.700	A
C - A12 South	1595	399	175	2811	0.568	1599	1699	2.3	1.3	2.980	A
D - Barrack Square East	494	123	1371	921	0.536	503	254	3.5	1.2	8.796	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	265	2157	0.505	1093	1144	1.6	1.0	3.390	A
B - Eagle Way West	112	28	1296	888	0.126	113	187	0.2	0.1	4.648	A
C - A12 South	1336	334	145	2830	0.472	1338	1415	1.3	0.9	2.417	A
D - Barrack Square East	414	103	1145	1036	0.399	416	212	1.2	0.7	5.826	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.89	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.05	0.45	4.06	6.62			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.30	0.04	0.45	3.30	5.26			N/A	N/A
D - Barrack Square East	1.12	0.06	0.66	2.47	3.55			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.15	0.03	0.28	3.15	8.07			N/A	N/A
B - Eagle Way West	0.37	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.30	0.03	0.26	2.30	2.30			N/A	N/A
D - Barrack Square East	3.29	0.03	0.33	6.62	17.61			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.21	0.03	0.27	3.21	3.21			N/A	N/A
B - Eagle Way West	0.37	0.03	0.33	1.22	1.48			N/A	N/A
C - A12 South	2.32	0.03	0.26	2.32	2.32			N/A	N/A
D - Barrack Square East	3.48	0.03	0.30	3.54	15.86			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.07	1.05	3.53	4.88			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.32	0.19	1.20	1.96	2.57			N/A	N/A
D - Barrack Square East	1.18	0.05	0.46	2.87	4.51			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.04	0.44	2.48	3.84			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.90	0.07	0.79	1.57	1.95			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.49	3.02			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	822	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	818	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	781	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	646	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	13	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.96	0.7	2.3	A	755	1132
B - Eagle Way West	0.08	3.77	0.1	0.5	A	67	101
C - A12 South	0.33	1.97	0.5	2.1	A	751	1126
D - Barrack Square East	0.07	3.52	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	619	155	166	2167	0.286	617	497	0.0	0.4	2.321	A
B - Eagle Way West	55	14	608	1176	0.047	55	13	0.0	0.0	3.212	A
C - A12 South	616	154	7	2725	0.226	615	672	0.0	0.3	1.705	A
D - Barrack Square East	52	13	627	1244	0.042	52	156	0.0	0.0	3.019	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	739	185	198	2148	0.344	739	595	0.4	0.5	2.555	A
B - Eagle Way West	66	16	727	1116	0.059	66	16	0.0	0.1	3.427	A
C - A12 South	735	184	8	2724	0.270	735	804	0.3	0.4	1.809	A

D - Barrack Square East	62	15	751	1182	0.052	62	186	0.0	0.1	3.212	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	905	226	243	2122	0.427	904	728	0.5	0.7	2.957	A
B - Eagle Way West	81	20	890	1034	0.078	81	20	0.1	0.1	3.774	A
C - A12 South	901	225	10	2723	0.331	900	985	0.4	0.5	1.975	A
D - Barrack Square East	76	19	919	1098	0.069	76	228	0.1	0.1	3.521	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	905	226	243	2121	0.427	905	729	0.7	0.7	2.959	A
B - Eagle Way West	81	20	891	1034	0.078	81	20	0.1	0.1	3.775	A
C - A12 South	901	225	10	2723	0.331	901	986	0.5	0.5	1.975	A
D - Barrack Square East	76	19	920	1097	0.069	76	229	0.1	0.1	3.522	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	739	185	199	2147	0.344	740	595	0.7	0.5	2.558	A
B - Eagle Way West	66	16	728	1116	0.059	66	16	0.1	0.1	3.432	A
C - A12 South	735	184	8	2724	0.270	736	806	0.5	0.4	1.812	A
D - Barrack Square East	62	15	752	1181	0.052	62	187	0.1	0.1	3.215	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	619	155	166	2166	0.286	620	498	0.5	0.4	2.329	A
B - Eagle Way West	55	14	609	1175	0.047	55	13	0.1	0.0	3.217	A
C - A12 South	616	154	7	2725	0.226	616	675	0.4	0.3	1.708	A
D - Barrack Square East	52	13	630	1243	0.042	52	156	0.1	0.0	3.024	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.06	0.63	1.33	1.41			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.25	0.74	0.74			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Barrack Square East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.28	0.74	2.33			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.49	0.03	0.31	1.44	2.08			N/A	N/A
D - Barrack Square East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1360	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1926	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1318	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1382	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	8	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	13	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	12.17	4.9	23.6	B	1248	1873
B - Eagle Way West	0.50	16.72	1.0	4.8	C	176	264
C - A12 South	0.78	6.07	3.5	8.1	A	1767	2651
D - Barrack Square East	0.27	6.80	0.4	1.0	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1024	256	498	1927	0.531	1020	1085	0.0	1.1	3.947	A
B - Eagle Way West	145	36	1439	762	0.190	144	29	0.0	0.2	5.812	A
C - A12 South	1450	362	22	2720	0.533	1445	1194	0.0	1.1	2.814	A
D - Barrack Square East	137	34	1080	981	0.140	136	437	0.0	0.2	4.259	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1223	306	596	1870	0.654	1220	1297	1.1	1.9	5.513	A
B - Eagle Way West	173	43	1721	621	0.278	172	35	0.2	0.4	8.006	A
C - A12 South	1731	433	27	2717	0.637	1729	1429	1.1	1.7	3.635	A

D - Barrack Square East	164	41	1293	876	0.187	163	523	0.2	0.2	5.053	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1498	374	727	1793	0.835	1486	1586	1.9	4.7	11.340	B
B - Eagle Way West	212	53	2104	430	0.492	209	43	0.4	0.9	16.167	C
C - A12 South	2120	530	33	2712	0.782	2113	1742	1.7	3.5	5.940	A
D - Barrack Square East	200	50	1575	736	0.272	200	639	0.2	0.4	6.709	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1498	374	731	1791	0.836	1497	1591	4.7	4.9	12.170	B
B - Eagle Way West	212	53	2110	426	0.496	211	43	0.9	1.0	16.724	C
C - A12 South	2120	530	33	2712	0.782	2120	1754	3.5	3.5	6.072	A
D - Barrack Square East	200	50	1586	730	0.274	200	641	0.4	0.4	6.796	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1223	306	600	1867	0.655	1235	1305	4.9	1.9	5.797	A
B - Eagle Way West	173	43	1730	616	0.280	175	35	1.0	0.4	8.194	A
C - A12 South	1731	433	27	2716	0.637	1738	1446	3.5	1.8	3.707	A
D - Barrack Square East	164	41	1309	868	0.188	164	526	0.4	0.2	5.122	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1024	256	501	1926	0.532	1027	1090	1.9	1.1	4.022	A
B - Eagle Way West	145	36	1446	759	0.191	145	29	0.4	0.2	5.873	A
C - A12 South	1450	362	23	2720	0.533	1452	1203	1.8	1.1	2.845	A
D - Barrack Square East	137	34	1089	977	0.140	137	439	0.2	0.2	4.288	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.02	1.44	1.49			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.13	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.04	0.44	4.98	8.40			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.74	0.04	0.41	4.65	8.10			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.72	0.03	0.32	6.83	23.60			N/A	N/A
B - Eagle Way West	0.94	0.03	0.26	0.94	0.94			N/A	N/A
C - A12 South	3.48	0.03	0.28	3.48	7.13			N/A	N/A
D - Barrack Square East	0.37	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.91	0.03	0.28	4.91	13.65			N/A	N/A
B - Eagle Way West	0.96	0.03	0.31	1.70	4.82			N/A	N/A
C - A12 South	3.53	0.03	0.26	3.53	3.53			N/A	N/A
D - Barrack Square East	0.38	0.03	0.33	1.03	1.03			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.93	0.05	0.57	5.07	7.92			N/A	N/A
B - Eagle Way West	0.39	0.03	0.31	0.99	1.24			N/A	N/A
C - A12 South	1.78	0.08	1.16	3.90	5.43			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.04	0.35	2.80	5.56			N/A	N/A
B - Eagle Way West	0.24	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	1.15	0.05	0.46	2.78	4.30			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	28.86	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1309	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2352	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1258	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1517	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	11	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	14	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	20.67	7.8	40.7	C	1202	1802
B - Eagle Way West	1.04	166.15	11.4	33.8	F	197	295
C - A12 South	0.96	24.64	16.7	90.9	C	2158	3237
D - Barrack Square East	0.51	9.70	1.0	3.9	A	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	986	246	694	1780	0.554	981	1192	0.0	1.2	4.480	A
B - Eagle Way West	161	40	1726	630	0.256	160	80	0.0	0.3	7.636	A
C - A12 South	1770	443	43	2722	0.650	1763	1278	0.0	1.8	3.727	A
D - Barrack Square East	263	66	1059	1006	0.262	262	616	0.0	0.4	4.827	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1177	294	829	1704	0.691	1173	1425	1.2	2.2	6.741	A
B - Eagle Way West	193	48	2063	460	0.419	191	96	0.3	0.7	13.330	B
C - A12 South	2114	529	51	2717	0.778	2108	1529	1.8	3.4	5.852	A

D - Barrack Square East	315	79	1266	899	0.350	314	736	0.4	0.5	6.145	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1442	360	988	1614	0.893	1422	1717	2.2	7.1	17.235	C
B - Eagle Way West	236	59	2492	244	0.969	213	116	0.7	6.4	87.330	F
C - A12 South	2589	647	62	2710	0.955	2545	1845	3.4	14.3	18.364	C
D - Barrack Square East	385	96	1523	765	0.503	383	887	0.5	1.0	9.377	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1442	360	1002	1607	0.897	1439	1740	7.1	7.8	20.669	C
B - Eagle Way West	236	59	2525	227	1.041	216	117	6.4	11.4	166.150	F
C - A12 South	2589	647	62	2710	0.956	2580	1864	14.3	16.7	24.643	C
D - Barrack Square East	385	96	1541	756	0.510	385	899	1.0	1.0	9.699	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1177	294	881	1675	0.703	1199	1474	7.8	2.4	7.885	A
B - Eagle Way West	193	48	2120	431	0.447	235	98	11.4	0.8	22.377	C
C - A12 South	2114	529	52	2716	0.778	2166	1584	16.7	3.6	7.144	A
D - Barrack Square East	315	79	1319	873	0.360	316	760	1.0	0.6	6.492	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	986	246	701	1776	0.555	990	1202	2.4	1.3	4.610	A
B - Eagle Way West	161	40	1740	623	0.259	163	81	0.8	0.4	7.861	A
C - A12 South	1770	443	43	2722	0.651	1777	1292	3.6	1.9	3.840	A
D - Barrack Square East	263	66	1070	1001	0.263	264	621	0.6	0.4	4.895	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.56	1.14	1.55	1.79			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.84	0.37	1.14	2.92	3.66			N/A	N/A
D - Barrack Square East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.04	0.44	5.96	10.15			N/A	N/A
B - Eagle Way West	0.70	0.04	0.40	1.57	2.45			N/A	N/A
C - A12 South	3.41	0.04	0.42	9.38	17.41			N/A	N/A
D - Barrack Square East	0.53	0.06	0.65	1.33	1.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.07	0.04	0.41	18.84	38.36			N/A	N/A
B - Eagle Way West	6.43	0.18	3.30	15.60	21.29			N/A	N/A
C - A12 South	14.35	0.07	1.66	42.25	69.32			N/A	N/A
D - Barrack Square East	0.99	0.03	0.26	0.99	0.99			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.82	0.03	0.33	12.93	40.66			N/A	N/A
B - Eagle Way West	11.38	0.57	7.36	25.82	33.80			N/A	N/A
C - A12 South	16.66	0.05	0.47	46.10	90.93			N/A	N/A
D - Barrack Square East	1.02	0.03	0.28	1.04	3.93			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.43	0.05	0.46	6.70	11.24			N/A	N/A
B - Eagle Way West	0.84	0.03	0.32	1.70	4.08			N/A	N/A
C - A12 South	3.62	0.04	0.44	10.14	18.18			N/A	N/A
D - Barrack Square East	0.57	0.07	0.73	1.35	1.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.03	0.32	2.41	6.48			N/A	N/A
B - Eagle Way West	0.35	0.03	0.27	0.48	0.96			N/A	N/A
C - A12 South	1.88	0.03	0.31	3.08	9.63			N/A	N/A
D - Barrack Square East	0.36	0.03	0.30	0.85	1.18			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1299	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1841	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1231	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1437	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	10	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	9	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	7.54	2.9	7.0	A	1192	1789
B - Eagle Way West	0.41	12.28	0.7	3.3	B	171	256
C - A12 South	0.75	5.36	3.0	6.9	A	1690	2535
D - Barrack Square East	0.75	18.01	2.9	13.7	C	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	978	245	325	1994	0.491	975	1186	0.0	1.0	3.520	A
B - Eagle Way West	140	35	1372	808	0.173	139	137	0.0	0.2	5.378	A
C - A12 South	1386	347	127	2734	0.507	1382	1314	0.0	1.0	2.655	A
D - Barrack Square East	410	103	1033	1058	0.388	408	267	0.0	0.6	5.513	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	389	1958	0.597	1166	1419	1.0	1.5	4.537	A
B - Eagle Way West	167	42	1642	677	0.247	167	164	0.2	0.3	7.042	A
C - A12 South	1655	414	152	2719	0.609	1653	1573	1.0	1.5	3.370	A

D - Barrack Square East	490	122	1236	949	0.516	488	319	0.6	1.0	7.785	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1431	358	476	1909	0.750	1425	1734	1.5	2.9	7.353	A
B - Eagle Way West	205	51	2007	501	0.409	203	200	0.3	0.7	12.045	B
C - A12 South	2028	507	185	2699	0.751	2022	1919	1.5	3.0	5.273	A
D - Barrack Square East	600	150	1511	802	0.749	593	390	1.0	2.8	16.755	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1431	358	478	1908	0.750	1431	1740	2.9	2.9	7.541	A
B - Eagle Way West	205	51	2013	498	0.411	205	201	0.7	0.7	12.278	B
C - A12 South	2028	507	186	2698	0.752	2027	1930	3.0	3.0	5.364	A
D - Barrack Square East	600	150	1517	798	0.752	600	391	2.8	2.9	18.015	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	392	1956	0.597	1174	1427	2.9	1.5	4.636	A
B - Eagle Way West	167	42	1650	673	0.248	168	165	0.7	0.3	7.152	A
C - A12 South	1655	414	154	2718	0.609	1661	1588	3.0	1.6	3.426	A
D - Barrack Square East	490	122	1245	944	0.519	497	321	2.9	1.1	8.175	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	978	245	327	1992	0.491	980	1192	1.5	1.0	3.566	A
B - Eagle Way West	140	35	1379	804	0.174	140	138	0.3	0.2	5.424	A
C - A12 South	1386	347	128	2734	0.507	1389	1324	1.6	1.0	2.681	A
D - Barrack Square East	410	103	1040	1055	0.389	412	268	1.1	0.6	5.616	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.02	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.63	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.46	0.05	0.48	3.73	5.83			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.54	0.04	0.42	4.05	6.88			N/A	N/A
D - Barrack Square East	1.05	0.06	0.72	2.10	2.96			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.90	0.03	0.28	2.90	6.96			N/A	N/A
B - Eagle Way West	0.68	0.03	0.26	0.68	0.68			N/A	N/A
C - A12 South	2.95	0.03	0.27	2.95	3.33			N/A	N/A
D - Barrack Square East	2.78	0.03	0.31	3.91	13.75			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.95	0.03	0.27	2.95	2.95			N/A	N/A
B - Eagle Way West	0.69	0.03	0.31	1.35	3.29			N/A	N/A
C - A12 South	2.99	0.03	0.26	2.99	2.99			N/A	N/A
D - Barrack Square East	2.90	0.03	0.29	2.90	11.38			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.08	1.05	3.16	4.39			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.57	0.10	1.21	3.01	4.00			N/A	N/A
D - Barrack Square East	1.10	0.05	0.51	2.52	3.72			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.04	0.45	2.25	3.48			N/A	N/A
B - Eagle Way West	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.04	0.05	0.57	2.25	3.28			N/A	N/A
D - Barrack Square East	0.64	0.03	0.34	1.48	2.69			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1412	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1791	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1325	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1409	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	6	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	7.52	3.2	8.3	A	1296	1944
B - Eagle Way West	0.28	8.41	0.4	1.0	A	137	205
C - A12 South	0.71	4.47	2.4	5.5	A	1643	2465
D - Barrack Square East	0.79	21.52	3.5	17.5	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1063	266	263	2106	0.505	1059	1151	0.0	1.0	3.427	A
B - Eagle Way West	112	28	1302	882	0.127	112	186	0.0	0.1	4.672	A
C - A12 South	1348	337	144	2818	0.478	1344	1378	0.0	0.9	2.437	A
D - Barrack Square East	414	103	1111	1040	0.398	411	212	0.0	0.7	5.705	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1270	317	315	2075	0.612	1267	1376	1.0	1.6	4.445	A
B - Eagle Way West	134	34	1558	760	0.176	134	223	0.1	0.2	5.745	A
C - A12 South	1610	402	172	2800	0.575	1608	1649	0.9	1.3	3.016	A

D - Barrack Square East	494	123	1329	926	0.533	492	253	0.7	1.1	8.257	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1555	389	385	2034	0.765	1549	1683	1.6	3.1	7.329	A
B - Eagle Way West	164	41	1905	595	0.276	164	272	0.2	0.4	8.337	A
C - A12 South	1972	493	209	2777	0.710	1967	2011	1.3	2.4	4.422	A
D - Barrack Square East	605	151	1624	773	0.783	596	310	1.1	3.3	19.509	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1555	389	386	2033	0.765	1555	1688	3.1	3.2	7.518	A
B - Eagle Way West	164	41	1910	592	0.277	164	273	0.4	0.4	8.407	A
C - A12 South	1972	493	211	2776	0.710	1971	2023	2.4	2.4	4.473	A
D - Barrack Square East	605	151	1631	770	0.786	604	310	3.3	3.5	21.522	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1270	317	316	2074	0.612	1276	1383	3.2	1.6	4.545	A
B - Eagle Way West	134	34	1565	757	0.177	135	224	0.4	0.2	5.795	A
C - A12 South	1610	402	175	2799	0.575	1614	1666	2.4	1.4	3.051	A
D - Barrack Square East	494	123	1338	921	0.536	503	254	3.5	1.2	8.787	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1063	266	265	2105	0.505	1066	1156	1.6	1.0	3.472	A
B - Eagle Way West	112	28	1308	879	0.128	113	187	0.2	0.1	4.698	A
C - A12 South	1348	337	145	2817	0.479	1350	1388	1.4	0.9	2.457	A
D - Barrack Square East	414	103	1118	1036	0.399	416	212	1.2	0.7	5.820	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.91	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.05	0.46	4.03	6.54			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.34	0.04	0.44	3.44	5.55			N/A	N/A
D - Barrack Square East	1.12	0.06	0.66	2.47	3.55			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.14	0.03	0.28	3.14	8.30			N/A	N/A
B - Eagle Way West	0.38	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.41	0.03	0.27	2.41	2.41			N/A	N/A
D - Barrack Square East	3.27	0.03	0.33	6.56	17.54			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.20	0.03	0.27	3.20	3.20			N/A	N/A
B - Eagle Way West	0.38	0.03	0.33	1.03	1.03			N/A	N/A
C - A12 South	2.43	0.03	0.26	2.43	2.43			N/A	N/A
D - Barrack Square East	3.47	0.03	0.30	3.49	15.77			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.07	1.04	3.54	4.90			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.36	0.17	1.21	2.15	2.77			N/A	N/A
D - Barrack Square East	1.18	0.05	0.46	2.87	4.49			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.04	0.44	2.48	3.85			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.92	0.06	0.77	1.68	2.17			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.49	3.00			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	826	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	761	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	784	40
	B - Eagle Way West	16	0	55	6
	C - A12 South	588	9	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.98	0.8	2.3	A	758	1137
B - Eagle Way West	0.08	3.64	0.1	0.5	A	71	106
C - A12 South	0.30	1.86	0.4	1.5	A	698	1047
D - Barrack Square East	0.07	3.54	0.1	0.5	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	622	156	168	2164	0.288	621	457	0.0	0.4	2.331	A
B - Eagle Way West	58	14	567	1202	0.048	58	14	0.0	0.1	3.146	A
C - A12 South	573	143	9	2777	0.206	572	677	0.0	0.3	1.632	A
D - Barrack Square East	54	14	632	1243	0.044	54	157	0.0	0.0	3.028	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	743	186	201	2144	0.346	742	546	0.4	0.5	2.568	A
B - Eagle Way West	69	17	678	1147	0.060	69	17	0.1	0.1	3.338	A
C - A12 South	684	171	11	2775	0.246	683	810	0.3	0.3	1.720	A

D - Barrack Square East	65	16	756	1180	0.055	65	187	0.0	0.1	3.225	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	910	227	246	2118	0.430	909	669	0.5	0.7	2.976	A
B - Eagle Way West	85	21	830	1073	0.079	85	21	0.1	0.1	3.643	A
C - A12 South	837	209	14	2774	0.302	837	991	0.3	0.4	1.858	A
D - Barrack Square East	79	20	926	1095	0.072	79	229	0.1	0.1	3.542	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	910	227	246	2118	0.430	910	669	0.7	0.8	2.979	A
B - Eagle Way West	85	21	830	1072	0.079	85	21	0.1	0.1	3.643	A
C - A12 South	837	209	14	2774	0.302	837	992	0.4	0.4	1.858	A
D - Barrack Square East	79	20	927	1095	0.072	79	230	0.1	0.1	3.543	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	743	186	201	2144	0.346	744	546	0.8	0.5	2.573	A
B - Eagle Way West	69	17	678	1147	0.060	69	17	0.1	0.1	3.340	A
C - A12 South	684	171	11	2775	0.246	684	811	0.4	0.3	1.720	A
D - Barrack Square East	65	16	757	1180	0.055	65	188	0.1	0.1	3.228	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	622	156	168	2164	0.288	623	458	0.5	0.4	2.338	A
B - Eagle Way West	58	14	568	1201	0.048	58	14	0.1	0.1	3.148	A
C - A12 South	573	143	9	2777	0.206	573	679	0.3	0.3	1.632	A
D - Barrack Square East	54	14	634	1242	0.044	54	157	0.1	0.0	3.031	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.06	0.65	1.33	1.42			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.03	0.25	0.75	0.75			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.43	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.03	0.28	0.75	2.27			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.43	0.03	0.33	1.36	1.55			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1354	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	1852	100.000
D - Barrack Square East		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1297	56
	B - Eagle Way West	47	0	128	27
	C - A12 South	1307	30	0	515
	D - Barrack Square East	87	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	11.38	4.6	21.1	B	1242	1863
B - Eagle Way West	0.48	15.10	0.9	4.6	C	185	278
C - A12 South	0.74	5.13	2.9	6.7	A	1700	2549
D - Barrack Square East	0.36	7.40	0.6	2.6	A	230	345

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1019	255	503	1943	0.524	1015	1081	0.0	1.1	3.859	A
B - Eagle Way West	152	38	1434	785	0.194	151	31	0.0	0.2	5.668	A
C - A12 South	1394	349	74	2762	0.505	1390	1183	0.0	1.0	2.616	A
D - Barrack Square East	188	47	1069	1014	0.186	188	449	0.0	0.2	4.353	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1217	304	602	1885	0.646	1214	1293	1.1	1.8	5.343	A
B - Eagle Way West	181	45	1715	649	0.280	181	37	0.2	0.4	7.686	A
C - A12 South	1665	416	88	2753	0.605	1663	1415	1.0	1.5	3.297	A

D - Barrack Square East	225	56	1279	908	0.248	225	537	0.2	0.3	5.264	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1490	373	736	1806	0.825	1480	1582	1.8	4.4	10.704	B
B - Eagle Way West	222	56	2097	463	0.480	220	45	0.4	0.9	14.710	B
C - A12 South	2039	510	108	2741	0.744	2034	1726	1.5	2.8	5.054	A
D - Barrack Square East	276	69	1559	767	0.359	275	657	0.3	0.6	7.294	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1490	373	739	1804	0.826	1490	1586	4.4	4.6	11.383	B
B - Eagle Way West	222	56	2103	460	0.483	222	45	0.9	0.9	15.102	C
C - A12 South	2039	510	108	2741	0.744	2039	1737	2.8	2.9	5.130	A
D - Barrack Square East	276	69	1570	762	0.362	276	659	0.6	0.6	7.401	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1217	304	606	1883	0.646	1228	1300	4.6	1.9	5.585	A
B - Eagle Way West	181	45	1722	645	0.281	184	37	0.9	0.4	7.836	A
C - A12 South	1665	416	89	2753	0.605	1670	1431	2.9	1.5	3.341	A
D - Barrack Square East	225	56	1294	901	0.250	226	540	0.6	0.3	5.342	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1019	255	506	1942	0.525	1022	1086	1.9	1.1	3.926	A
B - Eagle Way West	152	38	1440	782	0.194	153	31	0.4	0.2	5.723	A
C - A12 South	1394	349	74	2762	0.505	1397	1192	1.5	1.0	2.639	A
D - Barrack Square East	188	47	1077	1010	0.187	189	451	0.3	0.2	4.389	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.01	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.79	0.04	0.44	4.80	7.99			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.52	0.04	0.42	3.97	6.71			N/A	N/A
D - Barrack Square East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.42	0.03	0.31	5.40	21.14			N/A	N/A
B - Eagle Way West	0.90	0.03	0.26	0.90	0.90			N/A	N/A
C - A12 South	2.85	0.03	0.27	2.85	2.85			N/A	N/A
D - Barrack Square East	0.55	0.03	0.25	0.55	0.55			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.58	0.03	0.28	4.58	10.87			N/A	N/A
B - Eagle Way West	0.92	0.03	0.31	1.55	4.56			N/A	N/A
C - A12 South	2.88	0.03	0.26	2.88	2.88			N/A	N/A
D - Barrack Square East	0.56	0.03	0.31	1.01	2.61			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.05	0.65	4.81	7.39			N/A	N/A
B - Eagle Way West	0.40	0.03	0.30	0.93	1.22			N/A	N/A
C - A12 South	1.54	0.11	1.22	2.90	3.82			N/A	N/A
D - Barrack Square East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.04	0.36	2.77	5.29			N/A	N/A
B - Eagle Way West	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.03	0.05	0.63	2.13	3.04			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	46.46	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1364	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2346	100.000
D - Barrack Square East		ONE HOUR	✓	526	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1281	63
	B - Eagle Way West	58	0	144	23
	C - A12 South	1508	72	1	765
	D - Barrack Square East	193	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	23.15	9.1	49.7	C	1252	1878
B - Eagle Way West	1.40	434.73	34.1	59.1	F	207	310
C - A12 South	0.97	31.18	21.3	106.2	D	2153	3229
D - Barrack Square East	0.74	17.86	2.8	12.6	C	482	724

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1027	257	699	1801	0.570	1022	1318	0.0	1.3	4.592	A
B - Eagle Way West	170	42	1850	594	0.285	168	84	0.0	0.4	8.414	A
C - A12 South	1766	442	175	2709	0.652	1759	1301	0.0	1.9	3.760	A
D - Barrack Square East	396	99	1082	1021	0.388	393	639	0.0	0.6	5.714	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1227	307	836	1723	0.712	1222	1576	1.3	2.4	7.121	A
B - Eagle Way West	202	51	2211	417	0.485	200	100	0.4	0.9	16.462	C
C - A12 South	2109	527	209	2689	0.784	2102	1556	1.9	3.5	6.070	A

D - Barrack Square East	473	118	1294	910	0.519	471	764	0.6	1.1	8.164	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1502	376	965	1649	0.911	1479	1883	2.4	8.2	18.995	C
B - Eagle Way West	248	62	2661	196	1.263	187	121	0.9	16.1	200.075	F
C - A12 South	2583	646	254	2662	0.970	2528	1849	3.5	17.3	21.343	C
D - Barrack Square East	579	145	1531	785	0.737	573	913	1.1	2.6	16.478	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1502	376	970	1647	0.912	1499	1908	8.2	9.1	23.149	C
B - Eagle Way West	248	62	2701	177	1.402	176	123	16.1	34.1	434.728	F
C - A12 South	2583	646	257	2660	0.971	2567	1864	17.3	21.3	31.184	D
D - Barrack Square East	579	145	1542	779	0.743	578	926	2.6	2.8	17.857	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1227	307	960	1654	0.742	1251	1662	9.1	3.0	9.449	A
B - Eagle Way West	202	51	2288	379	0.534	334	103	34.1	1.3	151.869	F
C - A12 South	2109	527	213	2687	0.785	2179	1672	21.3	3.8	8.047	A
D - Barrack Square East	473	118	1406	855	0.553	479	804	2.8	1.3	9.723	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1027	257	708	1796	0.572	1034	1331	3.0	1.4	4.763	A
B - Eagle Way West	170	42	1866	586	0.289	173	85	1.3	0.4	8.791	A
C - A12 South	1766	442	177	2708	0.652	1774	1318	3.8	1.9	3.884	A
D - Barrack Square East	396	99	1097	1013	0.391	398	645	1.3	0.6	5.876	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.55	1.22	1.72	1.89			N/A	N/A
B - Eagle Way West	0.39	0.03	0.35	1.19	1.37			N/A	N/A
C - A12 South	1.85	0.28	1.09	3.06	3.86			N/A	N/A
D - Barrack Square East	0.63	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.40	0.04	0.45	6.64	11.28			N/A	N/A
B - Eagle Way West	0.91	0.03	0.33	2.01	4.46			N/A	N/A
C - A12 South	3.53	0.04	0.42	9.72	18.04			N/A	N/A
D - Barrack Square East	1.06	0.06	0.78	2.03	2.88			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.21	0.05	0.47	23.15	43.04			N/A	N/A
B - Eagle Way West	16.13	4.33	14.08	27.42	32.26			N/A	N/A
C - A12 South	17.25	0.10	4.42	49.49	75.36			N/A	N/A
D - Barrack Square East	2.63	0.03	0.31	3.35	12.65			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.10	0.04	0.36	18.88	49.71			N/A	N/A
B - Eagle Way West	34.11	14.49	31.78	52.09	59.08			N/A	N/A
C - A12 South	21.26	0.07	1.81	62.80	106.16			N/A	N/A
D - Barrack Square East	2.78	0.03	0.29	2.78	10.58			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.97	0.05	0.56	8.28	13.47			N/A	N/A
B - Eagle Way West	1.33	0.03	0.29	1.33	5.92			N/A	N/A
C - A12 South	3.78	0.04	0.43	10.53	19.24			N/A	N/A
D - Barrack Square East	1.27	0.06	0.83	2.73	3.83			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.03	0.31	2.30	6.87			N/A	N/A
B - Eagle Way West	0.41	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.90	0.03	0.31	2.64	9.33			N/A	N/A
D - Barrack Square East	0.65	0.03	0.35	1.49	2.67			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	11.37	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1448	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1911	100.000
D - Barrack Square East		ONE HOUR	✓	617	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1277	114
	B - Eagle Way West	61	0	97	37
	C - A12 South	1501	104	0	305
	D - Barrack Square East	154	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	8	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	9.78	4.2	17.6	A	1329	1993
B - Eagle Way West	0.48	15.44	0.9	4.5	C	179	269
C - A12 South	0.78	6.02	3.5	7.8	A	1753	2630
D - Barrack Square East	0.86	31.05	5.5	30.0	D	566	849

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	330	2051	0.532	1086	1289	0.0	1.1	3.715	A
B - Eagle Way West	147	37	1473	774	0.190	146	144	0.0	0.2	5.729	A
C - A12 South	1438	360	183	2754	0.522	1434	1352	0.0	1.1	2.719	A
D - Barrack Square East	464	116	1073	1053	0.441	461	343	0.0	0.8	6.053	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1302	325	395	2013	0.647	1299	1541	1.1	1.8	5.025	A
B - Eagle Way West	176	44	1761	637	0.276	175	172	0.2	0.4	7.787	A
C - A12 South	1718	429	218	2731	0.629	1715	1618	1.1	1.7	3.536	A

D - Barrack Square East	554	139	1284	942	0.589	552	410	0.8	1.4	9.177	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1595	399	483	1962	0.813	1585	1881	1.8	4.1	9.327	A
B - Eagle Way West	215	54	2151	453	0.476	213	210	0.4	0.9	14.925	B
C - A12 South	2104	526	264	2703	0.778	2097	1968	1.7	3.4	5.869	A
D - Barrack Square East	679	170	1567	793	0.856	665	501	1.4	5.0	25.708	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1595	399	485	1961	0.813	1594	1890	4.1	4.2	9.783	A
B - Eagle Way West	215	54	2160	448	0.480	215	211	0.9	0.9	15.440	C
C - A12 South	2104	526	268	2701	0.779	2103	1985	3.4	3.5	6.020	A
D - Barrack Square East	679	170	1576	788	0.862	677	503	5.0	5.5	31.052	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1302	325	399	2011	0.647	1311	1554	4.2	1.9	5.213	A
B - Eagle Way West	176	44	1775	631	0.279	178	174	0.9	0.4	7.986	A
C - A12 South	1718	429	225	2728	0.630	1725	1643	3.5	1.7	3.613	A
D - Barrack Square East	554	139	1297	935	0.593	571	413	5.5	1.5	10.284	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	333	2049	0.532	1093	1296	1.9	1.1	3.775	A
B - Eagle Way West	147	37	1481	770	0.191	148	145	0.4	0.2	5.790	A
C - A12 South	1438	360	185	2752	0.523	1441	1363	1.7	1.1	2.752	A
D - Barrack Square East	464	116	1081	1049	0.443	467	345	1.5	0.8	6.215	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.09	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.78	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.80	0.04	0.44	4.83	8.06			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.68	0.04	0.41	4.47	7.80			N/A	N/A
D - Barrack Square East	1.40	0.05	0.51	3.46	5.24			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.11	0.03	0.30	4.11	17.64			N/A	N/A
B - Eagle Way West	0.88	0.03	0.26	0.88	0.88			N/A	N/A
C - A12 South	3.41	0.03	0.28	3.41	6.65			N/A	N/A
D - Barrack Square East	4.95	0.04	0.43	13.65	25.95			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.23	0.03	0.28	4.23	6.69			N/A	N/A
B - Eagle Way West	0.91	0.03	0.31	1.59	4.52			N/A	N/A
C - A12 South	3.47	0.03	0.26	3.47	3.47			N/A	N/A
D - Barrack Square East	5.51	0.03	0.35	11.59	29.98			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.87	0.06	0.80	4.72	7.03			N/A	N/A
B - Eagle Way West	0.39	0.03	0.30	0.87	1.19			N/A	N/A
C - A12 South	1.72	0.08	1.17	3.72	5.05			N/A	N/A
D - Barrack Square East	1.49	0.04	0.41	3.92	6.81			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.04	0.38	2.89	5.18			N/A	N/A
B - Eagle Way West	0.24	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	1.10	0.05	0.46	2.64	3.99			N/A	N/A
D - Barrack Square East	0.80	0.03	0.30	1.36	3.93			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	13.68	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1557	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1849	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1380	107
	B - Eagle Way West	45	0	94	19
	C - A12 South	1460	145	1	243
	D - Barrack Square East	165	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	9.71	4.5	19.3	A	1429	2143
B - Eagle Way West	0.33	10.10	0.5	1.8	B	144	216
C - A12 South	0.75	5.17	2.9	6.6	A	1697	2545
D - Barrack Square East	0.92	49.54	9.0	46.1	E	582	874

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1172	293	267	2159	0.543	1167	1253	0.0	1.2	3.619	A
B - Eagle Way West	118	30	1402	838	0.141	117	196	0.0	0.2	4.990	A
C - A12 South	1392	348	210	2792	0.499	1388	1422	0.0	1.0	2.557	A
D - Barrack Square East	478	119	1158	1032	0.463	474	277	0.0	0.9	6.425	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1400	350	320	2127	0.658	1397	1498	1.2	1.9	4.910	A
B - Eagle Way West	141	35	1677	708	0.199	141	234	0.2	0.2	6.339	A
C - A12 South	1662	416	252	2766	0.601	1660	1702	1.0	1.5	3.250	A

D - Barrack Square East	571	143	1386	916	0.623	568	331	0.9	1.6	10.253	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1714	429	391	2084	0.823	1704	1827	1.9	4.4	9.249	A
B - Eagle Way West	173	43	2047	533	0.324	172	285	0.2	0.5	9.932	A
C - A12 South	2036	509	301	2735	0.744	2030	2065	1.5	2.8	5.069	A
D - Barrack Square East	699	175	1691	760	0.919	676	404	1.6	7.4	35.662	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1714	429	392	2083	0.823	1714	1836	4.4	4.5	9.713	A
B - Eagle Way West	173	43	2056	529	0.327	173	287	0.5	0.5	10.100	B
C - A12 South	2036	509	307	2731	0.745	2035	2085	2.8	2.9	5.172	A
D - Barrack Square East	699	175	1700	756	0.925	693	406	7.4	9.0	49.543	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1400	350	322	2126	0.658	1410	1513	4.5	2.0	5.098	A
B - Eagle Way West	141	35	1693	701	0.201	142	238	0.5	0.3	6.447	A
C - A12 South	1662	416	263	2759	0.602	1668	1735	2.9	1.5	3.316	A
D - Barrack Square East	571	143	1399	909	0.628	600	333	9.0	1.7	12.665	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1172	293	269	2158	0.543	1175	1259	2.0	1.2	3.675	A
B - Eagle Way West	118	30	1410	835	0.142	118	197	0.3	0.2	5.029	A
C - A12 South	1392	348	213	2790	0.499	1394	1434	1.5	1.0	2.582	A
D - Barrack Square East	478	119	1166	1028	0.465	481	278	1.7	0.9	6.633	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.55	1.04	1.28	1.28			N/A	N/A
B - Eagle Way West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A12 South	0.99	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.85	0.53	0.99	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.89	0.04	0.43	5.11	8.73			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.49	0.04	0.42	3.91	6.62			N/A	N/A
D - Barrack Square East	1.61	0.05	0.48	4.16	6.60			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.39	0.03	0.30	4.39	19.30			N/A	N/A
B - Eagle Way West	0.47	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	2.85	0.03	0.27	2.85	2.85			N/A	N/A
D - Barrack Square East	7.41	0.07	1.29	21.18	33.05			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.51	0.03	0.28	4.51	7.46			N/A	N/A
B - Eagle Way West	0.48	0.03	0.33	1.45	1.84			N/A	N/A
C - A12 South	2.89	0.03	0.26	2.89	2.89			N/A	N/A
D - Barrack Square East	8.98	0.05	0.66	25.98	46.14			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.06	0.78	4.99	7.57			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.53	0.11	1.22	2.85	3.75			N/A	N/A
D - Barrack Square East	1.74	0.04	0.37	4.51	8.67			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.04	0.37	3.02	5.56			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	1.00	0.05	0.61	2.05	2.97			N/A	N/A
D - Barrack Square East	0.88	0.03	0.29	1.30	3.84			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	828	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	910	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	786	40
	B - Eagle Way West	16	0	55	6
	C - A12 South	738	9	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	11	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.98	0.8	2.3	A	760	1140
B - Eagle Way West	0.09	3.99	0.1	0.5	A	71	106
C - A12 South	0.36	2.06	0.6	2.7	A	835	1253
D - Barrack Square East	0.07	3.55	0.1	0.5	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	624	156	168	2164	0.288	622	569	0.0	0.4	2.332	A
B - Eagle Way West	58	14	679	1144	0.051	58	14	0.0	0.1	3.315	A
C - A12 South	685	171	9	2752	0.249	684	678	0.0	0.3	1.740	A
D - Barrack Square East	54	14	633	1242	0.044	54	157	0.0	0.0	3.030	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	745	186	201	2145	0.347	744	680	0.4	0.5	2.570	A
B - Eagle Way West	69	17	812	1078	0.064	69	17	0.1	0.1	3.568	A
C - A12 South	818	205	11	2751	0.297	818	811	0.3	0.4	1.861	A

D - Barrack Square East	65	16	758	1180	0.055	65	187	0.0	0.1	3.228	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	912	228	246	2118	0.431	911	833	0.5	0.8	2.981	A
B - Eagle Way West	85	21	994	988	0.086	85	21	0.1	0.1	3.987	A
C - A12 South	1002	250	14	2749	0.364	1001	993	0.4	0.6	2.060	A
D - Barrack Square East	79	20	928	1094	0.072	79	229	0.1	0.1	3.545	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	912	228	246	2118	0.431	912	834	0.8	0.8	2.984	A
B - Eagle Way West	85	21	995	987	0.086	85	21	0.1	0.1	3.988	A
C - A12 South	1002	250	14	2749	0.364	1002	994	0.6	0.6	2.060	A
D - Barrack Square East	79	20	929	1094	0.072	79	230	0.1	0.1	3.547	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	745	186	201	2145	0.347	746	681	0.8	0.5	2.574	A
B - Eagle Way West	69	17	813	1077	0.064	69	17	0.1	0.1	3.570	A
C - A12 South	818	205	11	2751	0.297	819	813	0.6	0.4	1.862	A
D - Barrack Square East	65	16	759	1179	0.055	65	188	0.1	0.1	3.233	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	624	156	169	2164	0.288	624	570	0.5	0.4	2.340	A
B - Eagle Way West	58	14	681	1143	0.051	58	14	0.1	0.1	3.318	A
C - A12 South	685	171	9	2752	0.249	685	681	0.4	0.3	1.744	A
D - Barrack Square East	54	14	636	1241	0.044	54	157	0.1	0.0	3.035	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.06	0.66	1.33	1.42			N/A	N/A
B - Eagle Way West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.42	0.00	0.00	0.42	0.42			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.03	0.25	0.75	0.75			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.57	0.03	0.25	0.57	0.57			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.03	0.28	0.75	2.25			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.57	0.03	0.30	1.35	2.69			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.42	0.00	0.00	0.42	0.42			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.33	0.00	0.00	0.33	0.33			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	9.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1331	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	1964	100.000
D - Barrack Square East		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1274	56
	B - Eagle Way West	47	0	128	27
	C - A12 South	1419	30	0	515
	D - Barrack Square East	87	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	12	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	10.70	4.2	18.5	B	1221	1832
B - Eagle Way West	0.59	23.03	1.4	7.0	C	185	278
C - A12 South	0.81	6.90	4.1	12.0	A	1802	2703
D - Barrack Square East	0.36	7.24	0.6	2.5	A	230	345

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1002	250	503	1938	0.517	998	1165	0.0	1.1	3.810	A
B - Eagle Way West	152	38	1517	729	0.208	151	31	0.0	0.3	6.214	A
C - A12 South	1479	370	74	2704	0.547	1474	1166	0.0	1.2	2.916	A
D - Barrack Square East	188	47	1052	1021	0.185	188	449	0.0	0.2	4.315	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1196	299	602	1880	0.636	1194	1393	1.1	1.7	5.224	A
B - Eagle Way West	181	45	1815	582	0.312	181	37	0.3	0.4	8.963	A
C - A12 South	1766	441	88	2695	0.655	1763	1395	1.2	1.9	3.851	A

D - Barrack Square East	225	56	1259	917	0.245	225	537	0.2	0.3	5.200	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1465	366	734	1802	0.813	1456	1702	1.7	4.1	10.114	B
B - Eagle Way West	222	56	2217	382	0.582	219	45	0.4	1.3	21.628	C
C - A12 South	2162	541	108	2683	0.806	2154	1701	1.9	4.0	6.698	A
D - Barrack Square East	276	69	1534	778	0.354	275	656	0.3	0.5	7.142	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1465	366	739	1800	0.814	1465	1709	4.1	4.2	10.696	B
B - Eagle Way West	222	56	2226	378	0.588	222	45	1.3	1.4	23.029	C
C - A12 South	2162	541	108	2683	0.806	2162	1712	4.0	4.1	6.903	A
D - Barrack Square East	276	69	1545	773	0.357	276	659	0.5	0.6	7.242	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1196	299	608	1876	0.638	1206	1403	4.2	1.8	5.448	A
B - Eagle Way West	181	45	1826	576	0.315	185	37	1.4	0.5	9.298	A
C - A12 South	1766	441	89	2695	0.655	1774	1410	4.1	1.9	3.947	A
D - Barrack Square East	225	56	1273	909	0.247	226	541	0.6	0.3	5.275	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1002	250	507	1936	0.517	1005	1171	1.8	1.1	3.875	A
B - Eagle Way West	152	38	1525	725	0.210	153	31	0.5	0.3	6.296	A
C - A12 South	1479	370	74	2704	0.547	1481	1174	1.9	1.2	2.951	A
D - Barrack Square East	188	47	1060	1017	0.185	189	451	0.3	0.2	4.351	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.20	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.72	0.04	0.45	4.59	7.58			N/A	N/A
B - Eagle Way West	0.45	0.04	0.36	1.16	1.33			N/A	N/A
C - A12 South	1.88	0.04	0.40	5.02	9.00			N/A	N/A
D - Barrack Square East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.10	0.03	0.30	4.10	18.54			N/A	N/A
B - Eagle Way West	1.32	0.03	0.28	1.32	4.08			N/A	N/A
C - A12 South	4.00	0.03	0.29	4.00	11.95			N/A	N/A
D - Barrack Square East	0.54	0.03	0.25	0.54	0.54			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.24	0.03	0.28	4.24	8.43			N/A	N/A
B - Eagle Way West	1.38	0.03	0.31	2.44	7.05			N/A	N/A
C - A12 South	4.08	0.03	0.27	4.08	4.08			N/A	N/A
D - Barrack Square East	0.55	0.03	0.31	1.50	2.53			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.79	0.06	0.74	4.53	6.80			N/A	N/A
B - Eagle Way West	0.47	0.04	0.40	1.25	1.39			N/A	N/A
C - A12 South	1.92	0.07	1.06	4.60	6.59			N/A	N/A
D - Barrack Square East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.04	0.37	2.72	4.94			N/A	N/A
B - Eagle Way West	0.27	0.03	0.30	0.88	1.21			N/A	N/A
C - A12 South	1.22	0.04	0.42	3.06	5.05			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	53.66	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1353	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2339	100.000
D - Barrack Square East		ONE HOUR	✓	511	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1270	63
	B - Eagle Way West	58	0	144	23
	C - A12 South	1500	72	1	765
	D - Barrack Square East	178	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	10	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	14	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	22.78	8.9	48.3	C	1242	1863
B - Eagle Way West	1.50	502.05	38.8	63.9	F	207	310
C - A12 South	0.99	39.33	27.4	119.5	E	2146	3219
D - Barrack Square East	0.72	16.46	2.5	10.7	C	469	703

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1019	255	699	1784	0.571	1013	1301	0.0	1.3	4.641	A
B - Eagle Way West	170	42	1832	583	0.291	168	84	0.0	0.4	8.632	A
C - A12 South	1761	440	164	2657	0.663	1753	1293	0.0	1.9	3.948	A
D - Barrack Square East	385	96	1074	1019	0.377	382	639	0.0	0.6	5.632	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	835	1707	0.713	1212	1555	1.3	2.4	7.205	A
B - Eagle Way West	202	51	2190	404	0.501	200	100	0.4	1.0	17.463	C
C - A12 South	2102	526	196	2638	0.797	2095	1546	1.9	3.8	6.535	A

D - Barrack Square East	459	115	1284	908	0.506	458	763	0.6	1.0	7.961	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1490	372	955	1639	0.909	1467	1849	2.4	8.1	18.854	C
B - Eagle Way West	248	62	2624	187	1.326	179	121	1.0	18.1	230.350	F
C - A12 South	2575	644	238	2614	0.985	2507	1833	3.8	20.8	24.841	C
D - Barrack Square East	562	141	1514	785	0.716	557	908	1.0	2.4	15.411	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1490	372	958	1638	0.910	1487	1873	8.1	8.9	22.782	C
B - Eagle Way West	248	62	2667	166	1.496	165	122	18.1	38.8	502.053	F
C - A12 South	2575	644	241	2612	0.986	2548	1845	20.8	27.4	39.333	E
D - Barrack Square East	562	141	1524	780	0.721	562	921	2.4	2.5	16.457	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	976	1629	0.747	1240	1660	8.9	3.1	9.764	A
B - Eagle Way West	202	51	2290	354	0.572	345	104	38.8	3.1	230.788	F
C - A12 South	2102	526	199	2637	0.797	2195	1668	27.4	4.1	9.862	A
D - Barrack Square East	459	115	1403	850	0.540	464	813	2.5	1.2	9.464	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1019	255	714	1776	0.574	1026	1316	3.1	1.4	4.841	A
B - Eagle Way West	170	42	1850	575	0.295	180	85	3.1	0.4	9.375	A
C - A12 South	1761	440	166	2656	0.663	1769	1315	4.1	2.0	4.095	A
D - Barrack Square East	385	96	1094	1009	0.381	387	646	1.2	0.6	5.810	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.55	1.22	1.72	1.89			N/A	N/A
B - Eagle Way West	0.40	0.03	0.35	1.25	1.46			N/A	N/A
C - A12 South	1.94	0.24	1.13	3.41	4.27			N/A	N/A
D - Barrack Square East	0.60	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.41	0.05	0.45	6.66	11.26			N/A	N/A
B - Eagle Way West	0.97	0.03	0.32	2.03	4.80			N/A	N/A
C - A12 South	3.79	0.04	0.43	10.57	19.27			N/A	N/A
D - Barrack Square East	1.01	0.07	0.80	1.86	2.59			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.06	0.05	0.46	22.65	42.51			N/A	N/A
B - Eagle Way West	18.11	5.70	16.15	29.73	34.58			N/A	N/A
C - A12 South	20.82	0.19	8.59	56.34	80.76			N/A	N/A
D - Barrack Square East	2.38	0.03	0.30	2.38	10.71			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.89	0.04	0.35	17.89	48.31			N/A	N/A
B - Eagle Way West	38.80	18.45	36.63	57.00	63.88			N/A	N/A
C - A12 South	27.39	0.12	7.45	78.75	119.51			N/A	N/A
D - Barrack Square East	2.50	0.03	0.29	2.50	8.72			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.06	0.05	0.68	8.52	13.67			N/A	N/A
B - Eagle Way West	3.15	0.05	0.45	8.80	15.32			N/A	N/A
C - A12 South	4.10	0.04	0.43	11.37	21.04			N/A	N/A
D - Barrack Square East	1.20	0.07	0.88	2.45	3.35			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.03	0.31	2.37	6.94			N/A	N/A
B - Eagle Way West	0.42	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	1.99	0.03	0.30	2.42	9.44			N/A	N/A
D - Barrack Square East	0.62	0.04	0.36	1.39	2.37			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	11.74	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1420	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1892	100.000
D - Barrack Square East		ONE HOUR	✓	617	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1252	111
	B - Eagle Way West	61	0	97	37
	C - A12 South	1483	104	0	305
	D - Barrack Square East	154	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	10	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	9	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	10.04	4.3	18.1	B	1303	1955
B - Eagle Way West	0.49	16.27	1.0	4.8	C	179	269
C - A12 South	0.79	6.42	3.7	8.5	A	1736	2604
D - Barrack Square East	0.86	31.67	5.6	30.6	D	566	849

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	330	2008	0.532	1065	1274	0.0	1.1	3.795	A
B - Eagle Way West	147	37	1458	766	0.192	146	144	0.0	0.2	5.804	A
C - A12 South	1424	356	183	2694	0.529	1420	1333	0.0	1.1	2.817	A
D - Barrack Square East	464	116	1054	1051	0.442	461	341	0.0	0.8	6.070	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1277	319	395	1972	0.648	1274	1524	1.1	1.8	5.140	A
B - Eagle Way West	176	44	1744	627	0.280	175	172	0.2	0.4	7.953	A
C - A12 South	1701	425	218	2672	0.636	1698	1595	1.1	1.7	3.687	A

D - Barrack Square East	554	139	1262	940	0.590	552	408	0.8	1.4	9.224	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	391	482	1922	0.814	1554	1860	1.8	4.1	9.557	A
B - Eagle Way West	215	54	2129	441	0.488	213	210	0.4	0.9	15.663	C
C - A12 South	2083	521	264	2645	0.788	2075	1940	1.7	3.6	6.243	A
D - Barrack Square East	679	170	1539	791	0.859	665	498	1.4	5.0	26.073	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1564	391	485	1921	0.814	1563	1869	4.1	4.3	10.037	B
B - Eagle Way West	215	54	2139	436	0.494	215	211	0.9	1.0	16.273	C
C - A12 South	2083	521	268	2642	0.788	2083	1957	3.6	3.7	6.423	A
D - Barrack Square East	679	170	1548	786	0.864	677	500	5.0	5.6	31.671	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1277	319	399	1970	0.648	1286	1538	4.3	1.9	5.339	A
B - Eagle Way West	176	44	1759	620	0.283	178	174	1.0	0.4	8.177	A
C - A12 South	1701	425	225	2668	0.637	1708	1621	3.7	1.8	3.777	A
D - Barrack Square East	554	139	1274	933	0.594	571	411	5.6	1.5	10.372	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1069	267	333	2007	0.533	1072	1282	1.9	1.2	3.861	A
B - Eagle Way West	147	37	1466	762	0.193	148	145	0.4	0.2	5.869	A
C - A12 South	1424	356	185	2693	0.529	1427	1344	1.8	1.1	2.851	A
D - Barrack Square East	464	116	1062	1047	0.443	467	343	1.5	0.8	6.237	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.11	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.78	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.04	0.44	4.84	8.03			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.73	0.04	0.41	4.62	8.09			N/A	N/A
D - Barrack Square East	1.40	0.05	0.51	3.48	5.29			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.13	0.03	0.30	4.13	18.06			N/A	N/A
B - Eagle Way West	0.92	0.03	0.26	0.92	0.92			N/A	N/A
C - A12 South	3.59	0.03	0.28	3.59	8.50			N/A	N/A
D - Barrack Square East	5.03	0.04	0.43	13.93	26.20			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.25	0.03	0.28	4.25	7.16			N/A	N/A
B - Eagle Way West	0.95	0.03	0.31	1.66	4.77			N/A	N/A
C - A12 South	3.66	0.03	0.27	3.66	3.66			N/A	N/A
D - Barrack Square East	5.62	0.04	0.35	12.09	30.64			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.87	0.06	0.78	4.75	7.13			N/A	N/A
B - Eagle Way West	0.40	0.03	0.31	1.01	1.25			N/A	N/A
C - A12 South	1.78	0.08	1.13	3.96	5.57			N/A	N/A
D - Barrack Square East	1.50	0.04	0.41	3.94	6.88			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.04	0.38	2.90	5.23			N/A	N/A
B - Eagle Way West	0.24	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	1.13	0.04	0.44	2.77	4.36			N/A	N/A
D - Barrack Square East	0.81	0.03	0.30	1.33	3.94			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	12.77	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1501	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1849	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1326	104
	B - Eagle Way West	45	0	94	19
	C - A12 South	1460	145	1	243
	D - Barrack Square East	165	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	6	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	9.27	4.2	16.6	A	1377	2066
B - Eagle Way West	0.33	10.29	0.5	1.9	B	144	216
C - A12 South	0.75	5.31	3.0	6.8	A	1697	2545
D - Barrack Square East	0.91	44.10	8.0	42.4	E	582	874

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1130	282	267	2114	0.535	1125	1253	0.0	1.1	3.626	A
B - Eagle Way West	118	30	1403	834	0.142	117	196	0.0	0.2	5.020	A
C - A12 South	1392	348	210	2774	0.502	1388	1382	0.0	1.0	2.590	A
D - Barrack Square East	478	119	1118	1040	0.460	475	274	0.0	0.8	6.335	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1349	337	320	2082	0.648	1346	1498	1.1	1.8	4.875	A
B - Eagle Way West	141	35	1678	703	0.201	141	234	0.2	0.2	6.398	A
C - A12 South	1662	416	252	2748	0.605	1660	1654	1.0	1.5	3.304	A

D - Barrack Square East	571	143	1338	925	0.617	568	328	0.8	1.6	9.987	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1652	413	391	2040	0.810	1643	1828	1.8	4.1	8.880	A
B - Eagle Way West	173	43	2047	527	0.328	172	285	0.2	0.5	10.114	B
C - A12 South	2036	509	302	2717	0.749	2030	2009	1.5	2.9	5.202	A
D - Barrack Square East	699	175	1633	772	0.905	678	401	1.6	6.8	33.000	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1652	413	392	2039	0.810	1652	1837	4.1	4.2	9.269	A
B - Eagle Way West	173	43	2056	523	0.331	173	287	0.5	0.5	10.289	B
C - A12 South	2036	509	308	2713	0.750	2036	2028	2.9	3.0	5.310	A
D - Barrack Square East	699	175	1642	767	0.911	694	403	6.8	8.0	44.098	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1349	337	322	2081	0.648	1358	1512	4.2	1.9	5.042	A
B - Eagle Way West	141	35	1692	696	0.203	142	237	0.5	0.3	6.507	A
C - A12 South	1662	416	261	2742	0.606	1668	1684	3.0	1.6	3.371	A
D - Barrack Square East	571	143	1350	919	0.621	596	330	8.0	1.7	11.958	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1130	282	269	2113	0.535	1133	1260	1.9	1.2	3.685	A
B - Eagle Way West	118	30	1410	830	0.142	118	197	0.3	0.2	5.060	A
C - A12 South	1392	348	213	2772	0.502	1394	1394	1.6	1.0	2.616	A
D - Barrack Square East	478	119	1126	1036	0.461	481	276	1.7	0.9	6.528	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C - A12 South	1.00	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.84	0.54	0.99	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.04	0.44	4.86	8.17			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.52	0.04	0.42	3.98	6.78			N/A	N/A
D - Barrack Square East	1.56	0.05	0.48	4.00	6.33			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.06	0.03	0.30	4.06	16.63			N/A	N/A
B - Eagle Way West	0.48	0.03	0.26	0.48	0.49			N/A	N/A
C - A12 South	2.92	0.03	0.27	2.92	3.07			N/A	N/A
D - Barrack Square East	6.77	0.06	1.25	19.52	31.59			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.16	0.03	0.27	4.16	5.60			N/A	N/A
B - Eagle Way West	0.49	0.03	0.33	1.46	1.89			N/A	N/A
C - A12 South	2.97	0.03	0.26	2.97	2.97			N/A	N/A
D - Barrack Square East	7.98	0.05	0.45	22.28	42.45			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.87	0.06	0.85	4.69	6.94			N/A	N/A
B - Eagle Way West	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C - A12 South	1.55	0.11	1.22	2.94	3.90			N/A	N/A
D - Barrack Square East	1.69	0.04	0.38	4.42	8.31			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.04	0.39	2.93	5.18			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	1.01	0.05	0.57	2.16	3.14			N/A	N/A
D - Barrack Square East	0.87	0.03	0.29	1.40	3.93			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	851	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	835	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	809	40
	B - Eagle Way West	17	0	57	6
	C - A12 South	662	10	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.05	0.8	2.0	A	781	1172
B - Eagle Way West	0.09	3.80	0.1	0.5	A	73	110
C - A12 South	0.33	1.93	0.5	2.1	A	766	1149
D - Barrack Square East	0.07	3.60	0.1	0.5	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	641	160	170	2163	0.296	639	513	0.0	0.4	2.361	A
B - Eagle Way West	60	15	622	1176	0.051	60	15	0.0	0.1	3.225	A
C - A12 South	629	157	10	2791	0.225	627	697	0.0	0.3	1.663	A
D - Barrack Square East	54	14	652	1231	0.044	54	157	0.0	0.0	3.058	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	765	191	203	2143	0.357	765	613	0.4	0.6	2.610	A
B - Eagle Way West	72	18	744	1117	0.064	72	17	0.1	0.1	3.444	A
C - A12 South	751	188	11	2790	0.269	750	834	0.3	0.4	1.764	A

D - Barrack Square East	65	16	780	1167	0.056	65	188	0.0	0.1	3.265	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	938	234	249	2116	0.443	937	751	0.6	0.8	3.048	A
B - Eagle Way West	88	22	911	1035	0.085	88	21	0.1	0.1	3.799	A
C - A12 South	919	230	14	2788	0.330	919	1021	0.4	0.5	1.926	A
D - Barrack Square East	80	20	955	1079	0.074	79	230	0.1	0.1	3.599	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	938	234	249	2116	0.443	937	751	0.8	0.8	3.053	A
B - Eagle Way West	88	22	912	1035	0.085	88	21	0.1	0.1	3.800	A
C - A12 South	919	230	14	2788	0.330	919	1022	0.5	0.5	1.926	A
D - Barrack Square East	80	20	956	1079	0.074	80	230	0.1	0.1	3.601	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	765	191	203	2143	0.357	766	614	0.8	0.6	2.618	A
B - Eagle Way West	72	18	745	1116	0.064	72	17	0.1	0.1	3.446	A
C - A12 South	751	188	11	2790	0.269	751	836	0.5	0.4	1.768	A
D - Barrack Square East	65	16	782	1166	0.056	65	188	0.1	0.1	3.268	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	641	160	170	2162	0.296	642	514	0.6	0.4	2.369	A
B - Eagle Way West	60	15	624	1175	0.051	60	15	0.1	0.1	3.230	A
C - A12 South	629	157	10	2791	0.225	629	699	0.4	0.3	1.664	A
D - Barrack Square East	54	14	655	1230	0.044	54	157	0.1	0.0	3.063	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.07	0.73	1.35	1.42			N/A	N/A
B - Eagle Way West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.03	0.25	0.79	0.79			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.03	0.27	0.79	1.98			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.49	0.03	0.32	1.45	2.05			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	9.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1404	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	1975	100.000
D - Barrack Square East		ONE HOUR	✓	305	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1342	60
	B - Eagle Way West	48	0	133	28
	C - A12 South	1429	31	0	515
	D - Barrack Square East	141	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	12.98	5.4	26.8	B	1288	1932
B - Eagle Way West	0.61	24.27	1.5	7.7	C	192	288
C - A12 South	0.80	6.46	3.8	9.7	A	1813	2719
D - Barrack Square East	0.45	8.68	0.8	3.6	A	280	419

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1057	264	508	1961	0.539	1052	1214	0.0	1.2	3.941	A
B - Eagle Way West	158	39	1565	729	0.216	157	32	0.0	0.3	6.274	A
C - A12 South	1487	372	115	2764	0.538	1483	1220	0.0	1.2	2.798	A
D - Barrack Square East	229	57	1107	1011	0.227	228	453	0.0	0.3	4.594	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1262	315	607	1902	0.664	1259	1452	1.2	1.9	5.574	A
B - Eagle Way West	188	47	1872	582	0.324	188	38	0.3	0.5	9.113	A
C - A12 South	1776	444	137	2750	0.646	1773	1460	1.2	1.8	3.676	A

D - Barrack Square East	274	68	1324	901	0.304	273	542	0.3	0.4	5.727	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1545	386	740	1822	0.848	1533	1774	1.9	5.1	11.939	B
B - Eagle Way West	231	58	2288	382	0.604	227	46	0.5	1.4	22.670	C
C - A12 South	2175	544	168	2731	0.796	2167	1778	1.8	3.8	6.290	A
D - Barrack Square East	335	84	1611	757	0.443	334	662	0.4	0.8	8.488	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1545	386	745	1819	0.849	1544	1781	5.1	5.4	12.982	B
B - Eagle Way West	231	58	2296	378	0.610	230	47	1.4	1.5	24.269	C
C - A12 South	2175	544	168	2731	0.796	2175	1792	3.8	3.8	6.462	A
D - Barrack Square East	335	84	1625	750	0.447	335	665	0.8	0.8	8.679	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1262	315	614	1898	0.665	1275	1462	5.4	2.0	5.903	A
B - Eagle Way West	188	47	1884	576	0.327	192	38	1.5	0.5	9.472	A
C - A12 South	1776	444	138	2750	0.646	1784	1480	3.8	1.8	3.756	A
D - Barrack Square East	274	68	1343	892	0.307	275	546	0.8	0.4	5.853	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1057	264	511	1959	0.539	1060	1221	2.0	1.2	4.019	A
B - Eagle Way West	158	39	1573	725	0.217	159	32	0.5	0.3	6.360	A
C - A12 South	1487	372	115	2764	0.538	1490	1230	1.8	1.2	2.833	A
D - Barrack Square East	229	57	1116	1006	0.228	230	456	0.4	0.3	4.640	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.55	1.05	1.44	1.44			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.16	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.94	0.04	0.43	5.25	8.91			N/A	N/A
B - Eagle Way West	0.47	0.04	0.41	1.24	1.37			N/A	N/A
C - A12 South	1.80	0.04	0.40	4.82	8.62			N/A	N/A
D - Barrack Square East	0.43	0.00	0.00	0.43	0.43			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.14	0.03	0.33	8.73	26.82			N/A	N/A
B - Eagle Way West	1.43	0.03	0.28	1.43	5.30			N/A	N/A
C - A12 South	3.78	0.03	0.28	3.78	9.65			N/A	N/A
D - Barrack Square East	0.78	0.03	0.26	0.78	0.78			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.38	0.03	0.29	5.38	17.43			N/A	N/A
B - Eagle Way West	1.51	0.03	0.31	2.65	7.73			N/A	N/A
C - A12 South	3.84	0.03	0.27	3.84	3.84			N/A	N/A
D - Barrack Square East	0.80	0.03	0.29	1.35	3.63			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.02	0.05	0.50	5.40	8.55			N/A	N/A
B - Eagle Way West	0.49	0.04	0.41	1.29	1.42			N/A	N/A
C - A12 South	1.84	0.07	1.11	4.24	5.94			N/A	N/A
D - Barrack Square East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.03	0.34	2.83	5.87			N/A	N/A
B - Eagle Way West	0.28	0.03	0.30	0.97	1.27			N/A	N/A
C - A12 South	1.17	0.04	0.44	2.90	4.68			N/A	N/A
D - Barrack Square East	0.30	0.03	0.25	0.45	0.48			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	63.83	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1328	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2333	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1237	70
	B - Eagle Way West	61	0	149	24
	C - A12 South	1492	75	1	765
	D - Barrack Square East	301	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	0	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	16.06	6.3	32.5	C	1219	1828
B - Eagle Way West	1.81	698.58	54.3	80.7	F	214	322
C - A12 South	0.99	40.50	28.3	120.8	E	2141	3211
D - Barrack Square East	0.85	27.18	5.0	26.1	D	583	874

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1000	250	704	1819	0.550	995	1389	0.0	1.2	4.347	A
B - Eagle Way West	176	44	1918	567	0.310	174	87	0.0	0.4	9.129	A
C - A12 South	1756	439	257	2672	0.657	1749	1272	0.0	1.9	3.866	A
D - Barrack Square East	478	119	1054	1048	0.456	475	645	0.0	0.8	6.240	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1194	298	841	1740	0.686	1190	1660	1.2	2.1	6.506	A
B - Eagle Way West	210	53	2293	384	0.547	207	104	0.4	1.1	20.016	C
C - A12 South	2097	524	307	2642	0.794	2090	1521	1.9	3.7	6.434	A

D - Barrack Square East	571	143	1260	941	0.606	568	770	0.8	1.5	9.580	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1462	366	940	1682	0.869	1447	1965	2.1	5.9	14.469	B
B - Eagle Way West	257	64	2745	164	1.567	160	125	1.1	25.5	350.076	F
C - A12 South	2569	642	372	2604	0.986	2499	1789	3.7	21.1	25.150	D
D - Barrack Square East	699	175	1474	828	0.844	687	913	1.5	4.6	23.620	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1462	366	940	1682	0.869	1461	1992	5.9	6.3	16.060	C
B - Eagle Way West	257	64	2790	142	1.808	142	127	25.5	54.3	698.577	F
C - A12 South	2569	642	377	2600	0.988	2540	1796	21.1	28.3	40.499	E
D - Barrack Square East	699	175	1476	827	0.846	698	926	4.6	5.0	27.178	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1194	298	963	1670	0.715	1209	1764	6.3	2.6	8.032	A
B - Eagle Way West	210	53	2401	331	0.634	325	108	54.3	25.4	417.841	F
C - A12 South	2097	524	315	2637	0.795	2194	1621	28.3	4.0	9.895	A
D - Barrack Square East	571	143	1353	895	0.637	584	818	5.0	1.8	11.981	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1000	250	785	1773	0.564	1005	1428	2.6	1.3	4.720	A
B - Eagle Way West	176	44	1937	558	0.315	276	88	25.4	0.5	18.627	C
C - A12 South	1756	439	261	2670	0.658	1765	1350	4.0	1.9	4.013	A
D - Barrack Square East	478	119	1128	1012	0.472	482	661	1.8	0.9	6.834	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.56	1.11	1.43	1.72			N/A	N/A
B - Eagle Way West	0.44	0.03	0.30	1.31	1.92			N/A	N/A
C - A12 South	1.89	0.22	1.08	3.34	4.18			N/A	N/A
D - Barrack Square East	0.83	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.14	0.05	0.45	5.83	9.75			N/A	N/A
B - Eagle Way West	1.15	0.03	0.30	1.77	5.71			N/A	N/A
C - A12 South	3.72	0.04	0.43	10.33	18.99			N/A	N/A
D - Barrack Square East	1.50	0.05	0.65	3.69	5.53			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.92	0.04	0.36	13.35	32.45			N/A	N/A
B - Eagle Way West	25.49	10.75	23.64	38.72	43.90			N/A	N/A
C - A12 South	21.14	0.20	9.02	56.78	80.93			N/A	N/A
D - Barrack Square East	4.63	0.04	0.40	12.28	24.86			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.25	0.03	0.30	6.25	26.67			N/A	N/A
B - Eagle Way West	54.29	31.63	52.41	73.75	80.69			N/A	N/A
C - A12 South	28.29	0.14	8.51	80.57	120.77			N/A	N/A
D - Barrack Square East	5.00	0.03	0.33	8.47	26.06			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.58	0.05	0.76	6.97	10.90			N/A	N/A
B - Eagle Way West	25.44	10.11	23.44	39.43	44.96			N/A	N/A
C - A12 South	4.04	0.04	0.43	11.19	20.76			N/A	N/A
D - Barrack Square East	1.82	0.05	0.48	4.81	7.71			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.03	0.33	2.94	6.68			N/A	N/A
B - Eagle Way West	0.47	0.03	0.25	0.47	0.48			N/A	N/A
C - A12 South	1.95	0.03	0.30	2.22	9.10			N/A	N/A
D - Barrack Square East	0.91	0.03	0.32	1.80	4.51			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	22.30	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1609	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2079	100.000
D - Barrack Square East		ONE HOUR	✓	668	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1361	189
	B - Eagle Way West	63	0	101	39
	C - A12 South	1665	108	0	305
	D - Barrack Square East	204	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	6	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	2	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	16.58	7.8	39.6	C	1477	2215
B - Eagle Way West	0.64	28.25	1.7	8.8	D	186	280
C - A12 South	0.85	8.87	5.5	23.7	A	1907	2861
D - Barrack Square East	0.98	77.51	15.5	60.8	F	613	919

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1212	303	334	2074	0.584	1206	1450	0.0	1.4	4.123	A
B - Eagle Way West	153	38	1632	705	0.217	152	150	0.0	0.3	6.490	A
C - A12 South	1565	391	222	2753	0.568	1560	1416	0.0	1.3	3.003	A
D - Barrack Square East	503	126	1140	1025	0.490	499	401	0.0	0.9	6.789	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1447	362	400	2035	0.711	1443	1734	1.4	2.4	6.034	A
B - Eagle Way West	183	46	1952	555	0.329	182	179	0.3	0.5	9.623	A
C - A12 South	1869	467	266	2726	0.686	1865	1694	1.3	2.1	4.166	A

D - Barrack Square East	600	150	1363	909	0.661	597	479	0.9	1.9	11.403	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1772	443	486	1985	0.893	1753	2107	2.4	7.2	14.456	B
B - Eagle Way West	224	56	2373	357	0.626	219	216	0.5	1.6	25.353	D
C - A12 South	2289	572	314	2696	0.849	2276	2041	2.1	5.3	8.326	A
D - Barrack Square East	735	184	1655	756	0.972	699	583	1.9	10.9	46.955	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1772	443	490	1982	0.894	1770	2123	7.2	7.8	16.585	C
B - Eagle Way West	224	56	2390	350	0.640	223	219	1.6	1.7	28.253	D
C - A12 South	2289	572	321	2692	0.850	2288	2069	5.3	5.5	8.868	A
D - Barrack Square East	735	184	1672	747	0.984	717	588	10.9	15.5	77.509	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1447	362	406	2032	0.712	1468	1767	7.8	2.5	6.612	A
B - Eagle Way West	183	46	1985	540	0.338	187	183	1.7	0.5	10.344	B
C - A12 South	1869	467	287	2713	0.689	1882	1755	5.5	2.2	4.398	A
D - Barrack Square East	600	150	1388	896	0.670	654	486	15.5	2.1	18.080	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1212	303	337	2072	0.585	1216	1460	2.5	1.4	4.228	A
B - Eagle Way West	153	38	1643	700	0.218	154	151	0.5	0.3	6.601	A
C - A12 South	1565	391	226	2751	0.569	1569	1431	2.2	1.3	3.056	A
D - Barrack Square East	503	126	1149	1020	0.493	507	404	2.1	1.0	7.077	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.39	0.57	1.29	1.77	1.92			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.31	0.57	1.19	1.64	1.83			N/A	N/A
D - Barrack Square East	0.95	0.34	1.00	1.29	1.29			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.40	0.04	0.43	6.61	11.54			N/A	N/A
B - Eagle Way West	0.48	0.04	0.43	1.26	1.38			N/A	N/A
C - A12 South	2.15	0.04	0.39	5.75	10.72			N/A	N/A
D - Barrack Square East	1.88	0.05	0.47	5.00	8.11			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.24	0.04	0.39	17.85	39.59			N/A	N/A
B - Eagle Way West	1.56	0.03	0.29	1.56	6.73			N/A	N/A
C - A12 South	5.29	0.03	0.31	5.29	23.72			N/A	N/A
D - Barrack Square East	10.95	0.19	5.15	28.18	39.34			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.77	0.03	0.32	9.03	36.74			N/A	N/A
B - Eagle Way West	1.68	0.03	0.32	3.32	8.81			N/A	N/A
C - A12 South	5.49	0.03	0.28	5.49	9.21			N/A	N/A
D - Barrack Square East	15.53	0.15	6.05	42.16	60.78			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.05	0.46	7.00	11.85			N/A	N/A
B - Eagle Way West	0.52	0.04	0.42	1.33	1.47			N/A	N/A
C - A12 South	2.25	0.06	0.86	5.87	8.89			N/A	N/A
D - Barrack Square East	2.13	0.04	0.37	5.41	11.06			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.03	0.33	2.99	7.37			N/A	N/A
B - Eagle Way West	0.28	0.03	0.31	1.00	1.32			N/A	N/A
C - A12 South	1.33	0.04	0.37	3.41	6.40			N/A	N/A
D - Barrack Square East	0.99	0.03	0.28	0.99	3.57			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	18.91	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1598	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1985	100.000
D - Barrack Square East		ONE HOUR	✓	688	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1363	161
	B - Eagle Way West	46	0	97	19
	C - A12 South	1591	151	1	243
	D - Barrack Square East	217	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	10.28	4.9	22.1	B	1466	2199
B - Eagle Way West	0.40	13.54	0.7	3.1	B	150	224
C - A12 South	0.80	6.74	4.0	11.0	A	1822	2733
D - Barrack Square East	0.98	75.49	15.5	61.5	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1203	301	271	2185	0.551	1198	1391	0.0	1.2	3.631	A
B - Eagle Way West	123	31	1539	780	0.157	122	203	0.0	0.2	5.465	A
C - A12 South	1495	374	252	2789	0.536	1490	1413	0.0	1.1	2.762	A
D - Barrack Square East	518	130	1150	1044	0.497	514	318	0.0	1.0	6.753	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1436	359	324	2152	0.667	1433	1663	1.2	2.0	4.988	A
B - Eagle Way West	147	37	1841	639	0.229	146	243	0.2	0.3	7.304	A
C - A12 South	1785	446	302	2758	0.647	1782	1690	1.1	1.8	3.676	A

D - Barrack Square East	619	155	1377	930	0.665	615	380	1.0	1.9	11.297	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1759	440	395	2108	0.834	1748	2022	2.0	4.7	9.714	A
B - Eagle Way West	179	45	2239	451	0.397	178	295	0.3	0.6	13.101	B
C - A12 South	2186	547	357	2724	0.803	2178	2043	1.8	3.9	6.490	A
D - Barrack Square East	758	189	1679	778	0.974	721	464	1.9	11.3	46.662	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1759	440	397	2107	0.835	1758	2035	4.7	4.9	10.285	B
B - Eagle Way West	179	45	2253	445	0.403	179	297	0.6	0.7	13.543	B
C - A12 South	2186	547	365	2719	0.804	2186	2065	3.9	4.0	6.741	A
D - Barrack Square East	758	189	1689	773	0.981	741	466	11.3	15.5	75.486	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1436	359	326	2150	0.668	1448	1691	4.9	2.0	5.205	A
B - Eagle Way West	147	37	1869	625	0.234	148	249	0.7	0.3	7.564	A
C - A12 South	1785	446	324	2744	0.650	1793	1739	4.0	1.9	3.819	A
D - Barrack Square East	619	155	1391	923	0.671	672	383	15.5	2.1	17.343	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1203	301	272	2184	0.551	1206	1400	2.0	1.2	3.693	A
B - Eagle Way West	123	31	1549	776	0.158	123	205	0.3	0.2	5.523	A
C - A12 South	1495	374	256	2787	0.536	1498	1425	1.9	1.2	2.799	A
D - Barrack Square East	518	130	1158	1040	0.498	523	320	2.1	1.0	7.021	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.56	1.07	1.21	1.61			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	1.15	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.97	0.34	1.01	1.43	1.43			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.97	0.04	0.43	5.36	9.22			N/A	N/A
B - Eagle Way West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - A12 South	1.81	0.04	0.40	4.84	8.75			N/A	N/A
D - Barrack Square East	1.92	0.05	0.47	5.14	8.35			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.74	0.03	0.31	5.27	22.12			N/A	N/A
B - Eagle Way West	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C - A12 South	3.92	0.03	0.28	3.92	10.98			N/A	N/A
D - Barrack Square East	11.25	0.19	5.38	28.84	40.16			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.89	0.03	0.28	4.89	9.93			N/A	N/A
B - Eagle Way West	0.66	0.03	0.32	1.43	3.06			N/A	N/A
C - A12 South	4.02	0.03	0.27	4.02	4.02			N/A	N/A
D - Barrack Square East	15.50	0.15	5.78	42.38	61.47			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.05	0.71	5.35	8.20			N/A	N/A
B - Eagle Way West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A12 South	1.88	0.07	1.11	4.38	6.17			N/A	N/A
D - Barrack Square East	2.13	0.04	0.36	5.33	11.12			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.04	0.37	3.11	5.90			N/A	N/A
B - Eagle Way West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.16	0.04	0.42	2.90	4.76			N/A	N/A
D - Barrack Square East	1.01	0.03	0.28	1.01	3.67			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	852	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	836	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	810	40
	B - Eagle Way West	17	0	57	6
	C - A12 South	663	10	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.06	0.8	2.0	A	782	1173
B - Eagle Way West	0.09	3.80	0.1	0.5	A	73	110
C - A12 South	0.33	1.93	0.5	2.1	A	767	1150
D - Barrack Square East	0.07	3.60	0.1	0.5	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	642	160	170	2163	0.297	640	513	0.0	0.4	2.362	A
B - Eagle Way West	60	15	623	1176	0.051	60	15	0.0	0.1	3.226	A
C - A12 South	629	157	10	2791	0.225	628	698	0.0	0.3	1.664	A
D - Barrack Square East	54	14	653	1231	0.044	54	157	0.0	0.0	3.059	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	766	192	203	2143	0.358	766	614	0.4	0.6	2.612	A
B - Eagle Way West	72	18	745	1116	0.064	72	17	0.1	0.1	3.446	A
C - A12 South	751	188	11	2790	0.269	751	835	0.3	0.4	1.765	A

D - Barrack Square East	65	16	781	1167	0.056	65	188	0.0	0.1	3.266	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	939	235	249	2116	0.443	938	752	0.6	0.8	3.050	A
B - Eagle Way West	88	22	912	1035	0.085	88	21	0.1	0.1	3.801	A
C - A12 South	920	230	14	2788	0.330	920	1022	0.4	0.5	1.927	A
D - Barrack Square East	80	20	957	1079	0.074	79	230	0.1	0.1	3.601	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	939	235	249	2116	0.443	939	752	0.8	0.8	3.055	A
B - Eagle Way West	88	22	913	1034	0.085	88	21	0.1	0.1	3.802	A
C - A12 South	920	230	14	2788	0.330	920	1023	0.5	0.5	1.927	A
D - Barrack Square East	80	20	958	1078	0.074	80	230	0.1	0.1	3.603	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	766	192	203	2143	0.358	767	615	0.8	0.6	2.617	A
B - Eagle Way West	72	18	746	1116	0.064	72	17	0.1	0.1	3.450	A
C - A12 South	751	188	11	2790	0.269	752	836	0.5	0.4	1.765	A
D - Barrack Square East	65	16	783	1166	0.056	65	188	0.1	0.1	3.272	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	642	160	170	2162	0.297	642	515	0.6	0.4	2.370	A
B - Eagle Way West	60	15	625	1175	0.051	60	15	0.1	0.1	3.231	A
C - A12 South	629	157	10	2791	0.225	630	700	0.4	0.3	1.667	A
D - Barrack Square East	54	14	655	1230	0.044	54	157	0.1	0.0	3.062	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.07	0.73	1.35	1.42			N/A	N/A
B - Eagle Way West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.03	0.25	0.79	0.79			N/A	N/A
B - Eagle Way West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Barrack Square East	0.08	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.03	0.27	0.79	1.97			N/A	N/A
B - Eagle Way West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C - A12 South	0.49	0.03	0.31	1.45	2.06			N/A	N/A
D - Barrack Square East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	10.30	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1426	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	1965	100.000
D - Barrack Square East		ONE HOUR	✓	305	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1364	60
	B - Eagle Way West	48	0	133	28
	C - A12 South	1419	31	0	515
	D - Barrack Square East	141	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	14.15	5.9	30.4	B	1308	1962
B - Eagle Way West	0.60	23.64	1.5	7.5	C	192	288
C - A12 South	0.79	6.37	3.8	9.1	A	1803	2705
D - Barrack Square East	0.45	8.93	0.8	3.7	A	280	419

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1073	268	508	1962	0.547	1068	1207	0.0	1.2	4.009	A
B - Eagle Way West	158	39	1558	732	0.215	157	32	0.0	0.3	6.245	A
C - A12 South	1480	370	115	2761	0.536	1475	1237	0.0	1.1	2.789	A
D - Barrack Square East	229	57	1123	1003	0.229	228	453	0.0	0.3	4.642	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1282	320	607	1902	0.674	1278	1444	1.2	2.0	5.740	A
B - Eagle Way West	188	47	1863	585	0.322	188	38	0.3	0.5	9.038	A
C - A12 South	1767	442	137	2747	0.643	1764	1480	1.1	1.8	3.655	A

D - Barrack Square East	274	68	1344	892	0.307	273	542	0.3	0.4	5.817	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1570	392	741	1823	0.861	1555	1764	2.0	5.6	12.827	B
B - Eagle Way West	231	58	2277	386	0.598	227	46	0.5	1.4	22.151	C
C - A12 South	2164	541	168	2728	0.793	2156	1800	1.8	3.7	6.207	A
D - Barrack Square East	335	84	1634	746	0.450	334	662	0.4	0.8	8.713	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1570	392	745	1820	0.863	1568	1770	5.6	5.9	14.152	B
B - Eagle Way West	231	58	2285	382	0.604	230	47	1.4	1.5	23.640	C
C - A12 South	2164	541	168	2728	0.793	2164	1816	3.7	3.8	6.375	A
D - Barrack Square East	335	84	1649	738	0.454	335	665	0.8	0.8	8.934	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1282	320	614	1898	0.675	1297	1453	5.9	2.1	6.133	A
B - Eagle Way West	188	47	1875	580	0.325	192	38	1.5	0.5	9.383	A
C - A12 South	1767	442	138	2746	0.643	1775	1502	3.8	1.8	3.733	A
D - Barrack Square East	274	68	1364	881	0.311	275	546	0.8	0.5	5.957	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1073	268	511	1960	0.548	1077	1213	2.1	1.2	4.096	A
B - Eagle Way West	158	39	1566	728	0.217	159	32	0.5	0.3	6.327	A
C - A12 South	1480	370	115	2760	0.536	1482	1247	1.8	1.2	2.824	A
D - Barrack Square East	229	57	1132	998	0.230	230	456	0.5	0.3	4.690	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.56	1.09	1.32	1.66			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.15	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.03	0.04	0.43	5.52	9.45			N/A	N/A
B - Eagle Way West	0.47	0.04	0.40	1.23	1.37			N/A	N/A
C - A12 South	1.78	0.04	0.40	4.77	8.49			N/A	N/A
D - Barrack Square East	0.44	0.00	0.00	0.44	0.44			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.63	0.03	0.34	11.15	30.38			N/A	N/A
B - Eagle Way West	1.40	0.03	0.28	1.40	4.92			N/A	N/A
C - A12 South	3.71	0.03	0.28	3.71	9.07			N/A	N/A
D - Barrack Square East	0.80	0.03	0.26	0.80	0.80			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.93	0.03	0.30	5.93	22.38			N/A	N/A
B - Eagle Way West	1.47	0.03	0.31	2.55	7.52			N/A	N/A
C - A12 South	3.77	0.03	0.27	3.77	3.77			N/A	N/A
D - Barrack Square East	0.82	0.03	0.29	1.34	3.70			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.05	0.48	5.74	9.30			N/A	N/A
B - Eagle Way West	0.49	0.04	0.41	1.28	1.41			N/A	N/A
C - A12 South	1.82	0.08	1.12	4.14	5.82			N/A	N/A
D - Barrack Square East	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.03	0.34	2.82	6.18			N/A	N/A
B - Eagle Way West	0.28	0.03	0.30	0.95	1.26			N/A	N/A
C - A12 South	1.16	0.04	0.44	2.87	4.59			N/A	N/A
D - Barrack Square East	0.30	0.03	0.25	0.45	0.48			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	80.48	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1378	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2388	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1286	72
	B - Eagle Way West	61	0	149	24
	C - A12 South	1547	75	1	765
	D - Barrack Square East	301	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	0	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	19.78	7.9	40.4	C	1265	1897
B - Eagle Way West	2.02	849.31	61.7	88.7	F	214	322
C - A12 South	1.01	56.74	43.1	139.1	F	2191	3287
D - Barrack Square East	0.87	32.33	5.9	32.2	D	583	874

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1037	259	704	1817	0.571	1032	1430	0.0	1.3	4.559	A
B - Eagle Way West	176	44	1959	547	0.322	174	87	0.0	0.5	9.604	A
C - A12 South	1798	449	257	2673	0.672	1790	1308	0.0	2.0	4.038	A
D - Barrack Square East	478	119	1090	1029	0.464	475	646	0.0	0.9	6.453	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1239	310	840	1739	0.713	1234	1708	1.3	2.4	7.079	A
B - Eagle Way West	210	53	2341	361	0.582	207	104	0.5	1.3	22.835	C
C - A12 South	2147	537	307	2643	0.812	2138	1563	2.0	4.2	7.010	A

D - Barrack Square East	571	143	1303	918	0.622	568	772	0.9	1.6	10.186	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1517	379	921	1691	0.897	1498	2002	2.4	7.3	17.071	C
B - Eagle Way West	257	64	2777	149	1.726	146	124	1.3	29.2	438.356	F
C - A12 South	2629	657	370	2606	1.009	2531	1827	4.2	28.7	31.137	D
D - Barrack Square East	699	175	1513	806	0.867	684	905	1.6	5.3	26.806	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1517	379	920	1692	0.897	1515	2029	7.3	7.9	19.776	C
B - Eagle Way West	257	64	2822	127	2.024	127	126	29.2	61.7	849.310	F
C - A12 South	2629	657	377	2602	1.011	2571	1838	28.7	43.1	56.742	F
D - Barrack Square East	699	175	1518	803	0.870	697	917	5.3	5.9	32.329	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1239	310	943	1680	0.738	1259	1840	7.9	2.9	8.935	A
B - Eagle Way West	210	53	2508	280	0.751	275	110	61.7	45.4	579.848	F
C - A12 South	2147	537	317	2637	0.814	2301	1639	43.1	4.6	15.680	C
D - Barrack Square East	571	143	1370	885	0.645	587	832	5.9	1.9	12.680	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1037	259	844	1737	0.597	1043	1492	2.9	1.5	5.226	A
B - Eagle Way West	176	44	1980	537	0.328	356	88	45.4	0.5	59.412	F
C - A12 South	1798	449	260	2671	0.673	1808	1437	4.6	2.1	4.219	A
D - Barrack Square East	478	119	1216	968	0.494	482	671	1.9	1.0	7.461	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.56	1.22	1.71	1.88			N/A	N/A
B - Eagle Way West	0.47	0.03	0.28	0.86	1.91			N/A	N/A
C - A12 South	2.03	0.17	1.10	3.81	4.88			N/A	N/A
D - Barrack Square East	0.86	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.41	0.05	0.46	6.67	11.19			N/A	N/A
B - Eagle Way West	1.31	0.03	0.30	1.72	6.32			N/A	N/A
C - A12 South	4.15	0.04	0.45	11.69	21.07			N/A	N/A
D - Barrack Square East	1.60	0.05	0.63	3.96	6.01			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.35	0.04	0.42	19.68	39.88			N/A	N/A
B - Eagle Way West	29.15	13.23	27.30	43.34	48.79			N/A	N/A
C - A12 South	28.68	1.02	18.18	67.99	90.10			N/A	N/A
D - Barrack Square East	5.31	0.05	0.45	14.93	27.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.91	0.03	0.33	12.24	40.36			N/A	N/A
B - Eagle Way West	61.72	38.19	59.94	81.69	88.68			N/A	N/A
C - A12 South	43.12	1.23	26.64	104.19	139.07			N/A	N/A
D - Barrack Square East	5.90	0.04	0.36	12.87	32.24			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.91	0.05	0.52	8.06	13.16			N/A	N/A
B - Eagle Way West	45.41	25.69	43.66	62.34	68.45			N/A	N/A
C - A12 South	4.63	0.04	0.43	12.82	23.93			N/A	N/A
D - Barrack Square East	1.88	0.04	0.44	5.06	8.58			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.03	0.33	3.24	7.79			N/A	N/A
B - Eagle Way West	0.50	0.03	0.25	0.50	0.50			N/A	N/A
C - A12 South	2.09	0.03	0.30	2.09	9.23			N/A	N/A
D - Barrack Square East	0.99	0.03	0.31	1.88	4.97			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	22.78	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1615	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2081	100.000
D - Barrack Square East		ONE HOUR	✓	667	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1365	191
	B - Eagle Way West	63	0	101	39
	C - A12 South	1667	108	0	305
	D - Barrack Square East	203	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	2	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	17.22	8.1	41.0	C	1482	2224
B - Eagle Way West	0.64	28.34	1.7	8.8	D	186	280
C - A12 South	0.85	8.89	5.5	23.9	A	1909	2864
D - Barrack Square East	0.99	79.42	15.9	61.3	F	612	918

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	334	2072	0.587	1211	1451	0.0	1.4	4.155	A
B - Eagle Way West	153	38	1633	705	0.217	152	150	0.0	0.3	6.496	A
C - A12 South	1566	392	221	2753	0.569	1561	1420	0.0	1.3	3.006	A
D - Barrack Square East	502	126	1143	1023	0.491	498	402	0.0	0.9	6.810	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	400	2033	0.714	1448	1735	1.4	2.4	6.109	A
B - Eagle Way West	183	46	1953	555	0.329	182	179	0.3	0.5	9.633	A
C - A12 South	1871	468	265	2727	0.686	1867	1698	1.3	2.2	4.171	A

D - Barrack Square East	599	150	1367	906	0.662	596	481	0.9	1.9	11.469	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1779	445	486	1983	0.897	1758	2107	2.4	7.5	14.882	B
B - Eagle Way West	224	56	2374	357	0.627	219	216	0.5	1.6	25.429	D
C - A12 South	2291	573	312	2697	0.849	2278	2044	2.2	5.3	8.349	A
D - Barrack Square East	734	184	1659	753	0.975	697	585	1.9	11.1	47.667	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1779	445	490	1980	0.898	1776	2123	7.5	8.1	17.221	C
B - Eagle Way West	224	56	2391	349	0.640	223	219	1.6	1.7	28.335	D
C - A12 South	2291	573	319	2693	0.851	2290	2073	5.3	5.5	8.893	A
D - Barrack Square East	734	184	1677	744	0.987	715	590	11.1	15.9	79.415	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1452	363	406	2029	0.716	1474	1768	8.1	2.6	6.732	A
B - Eagle Way West	183	46	1987	539	0.339	187	184	1.7	0.5	10.362	B
C - A12 South	1871	468	287	2713	0.689	1884	1761	5.5	2.3	4.405	A
D - Barrack Square East	599	150	1393	892	0.672	655	487	15.9	2.1	18.547	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1216	304	337	2070	0.588	1221	1461	2.6	1.4	4.260	A
B - Eagle Way West	153	38	1644	700	0.219	154	151	0.5	0.3	6.608	A
C - A12 South	1566	392	225	2751	0.569	1570	1435	2.3	1.3	3.058	A
D - Barrack Square East	502	126	1153	1018	0.493	507	405	2.1	1.0	7.105	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.41	0.57	1.31	1.80	1.94			N/A	N/A
B - Eagle Way West	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C - A12 South	1.31	0.57	1.19	1.64	1.83			N/A	N/A
D - Barrack Square East	0.95	0.32	1.00	1.33	1.33			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.44	0.04	0.43	6.72	11.75			N/A	N/A
B - Eagle Way West	0.48	0.04	0.43	1.26	1.38			N/A	N/A
C - A12 South	2.15	0.04	0.39	5.76	10.75			N/A	N/A
D - Barrack Square East	1.89	0.05	0.47	5.03	8.16			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.50	0.04	0.40	19.04	40.97			N/A	N/A
B - Eagle Way West	1.56	0.03	0.29	1.56	6.77			N/A	N/A
C - A12 South	5.31	0.03	0.31	5.31	23.89			N/A	N/A
D - Barrack Square East	11.14	0.20	5.39	28.43	39.49			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.09	0.03	0.32	10.48	39.33			N/A	N/A
B - Eagle Way West	1.69	0.03	0.32	3.33	8.83			N/A	N/A
C - A12 South	5.51	0.03	0.28	5.51	9.36			N/A	N/A
D - Barrack Square East	15.95	0.17	6.59	42.87	61.31			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.58	0.05	0.45	7.14	12.14			N/A	N/A
B - Eagle Way West	0.52	0.04	0.42	1.33	1.47			N/A	N/A
C - A12 South	2.25	0.06	0.86	5.89	8.93			N/A	N/A
D - Barrack Square East	2.14	0.04	0.37	5.45	11.16			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.44	0.03	0.32	2.97	7.47			N/A	N/A
B - Eagle Way West	0.28	0.03	0.31	1.01	1.32			N/A	N/A
C - A12 South	1.33	0.04	0.37	3.41	6.42			N/A	N/A
D - Barrack Square East	0.99	0.03	0.28	0.99	3.53			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	19.00	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1601	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1952	100.000
D - Barrack Square East		ONE HOUR	✓	688	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1366	162
	B - Eagle Way West	46	0	97	19
	C - A12 South	1558	151	1	243
	D - Barrack Square East	217	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.39	4.9	22.6	B	1469	2203
B - Eagle Way West	0.39	12.74	0.6	2.8	B	150	224
C - A12 South	0.79	6.32	3.7	8.4	A	1792	2687
D - Barrack Square East	0.98	76.69	15.8	61.9	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1205	301	271	2184	0.552	1200	1366	0.0	1.2	3.640	A
B - Eagle Way West	123	31	1514	791	0.155	122	203	0.0	0.2	5.373	A
C - A12 South	1470	367	252	2788	0.527	1466	1414	0.0	1.1	2.713	A
D - Barrack Square East	518	130	1152	1043	0.497	514	318	0.0	1.0	6.766	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1439	360	324	2151	0.669	1436	1634	1.2	2.0	5.007	A
B - Eagle Way West	147	37	1811	652	0.225	146	243	0.2	0.3	7.109	A
C - A12 South	1755	439	302	2757	0.637	1753	1692	1.1	1.7	3.575	A

D - Barrack Square East	619	155	1379	929	0.666	615	381	1.0	1.9	11.338	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1762	441	395	2107	0.836	1751	1986	2.0	4.8	9.804	A
B - Eagle Way West	179	45	2204	468	0.384	178	295	0.3	0.6	12.373	B
C - A12 South	2150	537	356	2723	0.789	2142	2045	1.7	3.6	6.120	A
D - Barrack Square East	758	190	1681	776	0.976	720	465	1.9	11.4	47.144	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1762	441	397	2106	0.837	1762	1999	4.8	4.9	10.393	B
B - Eagle Way West	179	45	2217	462	0.389	179	297	0.6	0.6	12.745	B
C - A12 South	2150	537	365	2718	0.791	2149	2067	3.6	3.7	6.324	A
D - Barrack Square East	758	190	1691	771	0.983	740	467	11.4	15.8	76.689	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1439	360	326	2150	0.669	1450	1661	4.9	2.1	5.230	A
B - Eagle Way West	147	37	1839	639	0.229	148	249	0.6	0.3	7.344	A
C - A12 South	1755	439	325	2743	0.640	1763	1741	3.7	1.8	3.701	A
D - Barrack Square East	619	155	1393	922	0.672	673	384	15.8	2.1	17.599	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1205	301	272	2183	0.552	1208	1375	2.1	1.2	3.706	A
B - Eagle Way West	123	31	1524	787	0.156	123	205	0.3	0.2	5.428	A
C - A12 South	1470	367	256	2786	0.528	1473	1427	1.8	1.1	2.748	A
D - Barrack Square East	518	130	1160	1039	0.499	523	320	2.1	1.0	7.035	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.56	1.08	1.26	1.63			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	1.11	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.97	0.33	1.01	1.45	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.04	0.43	5.39	9.30			N/A	N/A
B - Eagle Way West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - A12 South	1.73	0.04	0.40	4.63	8.22			N/A	N/A
D - Barrack Square East	1.93	0.05	0.47	5.16	8.39			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.79	0.03	0.31	5.52	22.57			N/A	N/A
B - Eagle Way West	0.61	0.03	0.26	0.61	0.61			N/A	N/A
C - A12 South	3.63	0.03	0.28	3.63	8.43			N/A	N/A
D - Barrack Square East	11.40	0.20	5.56	29.06	40.33			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.95	0.03	0.28	4.95	10.39			N/A	N/A
B - Eagle Way West	0.63	0.03	0.32	1.34	2.84			N/A	N/A
C - A12 South	3.72	0.03	0.27	3.72	3.72			N/A	N/A
D - Barrack Square East	15.78	0.15	6.12	42.89	61.88			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.06	0.05	0.70	5.40	8.29			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.80	0.08	1.16	3.97	5.56			N/A	N/A
D - Barrack Square East	2.14	0.04	0.36	5.34	11.18			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.04	0.36	3.12	5.94			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	1.12	0.04	0.44	2.75	4.34			N/A	N/A
D - Barrack Square East	1.01	0.03	0.28	1.01	3.65			N/A	N/A

2023 Reference Case [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D36	2023 Reference Case [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	810	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	742	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	769	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	570	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.93	0.7	2.4	A	744	1115
B - Eagle Way West	0.07	3.59	0.1	0.5	A	67	101
C - A12 South	0.29	1.84	0.4	1.4	A	681	1021
D - Barrack Square East	0.07	3.50	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	610	153	166	2165	0.282	608	440	0.0	0.4	2.311	A
B - Eagle Way West	55	14	551	1209	0.046	55	13	0.0	0.0	3.119	A
C - A12 South	559	140	7	2776	0.201	558	663	0.0	0.3	1.622	A
D - Barrack Square East	52	13	618	1248	0.041	52	156	0.0	0.0	3.008	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	728	182	198	2146	0.339	728	526	0.4	0.5	2.539	A
B - Eagle Way West	66	16	659	1156	0.057	66	16	0.0	0.1	3.301	A
C - A12 South	667	167	8	2775	0.240	667	793	0.3	0.3	1.707	A

D - Barrack Square East	62	15	740	1187	0.052	62	187	0.0	0.1	3.198	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	892	223	243	2120	0.421	891	645	0.5	0.7	2.929	A
B - Eagle Way West	81	20	807	1084	0.074	81	20	0.1	0.1	3.588	A
C - A12 South	817	204	10	2774	0.295	817	972	0.3	0.4	1.838	A
D - Barrack Square East	76	19	906	1104	0.068	76	228	0.1	0.1	3.499	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	892	223	243	2120	0.421	892	645	0.7	0.7	2.932	A
B - Eagle Way West	81	20	807	1083	0.074	81	20	0.1	0.1	3.589	A
C - A12 South	817	204	10	2774	0.295	817	972	0.4	0.4	1.838	A
D - Barrack Square East	76	19	907	1104	0.069	76	229	0.1	0.1	3.501	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	728	182	199	2146	0.339	729	527	0.7	0.5	2.542	A
B - Eagle Way West	66	16	659	1156	0.057	66	16	0.1	0.1	3.302	A
C - A12 South	667	167	8	2775	0.240	667	795	0.4	0.3	1.710	A
D - Barrack Square East	62	15	741	1186	0.052	62	187	0.1	0.1	3.200	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	610	153	166	2165	0.282	611	441	0.5	0.4	2.316	A
B - Eagle Way West	55	14	552	1209	0.046	55	13	0.1	0.0	3.120	A
C - A12 South	559	140	7	2776	0.201	559	666	0.3	0.3	1.625	A
D - Barrack Square East	52	13	620	1247	0.041	52	156	0.1	0.0	3.014	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.51	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.25	0.72	0.72			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.42	0.03	0.25	0.45	0.48			N/A	N/A
D - Barrack Square East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.72	0.03	0.28	0.72	2.43			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.42	0.03	0.33	1.32	1.38			N/A	N/A
D - Barrack Square East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.52	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Reference Case [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D37	2023 Reference Case [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1316	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1798	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1274	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1254	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	10.02	3.9	16.2	B	1208	1812
B - Eagle Way West	0.41	11.61	0.7	3.2	B	176	264
C - A12 South	0.71	4.48	2.4	5.7	A	1650	2474
D - Barrack Square East	0.26	6.43	0.4	1.4	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	991	248	498	1945	0.510	987	989	0.0	1.0	3.744	A
B - Eagle Way West	145	36	1343	827	0.175	144	29	0.0	0.2	5.263	A
C - A12 South	1353	338	22	2789	0.485	1350	1162	0.0	0.9	2.494	A
D - Barrack Square East	137	34	1048	1002	0.137	136	437	0.0	0.2	4.157	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1184	296	596	1887	0.627	1181	1183	1.0	1.7	5.081	A
B - Eagle Way West	173	43	1606	699	0.247	172	35	0.2	0.3	6.835	A
C - A12 South	1616	404	27	2786	0.580	1614	1390	0.9	1.4	3.068	A

D - Barrack Square East	164	41	1254	900	0.182	163	523	0.2	0.2	4.883	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	728	1809	0.801	1441	1447	1.7	3.8	9.568	A
B - Eagle Way West	212	53	1965	524	0.404	210	43	0.3	0.7	11.433	B
C - A12 South	1979	495	33	2782	0.711	1975	1696	1.4	2.4	4.439	A
D - Barrack Square East	200	50	1530	765	0.262	200	640	0.2	0.4	6.367	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1449	362	731	1807	0.802	1449	1450	3.8	3.9	10.017	B
B - Eagle Way West	212	53	1969	522	0.406	211	43	0.7	0.7	11.606	B
C - A12 South	1979	495	33	2782	0.712	1979	1706	2.4	2.4	4.483	A
D - Barrack Square East	200	50	1538	760	0.263	200	641	0.4	0.4	6.426	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1184	296	599	1885	0.628	1192	1188	3.9	1.7	5.263	A
B - Eagle Way West	173	43	1612	696	0.248	174	35	0.7	0.3	6.921	A
C - A12 South	1616	404	27	2786	0.580	1620	1403	2.4	1.4	3.100	A
D - Barrack Square East	164	41	1266	894	0.183	164	525	0.4	0.2	4.932	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	991	248	501	1943	0.510	994	993	1.7	1.0	3.804	A
B - Eagle Way West	145	36	1349	824	0.175	145	29	0.3	0.2	5.304	A
C - A12 South	1353	338	23	2789	0.485	1355	1170	1.4	0.9	2.514	A
D - Barrack Square East	137	34	1055	998	0.137	137	439	0.2	0.2	4.182	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	0.94	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.04	0.45	4.40	7.18			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.37	0.04	0.44	3.53	5.69			N/A	N/A
D - Barrack Square East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.83	0.03	0.30	3.83	16.18			N/A	N/A
B - Eagle Way West	0.66	0.03	0.26	0.66	0.66			N/A	N/A
C - A12 South	2.43	0.03	0.27	2.43	2.43			N/A	N/A
D - Barrack Square East	0.35	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.94	0.03	0.28	3.94	6.38			N/A	N/A
B - Eagle Way West	0.67	0.03	0.31	1.30	3.20			N/A	N/A
C - A12 South	2.45	0.03	0.26	2.45	2.45			N/A	N/A
D - Barrack Square East	0.36	0.03	0.33	1.19	1.44			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.06	0.80	4.22	6.26			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.39	0.16	1.22	2.27	2.85			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.04	0.38	2.65	4.66			N/A	N/A
B - Eagle Way West	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.95	0.07	0.78	1.73	2.31			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Reference Case [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	19.75	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D38	2023 Reference Case [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1315	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2321	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1264	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1486	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	20.44	7.8	40.2	C	1207	1811
B - Eagle Way West	0.87	79.26	4.8	22.4	F	197	295
C - A12 South	0.92	15.66	10.5	53.4	C	2129	3194
D - Barrack Square East	0.51	9.71	1.0	4.0	A	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	990	248	694	1797	0.551	985	1169	0.0	1.2	4.407	A
B - Eagle Way West	161	40	1703	662	0.244	160	80	0.0	0.3	7.155	A
C - A12 South	1747	437	43	2787	0.627	1740	1283	0.0	1.7	3.418	A
D - Barrack Square East	263	66	1063	1009	0.261	262	616	0.0	0.4	4.809	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1183	296	830	1720	0.687	1179	1398	1.2	2.1	6.600	A
B - Eagle Way West	193	48	2036	498	0.387	191	96	0.3	0.6	11.707	B
C - A12 South	2086	522	51	2782	0.750	2081	1535	1.7	2.9	5.101	A

D - Barrack Square East	315	79	1272	902	0.349	314	736	0.4	0.5	6.111	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	1001	1623	0.892	1429	1696	2.1	7.0	17.060	C
B - Eagle Way West	236	59	2474	282	0.835	224	116	0.6	3.6	53.589	F
C - A12 South	2555	639	62	2775	0.921	2528	1858	2.9	9.8	13.319	B
D - Barrack Square East	385	96	1537	766	0.503	383	893	0.5	1.0	9.360	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1448	362	1015	1615	0.897	1445	1714	7.0	7.8	20.436	C
B - Eagle Way West	236	59	2497	271	0.871	231	117	3.6	4.8	79.260	F
C - A12 South	2555	639	62	2774	0.921	2552	1880	9.8	10.5	15.663	C
D - Barrack Square East	385	96	1558	756	0.510	385	903	1.0	1.0	9.712	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1183	296	854	1706	0.693	1204	1425	7.8	2.3	7.469	A
B - Eagle Way West	193	48	2070	481	0.401	209	97	4.8	0.7	14.010	B
C - A12 South	2086	522	52	2781	0.750	2116	1573	10.5	3.1	5.646	A
D - Barrack Square East	315	79	1308	884	0.356	316	750	1.0	0.6	6.363	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	990	248	700	1794	0.552	995	1178	2.3	1.2	4.528	A
B - Eagle Way West	161	40	1715	656	0.246	163	81	0.7	0.3	7.318	A
C - A12 South	1747	437	43	2787	0.627	1753	1295	3.1	1.7	3.501	A
D - Barrack Square East	263	66	1074	1004	0.262	264	620	0.6	0.4	4.872	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.55	1.13	1.52	1.77			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.66	0.53	1.04	2.43	2.85			N/A	N/A
D - Barrack Square East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.15	0.04	0.44	5.87	10.02			N/A	N/A
B - Eagle Way West	0.62	0.04	0.45	1.47	1.57			N/A	N/A
C - A12 South	2.93	0.04	0.40	7.91	15.00			N/A	N/A
D - Barrack Square East	0.53	0.06	0.64	1.33	1.41			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.03	0.04	0.41	18.65	38.19			N/A	N/A
B - Eagle Way West	3.65	0.05	0.61	10.30	16.94			N/A	N/A
C - A12 South	9.76	0.04	0.42	25.85	53.42			N/A	N/A
D - Barrack Square East	0.99	0.03	0.26	0.99	0.99			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.77	0.03	0.33	12.63	40.21			N/A	N/A
B - Eagle Way West	4.80	0.06	0.88	13.71	22.41			N/A	N/A
C - A12 South	10.55	0.03	0.33	15.76	53.35			N/A	N/A
D - Barrack Square East	1.02	0.03	0.28	1.06	3.97			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.31	0.04	0.45	6.36	10.83			N/A	N/A
B - Eagle Way West	0.68	0.03	0.35	1.59	2.88			N/A	N/A
C - A12 South	3.07	0.05	0.47	8.61	14.66			N/A	N/A
D - Barrack Square East	0.56	0.07	0.70	1.34	1.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.03	0.32	2.39	6.39			N/A	N/A
B - Eagle Way West	0.33	0.03	0.28	0.57	1.25			N/A	N/A
C - A12 South	1.70	0.03	0.33	3.51	8.89			N/A	N/A
D - Barrack Square East	0.36	0.03	0.29	0.83	1.17			N/A	N/A

2023 Reference Case [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D39	2023 Reference Case [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1326	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1828	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1258	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1424	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	8	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	7	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	7.30	2.9	6.4	A	1217	1826
B - Eagle Way West	0.39	11.36	0.6	3.0	B	171	256
C - A12 South	0.73	4.92	2.7	6.3	A	1678	2517
D - Barrack Square East	0.75	17.83	2.9	13.5	C	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	999	250	326	2041	0.489	995	1176	0.0	1.0	3.429	A
B - Eagle Way West	140	35	1363	824	0.170	139	137	0.0	0.2	5.251	A
C - A12 South	1377	344	127	2782	0.495	1373	1334	0.0	1.0	2.546	A
D - Barrack Square East	410	103	1053	1060	0.387	408	267	0.0	0.6	5.501	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1192	298	390	2004	0.595	1190	1407	1.0	1.5	4.416	A
B - Eagle Way West	167	42	1630	697	0.240	167	164	0.2	0.3	6.788	A
C - A12 South	1644	411	152	2767	0.594	1642	1597	1.0	1.5	3.195	A

D - Barrack Square East	490	122	1261	951	0.515	488	319	0.6	1.0	7.756	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1461	365	476	1954	0.748	1455	1720	1.5	2.9	7.133	A
B - Eagle Way West	205	51	1993	524	0.391	203	200	0.3	0.6	11.187	B
C - A12 South	2013	503	185	2746	0.733	2008	1949	1.5	2.7	4.846	A
D - Barrack Square East	600	150	1541	804	0.747	593	390	1.0	2.8	16.611	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1461	365	478	1953	0.748	1460	1725	2.9	2.9	7.301	A
B - Eagle Way West	205	51	1999	521	0.393	205	201	0.6	0.6	11.365	B
C - A12 South	2013	503	186	2745	0.733	2013	1960	2.7	2.7	4.916	A
D - Barrack Square East	600	150	1547	800	0.750	600	392	2.8	2.9	17.827	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1192	298	392	2002	0.596	1198	1414	2.9	1.5	4.507	A
B - Eagle Way West	167	42	1638	693	0.241	168	165	0.6	0.3	6.882	A
C - A12 South	1644	411	154	2765	0.594	1649	1612	2.7	1.5	3.237	A
D - Barrack Square East	490	122	1269	946	0.518	497	321	2.9	1.1	8.138	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	999	250	327	2040	0.490	1001	1182	1.5	1.0	3.474	A
B - Eagle Way West	140	35	1369	821	0.170	140	138	0.3	0.2	5.295	A
C - A12 South	1377	344	128	2781	0.495	1379	1344	1.5	1.0	2.569	A
D - Barrack Square East	410	103	1060	1056	0.388	412	268	1.1	0.6	5.602	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.97	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.63	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.05	0.47	3.71	5.82			N/A	N/A
B - Eagle Way West	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C - A12 South	1.45	0.04	0.43	3.79	6.30			N/A	N/A
D - Barrack Square East	1.05	0.06	0.72	2.07	2.94			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.87	0.03	0.28	2.87	6.45			N/A	N/A
B - Eagle Way West	0.63	0.03	0.26	0.63	0.63			N/A	N/A
C - A12 South	2.69	0.03	0.27	2.69	2.69			N/A	N/A
D - Barrack Square East	2.75	0.03	0.31	3.79	13.54			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.92	0.03	0.27	2.92	2.92			N/A	N/A
B - Eagle Way West	0.64	0.03	0.31	1.27	2.97			N/A	N/A
C - A12 South	2.72	0.03	0.26	2.72	2.72			N/A	N/A
D - Barrack Square East	2.88	0.03	0.29	2.88	11.15			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.49	0.08	1.06	3.08	4.26			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.48	0.12	1.22	2.68	3.45			N/A	N/A
D - Barrack Square East	1.09	0.05	0.52	2.50	3.68			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.05	0.46	2.20	3.38			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	0.99	0.06	0.68	1.93	2.78			N/A	N/A
D - Barrack Square East	0.64	0.03	0.35	1.47	2.67			N/A	N/A

2023 Reference Case [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	7.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D40	2023 Reference Case [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1448	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1775	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1361	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1393	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	7.35	3.2	8.1	A	1329	1993
B - Eagle Way West	0.27	8.17	0.4	1.5	A	137	205
C - A12 South	0.70	4.32	2.3	5.3	A	1628	2443
D - Barrack Square East	0.79	21.60	3.5	17.6	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	263	2158	0.505	1086	1139	0.0	1.0	3.347	A
B - Eagle Way West	112	28	1290	890	0.126	112	186	0.0	0.1	4.622	A
C - A12 South	1336	334	144	2830	0.472	1332	1405	0.0	0.9	2.397	A
D - Barrack Square East	414	103	1138	1039	0.398	411	212	0.0	0.7	5.707	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1302	326	315	2127	0.612	1300	1362	1.0	1.6	4.343	A
B - Eagle Way West	134	34	1543	770	0.174	134	223	0.1	0.2	5.654	A
C - A12 South	1595	399	172	2813	0.567	1594	1682	0.9	1.3	2.949	A

D - Barrack Square East	494	123	1362	926	0.534	492	253	0.7	1.1	8.267	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1595	399	385	2084	0.765	1588	1666	1.6	3.2	7.173	A
B - Eagle Way West	164	41	1887	607	0.270	164	272	0.2	0.4	8.106	A
C - A12 South	1954	488	209	2789	0.701	1950	2051	1.3	2.3	4.268	A
D - Barrack Square East	605	151	1664	772	0.783	596	310	1.1	3.3	19.572	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1595	399	386	2083	0.765	1594	1670	3.2	3.2	7.354	A
B - Eagle Way West	164	41	1892	605	0.271	164	273	0.4	0.4	8.170	A
C - A12 South	1954	488	211	2788	0.701	1954	2063	2.3	2.3	4.315	A
D - Barrack Square East	605	151	1670	769	0.787	604	310	3.3	3.5	21.599	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1302	326	316	2126	0.612	1308	1368	3.2	1.6	4.438	A
B - Eagle Way West	134	34	1550	767	0.175	135	224	0.4	0.2	5.700	A
C - A12 South	1595	399	175	2811	0.568	1599	1699	2.3	1.3	2.980	A
D - Barrack Square East	494	123	1371	921	0.536	503	254	3.5	1.2	8.796	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1090	273	265	2157	0.505	1093	1144	1.6	1.0	3.390	A
B - Eagle Way West	112	28	1296	888	0.126	113	187	0.2	0.1	4.648	A
C - A12 South	1336	334	145	2830	0.472	1338	1415	1.3	0.9	2.417	A
D - Barrack Square East	414	103	1145	1036	0.399	416	212	1.2	0.7	5.826	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.89	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.05	0.45	4.06	6.62			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.30	0.04	0.45	3.30	5.26			N/A	N/A
D - Barrack Square East	1.12	0.06	0.66	2.47	3.55			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.15	0.03	0.28	3.15	8.07			N/A	N/A
B - Eagle Way West	0.37	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.30	0.03	0.26	2.30	2.30			N/A	N/A
D - Barrack Square East	3.29	0.03	0.33	6.62	17.61			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.21	0.03	0.27	3.21	3.21			N/A	N/A
B - Eagle Way West	0.37	0.03	0.33	1.22	1.48			N/A	N/A
C - A12 South	2.32	0.03	0.26	2.32	2.32			N/A	N/A
D - Barrack Square East	3.48	0.03	0.30	3.54	15.86			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.07	1.05	3.53	4.88			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.32	0.19	1.20	1.96	2.57			N/A	N/A
D - Barrack Square East	1.18	0.05	0.46	2.87	4.51			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.04	0.44	2.48	3.84			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.90	0.07	0.79	1.57	1.95			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.49	3.02			N/A	N/A

2023 Early Years [Adjusted flows], 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D41	2023 Early Years [Adjusted flows]	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	822	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	818	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	781	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	646	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	13	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.96	0.7	2.3	A	755	1132
B - Eagle Way West	0.08	3.77	0.1	0.5	A	67	101
C - A12 South	0.33	1.97	0.5	2.1	A	751	1126
D - Barrack Square East	0.07	3.52	0.1	0.5	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	619	155	166	2167	0.286	617	497	0.0	0.4	2.321	A
B - Eagle Way West	55	14	608	1176	0.047	55	13	0.0	0.0	3.212	A
C - A12 South	616	154	7	2725	0.226	615	672	0.0	0.3	1.705	A
D - Barrack Square East	52	13	627	1244	0.042	52	156	0.0	0.0	3.019	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	739	185	198	2148	0.344	739	595	0.4	0.5	2.555	A
B - Eagle Way West	66	16	727	1116	0.059	66	16	0.0	0.1	3.427	A
C - A12 South	735	184	8	2724	0.270	735	804	0.3	0.4	1.809	A

D - Barrack Square East	62	15	751	1182	0.052	62	186	0.0	0.1	3.212	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	905	226	243	2122	0.427	904	728	0.5	0.7	2.957	A
B - Eagle Way West	81	20	890	1034	0.078	81	20	0.1	0.1	3.774	A
C - A12 South	901	225	10	2723	0.331	900	985	0.4	0.5	1.975	A
D - Barrack Square East	76	19	919	1098	0.069	76	228	0.1	0.1	3.521	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	905	226	243	2121	0.427	905	729	0.7	0.7	2.959	A
B - Eagle Way West	81	20	891	1034	0.078	81	20	0.1	0.1	3.775	A
C - A12 South	901	225	10	2723	0.331	901	986	0.5	0.5	1.975	A
D - Barrack Square East	76	19	920	1097	0.069	76	229	0.1	0.1	3.522	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	739	185	199	2147	0.344	740	595	0.7	0.5	2.558	A
B - Eagle Way West	66	16	728	1116	0.059	66	16	0.1	0.1	3.432	A
C - A12 South	735	184	8	2724	0.270	736	806	0.5	0.4	1.812	A
D - Barrack Square East	62	15	752	1181	0.052	62	187	0.1	0.1	3.215	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	619	155	166	2166	0.286	620	498	0.5	0.4	2.329	A
B - Eagle Way West	55	14	609	1175	0.047	55	13	0.1	0.0	3.217	A
C - A12 South	616	154	7	2725	0.226	616	675	0.4	0.3	1.708	A
D - Barrack Square East	52	13	630	1243	0.042	52	156	0.1	0.0	3.024	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.52	0.06	0.63	1.33	1.41			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.05	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.25	0.74	0.74			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.49	0.03	0.25	0.49	0.49			N/A	N/A
D - Barrack Square East	0.07	0.03	0.26	0.47	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.74	0.03	0.28	0.74	2.33			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.49	0.03	0.31	1.44	2.08			N/A	N/A
D - Barrack Square East	0.07	0.00	0.00	0.07	0.07			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.37	0.00	0.00	0.37	0.37			N/A	N/A
D - Barrack Square East	0.06	0.00	0.00	0.06	0.06			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Barrack Square East	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2023 Early Years [Adjusted flows], 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D42	2023 Early Years [Adjusted flows]	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1360	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1926	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1318	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1382	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	8	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	13	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	12.17	4.9	23.6	B	1248	1873
B - Eagle Way West	0.50	16.72	1.0	4.8	C	176	264
C - A12 South	0.78	6.07	3.5	8.1	A	1767	2651
D - Barrack Square East	0.27	6.80	0.4	1.0	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1024	256	498	1927	0.531	1020	1085	0.0	1.1	3.947	A
B - Eagle Way West	145	36	1439	762	0.190	144	29	0.0	0.2	5.812	A
C - A12 South	1450	362	22	2720	0.533	1445	1194	0.0	1.1	2.814	A
D - Barrack Square East	137	34	1080	981	0.140	136	437	0.0	0.2	4.259	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1223	306	596	1870	0.654	1220	1297	1.1	1.9	5.513	A
B - Eagle Way West	173	43	1721	621	0.278	172	35	0.2	0.4	8.006	A
C - A12 South	1731	433	27	2717	0.637	1729	1429	1.1	1.7	3.635	A

D - Barrack Square East	164	41	1293	876	0.187	163	523	0.2	0.2	5.053	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1498	374	727	1793	0.835	1486	1586	1.9	4.7	11.340	B
B - Eagle Way West	212	53	2104	430	0.492	209	43	0.4	0.9	16.167	C
C - A12 South	2120	530	33	2712	0.782	2113	1742	1.7	3.5	5.940	A
D - Barrack Square East	200	50	1575	736	0.272	200	639	0.2	0.4	6.709	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1498	374	731	1791	0.836	1497	1591	4.7	4.9	12.170	B
B - Eagle Way West	212	53	2110	426	0.496	211	43	0.9	1.0	16.724	C
C - A12 South	2120	530	33	2712	0.782	2120	1754	3.5	3.5	6.072	A
D - Barrack Square East	200	50	1586	730	0.274	200	641	0.4	0.4	6.796	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1223	306	600	1867	0.655	1235	1305	4.9	1.9	5.797	A
B - Eagle Way West	173	43	1730	616	0.280	175	35	1.0	0.4	8.194	A
C - A12 South	1731	433	27	2716	0.637	1738	1446	3.5	1.8	3.707	A
D - Barrack Square East	164	41	1309	868	0.188	164	526	0.4	0.2	5.122	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1024	256	501	1926	0.532	1027	1090	1.9	1.1	4.022	A
B - Eagle Way West	145	36	1446	759	0.191	145	29	0.4	0.2	5.873	A
C - A12 South	1450	362	23	2720	0.533	1452	1203	1.8	1.1	2.845	A
D - Barrack Square East	137	34	1089	977	0.140	137	439	0.2	0.2	4.288	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.02	1.44	1.49			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.13	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.04	0.44	4.98	8.40			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.74	0.04	0.41	4.65	8.10			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.72	0.03	0.32	6.83	23.60			N/A	N/A
B - Eagle Way West	0.94	0.03	0.26	0.94	0.94			N/A	N/A
C - A12 South	3.48	0.03	0.28	3.48	7.13			N/A	N/A
D - Barrack Square East	0.37	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.91	0.03	0.28	4.91	13.65			N/A	N/A
B - Eagle Way West	0.96	0.03	0.31	1.70	4.82			N/A	N/A
C - A12 South	3.53	0.03	0.26	3.53	3.53			N/A	N/A
D - Barrack Square East	0.38	0.03	0.33	1.03	1.03			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.93	0.05	0.57	5.07	7.92			N/A	N/A
B - Eagle Way West	0.39	0.03	0.31	0.99	1.24			N/A	N/A
C - A12 South	1.78	0.08	1.16	3.90	5.43			N/A	N/A
D - Barrack Square East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.04	0.35	2.80	5.56			N/A	N/A
B - Eagle Way West	0.24	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	1.15	0.05	0.46	2.78	4.30			N/A	N/A
D - Barrack Square East	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2023 Early Years [Adjusted flows], 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	28.86	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D43	2023 Early Years [Adjusted flows]	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1309	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2352	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1258	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1517	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	11	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	14	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	20.67	7.8	40.7	C	1202	1802
B - Eagle Way West	1.04	166.15	11.4	33.8	F	197	295
C - A12 South	0.96	24.64	16.7	90.9	C	2158	3237
D - Barrack Square East	0.51	9.70	1.0	3.9	A	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	986	246	694	1780	0.554	981	1192	0.0	1.2	4.480	A
B - Eagle Way West	161	40	1726	630	0.256	160	80	0.0	0.3	7.636	A
C - A12 South	1770	443	43	2722	0.650	1763	1278	0.0	1.8	3.727	A
D - Barrack Square East	263	66	1059	1006	0.262	262	616	0.0	0.4	4.827	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1177	294	829	1704	0.691	1173	1425	1.2	2.2	6.741	A
B - Eagle Way West	193	48	2063	460	0.419	191	96	0.3	0.7	13.330	B
C - A12 South	2114	529	51	2717	0.778	2108	1529	1.8	3.4	5.852	A

D - Barrack Square East	315	79	1266	899	0.350	314	736	0.4	0.5	6.145	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1442	360	988	1614	0.893	1422	1717	2.2	7.1	17.235	C
B - Eagle Way West	236	59	2492	244	0.969	213	116	0.7	6.4	87.330	F
C - A12 South	2589	647	62	2710	0.955	2545	1845	3.4	14.3	18.364	C
D - Barrack Square East	385	96	1523	765	0.503	383	887	0.5	1.0	9.377	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1442	360	1002	1607	0.897	1439	1740	7.1	7.8	20.669	C
B - Eagle Way West	236	59	2525	227	1.041	216	117	6.4	11.4	166.150	F
C - A12 South	2589	647	62	2710	0.956	2580	1864	14.3	16.7	24.643	C
D - Barrack Square East	385	96	1541	756	0.510	385	899	1.0	1.0	9.699	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1177	294	881	1675	0.703	1199	1474	7.8	2.4	7.885	A
B - Eagle Way West	193	48	2120	431	0.447	235	98	11.4	0.8	22.377	C
C - A12 South	2114	529	52	2716	0.778	2166	1584	16.7	3.6	7.144	A
D - Barrack Square East	315	79	1319	873	0.360	316	760	1.0	0.6	6.492	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	986	246	701	1776	0.555	990	1202	2.4	1.3	4.610	A
B - Eagle Way West	161	40	1740	623	0.259	163	81	0.8	0.4	7.861	A
C - A12 South	1770	443	43	2722	0.651	1777	1292	3.6	1.9	3.840	A
D - Barrack Square East	263	66	1070	1001	0.263	264	621	0.6	0.4	4.895	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.56	1.14	1.55	1.79			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.84	0.37	1.14	2.92	3.66			N/A	N/A
D - Barrack Square East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.04	0.44	5.96	10.15			N/A	N/A
B - Eagle Way West	0.70	0.04	0.40	1.57	2.45			N/A	N/A
C - A12 South	3.41	0.04	0.42	9.38	17.41			N/A	N/A
D - Barrack Square East	0.53	0.06	0.65	1.33	1.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.07	0.04	0.41	18.84	38.36			N/A	N/A
B - Eagle Way West	6.43	0.18	3.30	15.60	21.29			N/A	N/A
C - A12 South	14.35	0.07	1.66	42.25	69.32			N/A	N/A
D - Barrack Square East	0.99	0.03	0.26	0.99	0.99			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.82	0.03	0.33	12.93	40.66			N/A	N/A
B - Eagle Way West	11.38	0.57	7.36	25.82	33.80			N/A	N/A
C - A12 South	16.66	0.05	0.47	46.10	90.93			N/A	N/A
D - Barrack Square East	1.02	0.03	0.28	1.04	3.93			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.43	0.05	0.46	6.70	11.24			N/A	N/A
B - Eagle Way West	0.84	0.03	0.32	1.70	4.08			N/A	N/A
C - A12 South	3.62	0.04	0.44	10.14	18.18			N/A	N/A
D - Barrack Square East	0.57	0.07	0.73	1.35	1.42			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.03	0.32	2.41	6.48			N/A	N/A
B - Eagle Way West	0.35	0.03	0.27	0.48	0.96			N/A	N/A
C - A12 South	1.88	0.03	0.31	3.08	9.63			N/A	N/A
D - Barrack Square East	0.36	0.03	0.30	0.85	1.18			N/A	N/A

2023 Early Years [Adjusted flows], 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D44	2023 Early Years [Adjusted flows]	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1299	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1841	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1231	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1437	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	10	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	9	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	7.54	2.9	7.0	A	1192	1789
B - Eagle Way West	0.41	12.28	0.7	3.3	B	171	256
C - A12 South	0.75	5.36	3.0	6.9	A	1690	2535
D - Barrack Square East	0.75	18.01	2.9	13.7	C	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	978	245	325	1994	0.491	975	1186	0.0	1.0	3.520	A
B - Eagle Way West	140	35	1372	808	0.173	139	137	0.0	0.2	5.378	A
C - A12 South	1386	347	127	2734	0.507	1382	1314	0.0	1.0	2.655	A
D - Barrack Square East	410	103	1033	1058	0.388	408	267	0.0	0.6	5.513	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	389	1958	0.597	1166	1419	1.0	1.5	4.537	A
B - Eagle Way West	167	42	1642	677	0.247	167	164	0.2	0.3	7.042	A
C - A12 South	1655	414	152	2719	0.609	1653	1573	1.0	1.5	3.370	A

D - Barrack Square East	490	122	1236	949	0.516	488	319	0.6	1.0	7.785	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1431	358	476	1909	0.750	1425	1734	1.5	2.9	7.353	A
B - Eagle Way West	205	51	2007	501	0.409	203	200	0.3	0.7	12.045	B
C - A12 South	2028	507	185	2699	0.751	2022	1919	1.5	3.0	5.273	A
D - Barrack Square East	600	150	1511	802	0.749	593	390	1.0	2.8	16.755	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1431	358	478	1908	0.750	1431	1740	2.9	2.9	7.541	A
B - Eagle Way West	205	51	2013	498	0.411	205	201	0.7	0.7	12.278	B
C - A12 South	2028	507	186	2698	0.752	2027	1930	3.0	3.0	5.364	A
D - Barrack Square East	600	150	1517	798	0.752	600	391	2.8	2.9	18.015	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1168	292	392	1956	0.597	1174	1427	2.9	1.5	4.636	A
B - Eagle Way West	167	42	1650	673	0.248	168	165	0.7	0.3	7.152	A
C - A12 South	1655	414	154	2718	0.609	1661	1588	3.0	1.6	3.426	A
D - Barrack Square East	490	122	1245	944	0.519	497	321	2.9	1.1	8.175	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	978	245	327	1992	0.491	980	1192	1.5	1.0	3.566	A
B - Eagle Way West	140	35	1379	804	0.174	140	138	0.3	0.2	5.424	A
C - A12 South	1386	347	128	2734	0.507	1389	1324	1.6	1.0	2.681	A
D - Barrack Square East	410	103	1040	1055	0.389	412	268	1.1	0.6	5.616	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.02	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.63	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.46	0.05	0.48	3.73	5.83			N/A	N/A
B - Eagle Way West	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C - A12 South	1.54	0.04	0.42	4.05	6.88			N/A	N/A
D - Barrack Square East	1.05	0.06	0.72	2.10	2.96			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.90	0.03	0.28	2.90	6.96			N/A	N/A
B - Eagle Way West	0.68	0.03	0.26	0.68	0.68			N/A	N/A
C - A12 South	2.95	0.03	0.27	2.95	3.33			N/A	N/A
D - Barrack Square East	2.78	0.03	0.31	3.91	13.75			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.95	0.03	0.27	2.95	2.95			N/A	N/A
B - Eagle Way West	0.69	0.03	0.31	1.35	3.29			N/A	N/A
C - A12 South	2.99	0.03	0.26	2.99	2.99			N/A	N/A
D - Barrack Square East	2.90	0.03	0.29	2.90	11.38			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.08	1.05	3.16	4.39			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.57	0.10	1.21	3.01	4.00			N/A	N/A
D - Barrack Square East	1.10	0.05	0.51	2.52	3.72			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.04	0.45	2.25	3.48			N/A	N/A
B - Eagle Way West	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.04	0.05	0.57	2.25	3.28			N/A	N/A
D - Barrack Square East	0.64	0.03	0.34	1.48	2.69			N/A	N/A

2023 Early Years [Adjusted flows], 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout	A, D, C, B	8.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D45	2023 Early Years [Adjusted flows]	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1412	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1791	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1325	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1409	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	6	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	7.52	3.2	8.3	A	1296	1944
B - Eagle Way West	0.28	8.41	0.4	1.0	A	137	205
C - A12 South	0.71	4.47	2.4	5.5	A	1643	2465
D - Barrack Square East	0.79	21.52	3.5	17.5	C	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1063	266	263	2106	0.505	1059	1151	0.0	1.0	3.427	A
B - Eagle Way West	112	28	1302	882	0.127	112	186	0.0	0.1	4.672	A
C - A12 South	1348	337	144	2818	0.478	1344	1378	0.0	0.9	2.437	A
D - Barrack Square East	414	103	1111	1040	0.398	411	212	0.0	0.7	5.705	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1270	317	315	2075	0.612	1267	1376	1.0	1.6	4.445	A
B - Eagle Way West	134	34	1558	760	0.176	134	223	0.1	0.2	5.745	A
C - A12 South	1610	402	172	2800	0.575	1608	1649	0.9	1.3	3.016	A

D - Barrack Square East	494	123	1329	926	0.533	492	253	0.7	1.1	8.257	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1555	389	385	2034	0.765	1549	1683	1.6	3.1	7.329	A
B - Eagle Way West	164	41	1905	595	0.276	164	272	0.2	0.4	8.337	A
C - A12 South	1972	493	209	2777	0.710	1967	2011	1.3	2.4	4.422	A
D - Barrack Square East	605	151	1624	773	0.783	596	310	1.1	3.3	19.509	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1555	389	386	2033	0.765	1555	1688	3.1	3.2	7.518	A
B - Eagle Way West	164	41	1910	592	0.277	164	273	0.4	0.4	8.407	A
C - A12 South	1972	493	211	2776	0.710	1971	2023	2.4	2.4	4.473	A
D - Barrack Square East	605	151	1631	770	0.786	604	310	3.3	3.5	21.522	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1270	317	316	2074	0.612	1276	1383	3.2	1.6	4.545	A
B - Eagle Way West	134	34	1565	757	0.177	135	224	0.4	0.2	5.795	A
C - A12 South	1610	402	175	2799	0.575	1614	1666	2.4	1.4	3.051	A
D - Barrack Square East	494	123	1338	921	0.536	503	254	3.5	1.2	8.787	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1063	266	265	2105	0.505	1066	1156	1.6	1.0	3.472	A
B - Eagle Way West	112	28	1308	879	0.128	113	187	0.2	0.1	4.698	A
C - A12 South	1348	337	145	2817	0.479	1350	1388	1.4	0.9	2.457	A
D - Barrack Square East	414	103	1118	1036	0.399	416	212	1.2	0.7	5.820	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.91	0.55	1.00	1.40	1.45			N/A	N/A
D - Barrack Square East	0.65	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.05	0.46	4.03	6.54			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.34	0.04	0.44	3.44	5.55			N/A	N/A
D - Barrack Square East	1.12	0.06	0.66	2.47	3.55			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.14	0.03	0.28	3.14	8.30			N/A	N/A
B - Eagle Way West	0.38	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	2.41	0.03	0.27	2.41	2.41			N/A	N/A
D - Barrack Square East	3.27	0.03	0.33	6.56	17.54			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.20	0.03	0.27	3.20	3.20			N/A	N/A
B - Eagle Way West	0.38	0.03	0.33	1.03	1.03			N/A	N/A
C - A12 South	2.43	0.03	0.26	2.43	2.43			N/A	N/A
D - Barrack Square East	3.47	0.03	0.30	3.49	15.77			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.07	1.04	3.54	4.90			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.36	0.17	1.21	2.15	2.77			N/A	N/A
D - Barrack Square East	1.18	0.05	0.46	2.87	4.49			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.04	0.44	2.48	3.85			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.92	0.06	0.77	1.68	2.17			N/A	N/A
D - Barrack Square East	0.67	0.03	0.33	1.49	3.00			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

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»2019 Base Year, 6-7 AM
»2019 Base Year, 7-8 AM
»2019 Base Year, 8-9 AM
»2019 Base Year, 3-4 PM
»2019 Base Year, 5-6 PM
»2023 Reference Case, 6-7 AM
»2023 Reference Case, 7-8 AM
»2023 Reference Case, 8-9 AM
»2023 Reference Case, 3-4 PM
»2023 Reference Case, 5-6 PM
»2023 Early Years, 6-7 AM
»2023 Early Years, 7-8 AM
»2023 Early Years, 8-9 AM
»2023 Early Years, 3-4 PM
»2023 Early Years, 5-6 PM
»2028 Reference Case, 6-7 AM
»2028 Reference Case, 7-8 AM
»2028 Reference Case, 8-9 AM
»2028 Reference Case, 3-4 PM
»2028 Reference Case, 5-6 PM
»2028 Peak Construction, 6-7 AM
»2028 Peak Construction, 7-8 AM
»2028 Peak Construction, 8-9 AM
»2028 Peak Construction, 3-4 PM
»2028 Peak Construction, 5-6 PM
»2034 Reference Case, 6-7 AM
»2034 Reference Case, 7-8 AM
»2034 Reference Case, 8-9 AM
»2034 Reference Case, 3-4 PM
»2034 Reference Case, 5-6 PM
»2034 Operational Led, 6-7 AM
»2034 Operational Led, 7-8 AM
»2034 Operational Led, 8-9 AM
»2034 Operational Led, 3-4 PM
»2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	0.5	2.3	1.93	0.34	A	1.8	3.7	3.69	0.65	A	4.1	12.1	6.85	0.81	A	2.5	5.5	4.66	0.71	A	1.8	3.5	3.61	0.64	A
B - Eagle Way West	0.1	0.5	3.61	0.05	A	0.3	1.4	7.69	0.26	A	0.8	3.9	13.65	0.45	B	1.7	8.9	28.45	0.64	D	0.8	3.9	18.72	0.45	C
C - A12 South	0.3	1.3	2.08	0.25	A	1.5	2.3	3.97	0.60	A	3.0	6.3	6.88	0.75	A	4.9	22.7	11.09	0.84	B	4.2	16.6	9.26	0.81	A
D - Anson Rd East	0.1	0.5	3.03	0.12	A	0.5	1.9	5.15	0.32	A	0.6	2.9	6.11	0.38	A	4.4	22.7	18.00	0.82	C	5.7	28.8	21.14	0.86	C
2023 Reference Case																									
A - A12 North	0.5	2.6	1.97	0.35	A	1.9	3.9	3.89	0.66	A	4.4	14.4	7.28	0.82	A	2.6	5.7	4.85	0.72	A	2.0	4.1	3.89	0.67	A
B - Eagle Way West	0.1	0.5	3.71	0.06	A	0.4	1.7	9.05	0.31	A	1.3	6.4	20.03	0.57	C	3.0	15.8	45.83	0.77	E	1.0	4.9	20.60	0.50	C
C - A12 South	0.4	1.4	2.10	0.27	A	1.8	3.3	4.50	0.65	A	4.3	17.4	9.17	0.82	A	6.6	34.0	14.53	0.88	B	4.5	19.2	9.93	0.82	A
D - Anson Rd East	0.1	0.5	3.09	0.12	A	0.5	2.0	5.31	0.33	A	0.6	3.0	6.24	0.39	A	4.9	25.2	19.84	0.84	C	6.7	35.7	25.14	0.88	D
2023 Early Years																									
A - A12 North	0.6	2.6	1.99	0.36	A	2.1	4.5	4.17	0.68	A	4.4	15.1	7.43	0.82	A	2.7	5.9	5.07	0.73	A	2.0	4.2	4.01	0.67	A
B - Eagle Way West	0.1	0.5	3.92	0.06	A	0.6	2.7	12.11	0.38	B	1.8	9.1	27.49	0.65	D	4.3	21.4	67.49	0.85	F	1.1	5.4	22.68	0.53	C
C - A12 South	0.5	1.8	2.28	0.31	A	2.7	5.7	6.16	0.73	A	5.9	29.8	12.47	0.86	B	8.6	43.9	18.80	0.90	C	5.0	22.8	10.89	0.84	B
D - Anson Rd East	0.1	0.5	3.11	0.12	A	0.5	2.3	5.60	0.34	A	0.6	3.0	6.30	0.39	A	5.0	25.7	20.47	0.84	C	6.7	35.7	25.23	0.88	D
2028 Reference Case																									
A - A12 North	0.6	2.7	2.00	0.36	A	2.1	4.5	4.15	0.68	A	5.2	21.9	8.56	0.84	A	3.3	7.5	5.91	0.77	A	2.4	5.5	4.51	0.71	A
B - Eagle Way West	0.1	0.5	3.77	0.06	A	0.6	2.6	11.20	0.37	B	3.3	17.4	50.52	0.79	F	9.5	32.9	129.29	0.99	F	1.8	9.3	36.36	0.66	E
C - A12 South	0.4	1.1	2.13	0.28	A	2.3	4.8	5.36	0.70	A	9.5	49.4	18.47	0.91	C	14.4	77.4	29.26	0.95	D	8.2	41.1	16.84	0.90	C
D - Anson Rd East	0.1	0.5	3.12	0.12	A	0.5	2.3	5.55	0.34	A	0.7	3.2	6.61	0.41	A	6.3	33.7	26.27	0.88	D	8.9	48.4	34.30	0.92	D
2028 Peak Construction																									
A - A12 North	0.6	2.7	2.00	0.36	A	2.0	4.1	4.01	0.67	A	5.0	19.8	8.20	0.84	A	3.3	7.4	5.98	0.77	A	2.3	5.2	4.46	0.70	A
B - Eagle Way West	0.1	0.5	4.16	0.07	A	0.8	3.8	14.99	0.44	B	3.1	16.5	47.58	0.78	E	11.1	35.0	147.70	1.02	F	1.9	9.8	38.35	0.67	E
C - A12 South	0.5	2.5	2.39	0.35	A	3.4	8.9	7.26	0.78	A	9.1	46.7	18.29	0.91	C	16.6	85.1	34.03	0.96	D	8.7	44.2	17.87	0.91	C
D - Anson Rd East	0.1	0.5	3.12	0.12	A	0.5	2.1	5.42	0.33	A	0.7	3.2	6.56	0.41	A	6.1	32.4	25.56	0.87	D	7.8	42.7	30.09	0.90	D
2034 Reference Case																									
A - A12 North	0.7	2.7	2.16	0.40	A	4.7	17.4	7.77	0.83	A	4.9	19.1	8.05	0.83	A	10.6	54.4	16.33	0.92	C	3.9	9.8	6.52	0.80	A
B - Eagle Way West	0.1	0.5	4.03	0.07	A	1.0	5.1	18.93	0.51	C	3.4	18.2	51.03	0.80	F	26.5	52.1	336.46	1.23	F	7.8	26.2	144.71	0.99	F
C - A12 South	0.5	1.9	2.25	0.32	A	3.8	12.6	7.89	0.80	A	7.6	39.1	15.41	0.89	C	65.7	147.6	99.93	1.05	F	25.4	105.6	46.44	0.99	E
D - Anson Rd East	0.2	0.5	3.22	0.16	A	0.8	3.3	6.48	0.43	A	1.0	3.2	7.49	0.51	A	8.5	46.3	37.74	0.91	E	13.5	62.9	53.50	0.96	F
2034 Operational Led																									
A - A12 North	0.6	2.8	2.07	0.38	A	2.4	5.4	4.66	0.71	A	5.0	20.0	8.23	0.84	A	5.5	24.2	8.99	0.85	A	4.0	11.0	6.68	0.80	A
B - Eagle Way West	0.1	0.5	4.03	0.07	A	0.8	4.1	15.70	0.46	C	4.6	22.7	69.06	0.86	F	26.7	52.3	340.66	1.23	F	4.1	18.7	83.27	0.86	F
C - A12 South	0.5	1.9	2.25	0.32	A	3.4	8.6	7.04	0.78	A	12.0	66.2	22.66	0.93	C	66.9	148.9	101.64	1.05	F	14.7	79.0	29.04	0.95	D
D - Anson Rd East	0.2	0.5	3.22	0.16	A	0.6	2.6	5.94	0.36	A	0.7	3.1	6.48	0.40	A	8.9	47.8	39.68	0.92	E	17.0	69.0	66.89	0.98	F

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Eagle Way / Anson Rd
Location	52° 3'56.12"N, 1°16'29.45"E
Site number	24
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Anson Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.20	10.40	9.5	38.7	77.6	35.0	
B - Eagle Way West	3.50	6.90	12.7	15.3	77.6	11.0	
C - A12 South	7.50	10.70	34.5	40.2	77.6	33.0	
D - Anson Rd East	4.50	9.80	10.9	40.4	77.6	45.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Queue Calibration	400
B - Eagle Way West	Direct	Queue Calibration	-225
C - A12 South	Direct	Queue Calibration	-425
D - Anson Rd East	Direct	Queue Calibration	-75

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.623	3065
B - Eagle Way West	0.489	1473
C - A12 South	0.684	2638
D - Anson Rd East	0.507	1862

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	869	100.000
B - Eagle Way West		ONE HOUR	✓	51	100.000
C - A12 South		ONE HOUR	✓	530	100.000
D - Anson Rd East		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	671	194
	B - Eagle Way West	27	0	16	8
	C - A12 South	451	1	0	78
	D - Anson Rd East	66	0	77	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East

From	A - A12 North	0	25	7	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	11	0	0	15
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	1.93	0.5	2.3	A	797	1196
B - Eagle Way West	0.05	3.61	0.1	0.5	A	47	70
C - A12 South	0.25	2.08	0.3	1.3	A	486	730
D - Anson Rd East	0.12	3.03	0.1	0.5	A	131	197

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	654	164	77	2841	0.230	653	409	0.0	0.3	1.645	A
B - Eagle Way West	38	10	447	1161	0.033	38	4	0.0	0.0	3.207	A
C - A12 South	399	100	53	2333	0.171	398	574	0.0	0.2	1.860	A
D - Anson Rd East	108	27	519	1467	0.073	107	210	0.0	0.1	2.647	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	781	195	92	2832	0.276	781	489	0.3	0.4	1.754	A
B - Eagle Way West	46	11	535	1115	0.041	46	4	0.0	0.0	3.365	A
C - A12 South	476	119	63	2326	0.205	476	687	0.2	0.3	1.946	A
D - Anson Rd East	129	32	621	1416	0.091	128	252	0.1	0.1	2.795	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	957	239	112	2818	0.340	956	599	0.4	0.5	1.934	A
B - Eagle Way West	56	14	655	1054	0.053	56	6	0.0	0.1	3.608	A
C - A12 South	584	146	77	2316	0.252	583	841	0.3	0.3	2.077	A
D - Anson Rd East	157	39	760	1346	0.117	157	308	0.1	0.1	3.029	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	957	239	112	2818	0.340	957	599	0.5	0.5	1.934	A
B - Eagle Way West	56	14	655	1053	0.053	56	6	0.1	0.1	3.609	A
C - A12 South	584	146	77	2316	0.252	584	841	0.3	0.3	2.077	A
D - Anson Rd East	157	39	761	1345	0.117	157	308	0.1	0.1	3.029	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	781	195	92	2831	0.276	782	489	0.5	0.4	1.758	A
B - Eagle Way West	46	11	535	1115	0.041	46	4	0.1	0.0	3.366	A
C - A12 South	476	119	63	2326	0.205	477	687	0.3	0.3	1.948	A
D - Anson Rd East	129	32	622	1416	0.091	129	252	0.1	0.1	2.799	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	654	164	77	2841	0.230	655	410	0.4	0.3	1.645	A
B - Eagle Way West	38	10	448	1160	0.033	38	4	0.0	0.0	3.211	A
C - A12 South	399	100	53	2333	0.171	399	575	0.3	0.2	1.860	A
D - Anson Rd East	108	27	520	1467	0.073	108	211	0.1	0.1	2.650	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Eagle Way West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C - A12 South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Eagle Way West	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Anson Rd East	0.10	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.03	0.25	0.51	0.51			N/A	N/A

B - Eagle Way West	0.06	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	0.34	0.03	0.25	0.45	0.48			N/A	N/A
D - Anson Rd East	0.13	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.03	0.31	1.46	2.30			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.34	0.03	0.32	1.09	1.33			N/A	N/A
D - Anson Rd East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D - Anson Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.30	0.00	0.00	0.30	0.30			N/A	N/A
B - Eagle Way West	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C - A12 South	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1621	100.000
B - Eagle Way West		ONE HOUR	✓	147	100.000
C - A12 South		ONE HOUR	✓	1226	100.000
D - Anson Rd East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	52	1187	381
	B - Eagle Way West	81	0	49	17
	C - A12 South	1051	6	0	169
	D - Anson Rd East	177	2	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	9	0	0	5
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	3.69	1.8	3.7	A	1487	2231
B - Eagle Way West	0.26	7.69	0.3	1.4	A	135	202
C - A12 South	0.60	3.97	1.5	2.3	A	1125	1687
D - Anson Rd East	0.32	5.15	0.5	1.9	A	273	409

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1220	305	176	2810	0.434	1217	983	0.0	0.8	2.257	A
B - Eagle Way West	111	28	1049	880	0.126	110	45	0.0	0.1	4.675	A
C - A12 South	923	231	174	2311	0.399	920	1017	0.0	0.7	2.585	A
D - Anson Rd East	224	56	968	1251	0.179	223	426	0.0	0.2	3.498	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1457	364	211	2788	0.523	1456	1176	0.8	1.1	2.699	A
B - Eagle Way West	132	33	1256	775	0.171	132	54	0.1	0.2	5.602	A
C - A12 South	1102	276	208	2288	0.482	1101	1216	0.7	0.9	3.029	A
D - Anson Rd East	267	67	1158	1156	0.231	267	509	0.2	0.3	4.048	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1785	446	258	2759	0.647	1782	1440	1.1	1.8	3.673	A
B - Eagle Way West	162	40	1537	631	0.256	161	66	0.2	0.3	7.655	A
C - A12 South	1350	337	255	2257	0.598	1348	1488	0.9	1.5	3.948	A
D - Anson Rd East	327	82	1417	1027	0.319	326	623	0.3	0.5	5.137	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1785	446	259	2759	0.647	1785	1442	1.8	1.8	3.695	A
B - Eagle Way West	162	40	1539	630	0.257	162	66	0.3	0.3	7.691	A
C - A12 South	1350	337	255	2257	0.598	1350	1491	1.5	1.5	3.968	A
D - Anson Rd East	327	82	1419	1025	0.319	327	624	0.5	0.5	5.154	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1457	364	212	2788	0.523	1460	1180	1.8	1.1	2.718	A
B - Eagle Way West	132	33	1259	773	0.171	133	54	0.3	0.2	5.631	A
C - A12 South	1102	276	209	2288	0.482	1104	1220	1.5	0.9	3.049	A
D - Anson Rd East	267	67	1161	1154	0.231	268	511	0.5	0.3	4.065	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1220	305	177	2809	0.434	1222	987	1.1	0.8	2.270	A
B - Eagle Way West	111	28	1054	877	0.126	111	45	0.2	0.1	4.697	A
C - A12 South	923	231	175	2310	0.400	924	1021	0.9	0.7	2.600	A
D - Anson Rd East	224	56	972	1249	0.179	224	427	0.3	0.2	3.515	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C - A12 South	0.66	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.05	0.51	2.49	3.68			N/A	N/A
B - Eagle Way West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.92	0.06	0.75	1.70	2.25			N/A	N/A
D - Anson Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.81	0.03	0.26	1.81	1.81			N/A	N/A
B - Eagle Way West	0.34	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.47	0.03	0.26	1.47	1.47			N/A	N/A
D - Anson Rd East	0.46	0.03	0.25	0.46	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.03	0.26	1.82	1.82			N/A	N/A
B - Eagle Way West	0.34	0.03	0.32	1.15	1.41			N/A	N/A
C - A12 South	1.48	0.03	0.26	1.48	1.48			N/A	N/A
D - Anson Rd East	0.47	0.03	0.32	1.42	1.89			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.50	1.08	1.42	1.73			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	0.94	0.52	1.00	1.43	1.48			N/A	N/A
D - Anson Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.77	0.09	0.84	1.08	1.08			N/A	N/A
B - Eagle Way West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C - A12 South	0.67	0.09	0.81	1.37	1.44			N/A	N/A
D - Anson Rd East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	7.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2002	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1459	100.000
D - Anson Rd East		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	150	1193	659
	B - Eagle Way West	128	0	29	39
	C - A12 South	1286	20	0	153
	D - Anson Rd East	206	19	107	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	9	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	10	5	0	5
	D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	6.85	4.1	12.1	A	1837	2756
B - Eagle Way West	0.45	13.65	0.8	3.9	B	180	270
C - A12 South	0.75	6.88	3.0	6.3	A	1339	2008
D - Anson Rd East	0.38	6.11	0.6	2.9	A	306	458

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1507	377	166	2776	0.543	1502	1215	0.0	1.2	2.816	A
B - Eagle Way West	148	37	1235	777	0.190	147	142	0.0	0.2	5.699	A
C - A12 South	1098	275	282	2217	0.495	1095	997	0.0	1.0	3.196	A
D - Anson Rd East	251	63	1030	1200	0.209	250	639	0.0	0.3	3.785	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1800	450	199	2756	0.653	1797	1454	1.2	1.9	3.742	A
B - Eagle Way West	176	44	1477	652	0.270	176	170	0.2	0.4	7.548	A
C - A12 South	1312	328	338	2180	0.602	1310	1193	1.0	1.5	4.125	A
D - Anson Rd East	299	75	1231	1097	0.273	299	765	0.3	0.4	4.507	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2204	551	243	2729	0.808	2195	1777	1.9	4.0	6.639	A
B - Eagle Way West	216	54	1806	483	0.447	214	207	0.4	0.8	13.329	B
C - A12 South	1606	402	413	2130	0.754	1600	1457	1.5	3.0	6.723	A
D - Anson Rd East	367	92	1504	959	0.382	366	934	0.4	0.6	6.060	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2204	551	244	2728	0.808	2204	1783	4.0	4.1	6.855	A
B - Eagle Way West	216	54	1812	479	0.450	216	208	0.8	0.8	13.650	B
C - A12 South	1606	402	414	2129	0.754	1606	1463	3.0	3.0	6.877	A
D - Anson Rd East	367	92	1510	956	0.384	367	938	0.6	0.6	6.110	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1800	450	201	2755	0.653	1809	1463	4.1	1.9	3.837	A
B - Eagle Way West	176	44	1486	648	0.272	178	171	0.8	0.4	7.694	A
C - A12 South	1312	328	339	2179	0.602	1318	1201	3.0	1.5	4.209	A
D - Anson Rd East	299	75	1240	1093	0.274	300	770	0.6	0.4	4.545	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1507	377	168	2775	0.543	1510	1222	1.9	1.2	2.850	A
B - Eagle Way West	148	37	1242	774	0.191	148	143	0.4	0.2	5.757	A
C - A12 South	1098	275	284	2216	0.496	1101	1002	1.5	1.0	3.232	A
D - Anson Rd East	251	63	1035	1197	0.209	251	643	0.4	0.3	3.806	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.55	1.04	1.27	1.27			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	0.97	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.86	0.04	0.40	4.96	9.00			N/A	N/A
B - Eagle Way West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - A12 South	1.49	0.05	0.45	3.86	6.24			N/A	N/A
D - Anson Rd East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.05	0.03	0.29	4.05	12.09			N/A	N/A
B - Eagle Way West	0.79	0.03	0.26	0.79	0.79			N/A	N/A
C - A12 South	2.98	0.03	0.28	2.98	6.28			N/A	N/A
D - Anson Rd East	0.61	0.03	0.25	0.61	0.61			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.12	0.03	0.27	4.12	4.12			N/A	N/A
B - Eagle Way West	0.81	0.03	0.31	1.41	3.94			N/A	N/A
C - A12 South	3.03	0.03	0.27	3.03	3.03			N/A	N/A
D - Anson Rd East	0.62	0.03	0.30	1.44	2.92			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.07	1.06	4.55	6.50			N/A	N/A
B - Eagle Way West	0.38	0.03	0.27	0.49	0.87			N/A	N/A
C - A12 South	1.53	0.08	1.09	3.18	4.38			N/A	N/A
D - Anson Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.04	0.42	3.00	4.98			N/A	N/A
B - Eagle Way West	0.24	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.99	0.05	0.46	2.27	3.48			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	10.59	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1743	100.000
B - Eagle Way West		ONE HOUR	✓	204	100.000
C - A12 South		ONE HOUR	✓	1497	100.000
D - Anson Rd East		ONE HOUR	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	144	1042	557
	B - Eagle Way West	120	0	24	60
	C - A12 South	1213	38	1	245
	D - Anson Rd East	506	65	266	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	8	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	7	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.66	2.5	5.5	A	1599	2399
B - Eagle Way West	0.64	28.45	1.7	8.9	D	187	281
C - A12 South	0.84	11.09	4.9	22.7	B	1374	2061
D - Anson Rd East	0.82	18.00	4.4	22.7	C	768	1152

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1312	328	247	2761	0.475	1309	1378	0.0	0.9	2.472	A
B - Eagle Way West	154	38	1473	694	0.221	152	185	0.0	0.3	6.632	A
C - A12 South	1127	282	536	2134	0.528	1123	1000	0.0	1.1	3.541	A
D - Anson Rd East	630	158	909	1344	0.469	627	647	0.0	0.9	4.995	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1567	392	296	2732	0.574	1565	1649	0.9	1.3	3.082	A
B - Eagle Way West	183	46	1762	550	0.334	183	222	0.3	0.5	9.786	A
C - A12 South	1346	336	641	2065	0.652	1343	1196	1.1	1.8	4.962	A
D - Anson Rd East	752	188	1087	1249	0.602	750	774	0.9	1.5	7.175	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1919	480	360	2693	0.713	1915	2006	1.3	2.4	4.601	A
B - Eagle Way West	225	56	2146	358	0.628	220	270	0.5	1.6	25.458	D
C - A12 South	1648	412	779	1975	0.835	1637	1461	1.8	4.7	10.310	B
D - Anson Rd East	922	230	1330	1120	0.823	911	945	1.5	4.2	16.389	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1919	480	363	2691	0.713	1919	2023	2.4	2.5	4.662	A
B - Eagle Way West	225	56	2162	350	0.643	224	272	1.6	1.7	28.450	D
C - A12 South	1648	412	787	1970	0.837	1647	1467	4.7	4.9	11.088	B
D - Anson Rd East	922	230	1333	1119	0.824	921	949	4.2	4.4	17.996	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1567	392	301	2729	0.574	1571	1673	2.5	1.4	3.123	A
B - Eagle Way West	183	46	1785	538	0.341	188	224	1.7	0.5	10.419	B
C - A12 South	1346	336	651	2059	0.654	1358	1205	4.9	1.9	5.219	A
D - Anson Rd East	752	188	1092	1247	0.604	764	780	4.4	1.6	7.630	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1312	328	249	2760	0.475	1314	1389	1.4	0.9	2.492	A
B - Eagle Way West	154	38	1484	689	0.223	155	186	0.5	0.3	6.753	A
C - A12 South	1127	282	540	2131	0.529	1130	1006	1.9	1.1	3.605	A
D - Anson Rd East	630	158	913	1342	0.470	633	650	1.6	0.9	5.094	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C - A12 South	1.11	0.55	1.02	1.44	1.49			N/A	N/A
D - Anson Rd East	0.87	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.33	0.04	0.44	3.41	5.49			N/A	N/A
B - Eagle Way West	0.49	0.04	0.44	1.27	1.39			N/A	N/A
C - A12 South	1.84	0.04	0.42	4.94	8.56			N/A	N/A
D - Anson Rd East	1.49	0.05	0.49	3.76	5.81			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.44	0.03	0.27	2.44	2.44			N/A	N/A
B - Eagle Way West	1.57	0.03	0.29	1.57	6.86			N/A	N/A
C - A12 South	4.72	0.03	0.31	5.88	22.70			N/A	N/A
D - Anson Rd East	4.21	0.03	0.34	8.61	22.70			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.46	0.03	0.26	2.46	2.46			N/A	N/A
B - Eagle Way West	1.70	0.03	0.32	3.33	8.90			N/A	N/A
C - A12 South	4.92	0.03	0.28	4.92	11.97			N/A	N/A
D - Anson Rd East	4.43	0.03	0.30	4.43	18.50			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.15	1.20	2.20	2.81			N/A	N/A
B - Eagle Way West	0.53	0.04	0.42	1.34	1.48			N/A	N/A
C - A12 South	1.92	0.05	0.67	4.96	7.66			N/A	N/A
D - Anson Rd East	1.55	0.05	0.46	4.00	6.46			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.06	0.73	1.69	2.23			N/A	N/A
B - Eagle Way West	0.29	0.03	0.31	1.03	1.33			N/A	N/A
C - A12 South	1.13	0.04	0.36	2.79	5.42			N/A	N/A
D - Anson Rd East	0.89	0.03	0.33	1.97	4.36			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	9.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1626	100.000
B - Eagle Way West		ONE HOUR	✓	144	100.000
C - A12 South		ONE HOUR	✓	1523	100.000
D - Anson Rd East		ONE HOUR	✓	923	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	82	1061	483
	B - Eagle Way West	86	0	26	32
	C - A12 South	1244	37	0	242
	D - Anson Rd East	543	69	310	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	3	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	3	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	3.61	1.8	3.5	A	1492	2238
B - Eagle Way West	0.45	18.72	0.8	3.9	C	132	198
C - A12 South	0.81	9.26	4.2	16.6	A	1398	2096
D - Anson Rd East	0.86	21.14	5.7	28.8	C	847	1270

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1224	306	226	2853	0.429	1221	1404	0.0	0.7	2.202	A
B - Eagle Way West	108	27	1522	698	0.155	108	141	0.0	0.2	6.086	A
C - A12 South	1147	287	520	2228	0.515	1142	1048	0.0	1.1	3.305	A
D - Anson Rd East	695	174	878	1393	0.499	691	569	0.0	1.0	5.100	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1462	365	270	2826	0.517	1460	1680	0.7	1.1	2.634	A
B - Eagle Way West	129	32	1821	552	0.234	129	169	0.2	0.3	8.493	A
C - A12 South	1369	342	623	2159	0.634	1367	1254	1.1	1.7	4.527	A
D - Anson Rd East	830	207	1050	1304	0.636	827	681	1.0	1.7	7.497	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1790	448	329	2790	0.642	1787	2045	1.1	1.8	3.582	A
B - Eagle Way West	159	40	2217	358	0.442	157	206	0.3	0.8	17.691	C
C - A12 South	1677	419	755	2070	0.810	1667	1531	1.7	4.1	8.753	A
D - Anson Rd East	1016	254	1285	1183	0.859	1002	832	1.7	5.3	18.587	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1790	448	331	2788	0.642	1790	2061	1.8	1.8	3.606	A
B - Eagle Way West	159	40	2234	350	0.452	158	207	0.8	0.8	18.717	C
C - A12 South	1677	419	764	2064	0.813	1676	1538	4.1	4.2	9.261	A
D - Anson Rd East	1016	254	1287	1182	0.860	1015	834	5.3	5.7	21.138	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1462	365	273	2824	0.518	1465	1702	1.8	1.1	2.652	A
B - Eagle Way West	129	32	1844	541	0.239	131	171	0.8	0.3	8.825	A
C - A12 South	1369	342	635	2151	0.637	1379	1263	4.2	1.8	4.722	A
D - Anson Rd East	830	207	1053	1302	0.637	845	684	5.7	1.8	8.133	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1224	306	227	2852	0.429	1225	1415	1.1	0.8	2.216	A
B - Eagle Way West	108	27	1533	693	0.156	109	142	0.3	0.2	6.170	A
C - A12 South	1147	287	525	2225	0.515	1149	1054	1.8	1.1	3.356	A
D - Anson Rd East	695	174	881	1391	0.499	698	572	1.8	1.0	5.218	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C - A12 South	1.05	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.98	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.05	0.52	2.41	3.55			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.71	0.04	0.42	4.59	7.82			N/A	N/A
D - Anson Rd East	1.71	0.05	0.47	4.50	7.16			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.03	0.26	1.77	1.77			N/A	N/A
B - Eagle Way West	0.77	0.03	0.26	0.77	0.77			N/A	N/A
C - A12 South	4.06	0.03	0.30	4.06	16.56			N/A	N/A
D - Anson Rd East	5.32	0.04	0.38	13.29	28.83			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.78	0.03	0.26	1.78	1.78			N/A	N/A
B - Eagle Way West	0.81	0.03	0.33	1.78	3.87			N/A	N/A
C - A12 South	4.21	0.03	0.27	4.21	6.09			N/A	N/A
D - Anson Rd East	5.68	0.03	0.32	7.42	27.65			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.08	0.51	1.06	1.30	1.66			N/A	N/A
B - Eagle Way West	0.32	0.03	0.25	0.46	0.48			N/A	N/A
C - A12 South	1.78	0.06	0.86	4.37	6.44			N/A	N/A
D - Anson Rd East	1.80	0.04	0.43	4.83	8.14			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.09	0.84	1.41	1.49			N/A	N/A
B - Eagle Way West	0.19	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.07	0.04	0.38	2.70	4.77			N/A	N/A
D - Anson Rd East	1.01	0.03	0.32	1.99	5.05			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	910	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	576	100.000
D - Anson Rd East		ONE HOUR	✓	146	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	711	194
	B - Eagle Way West	30	0	18	9
	C - A12 South	489	1	0	86
	D - Anson Rd East	67	0	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	14
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	1.97	0.5	2.6	A	835	1252
B - Eagle Way West	0.06	3.71	0.1	0.5	A	52	78
C - A12 South	0.27	2.10	0.4	1.4	A	529	793
D - Anson Rd East	0.12	3.09	0.1	0.5	A	134	200

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	685	171	84	2850	0.240	684	440	0.0	0.3	1.661	A
B - Eagle Way West	43	11	482	1145	0.037	42	4	0.0	0.0	3.263	A
C - A12 South	434	108	54	2364	0.183	433	607	0.0	0.2	1.863	A
D - Anson Rd East	110	27	551	1455	0.075	109	217	0.0	0.1	2.675	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	818	205	101	2839	0.288	818	527	0.3	0.4	1.780	A
B - Eagle Way West	51	13	577	1097	0.046	51	5	0.0	0.0	3.439	A
C - A12 South	518	130	64	2357	0.220	518	726	0.2	0.3	1.957	A
D - Anson Rd East	131	33	659	1401	0.093	131	259	0.1	0.1	2.834	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1002	250	124	2824	0.355	1001	645	0.4	0.5	1.975	A
B - Eagle Way West	62	16	707	1031	0.060	62	6	0.0	0.1	3.714	A
C - A12 South	634	159	78	2347	0.270	634	889	0.3	0.4	2.102	A
D - Anson Rd East	160	40	807	1326	0.121	160	318	0.1	0.1	3.086	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1002	250	124	2824	0.355	1002	646	0.5	0.5	1.975	A
B - Eagle Way West	62	16	707	1031	0.060	62	6	0.1	0.1	3.715	A
C - A12 South	634	159	79	2347	0.270	634	889	0.4	0.4	2.102	A
D - Anson Rd East	160	40	808	1326	0.121	160	318	0.1	0.1	3.087	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	818	205	101	2839	0.288	819	528	0.5	0.4	1.781	A
B - Eagle Way West	51	13	578	1097	0.046	51	5	0.1	0.0	3.441	A
C - A12 South	518	130	64	2357	0.220	518	727	0.4	0.3	1.958	A
D - Anson Rd East	131	33	660	1400	0.093	131	260	0.1	0.1	2.836	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	685	171	85	2850	0.240	685	442	0.4	0.3	1.662	A
B - Eagle Way West	43	11	484	1145	0.037	43	4	0.0	0.0	3.268	A
C - A12 South	434	108	54	2364	0.184	434	609	0.3	0.2	1.867	A
D - Anson Rd East	110	27	553	1454	0.075	110	217	0.1	0.1	2.679	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.22	0.00	0.00	0.22	0.22			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.40	0.00	0.00	0.40	0.40			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D - Anson Rd East	0.10	0.03	0.25	0.45	0.48			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.03	0.25	0.55	0.55			N/A	N/A
B - Eagle Way West	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.37	0.03	0.25	0.45	0.48			N/A	N/A
D - Anson Rd East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.03	0.30	1.42	2.56			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.37	0.03	0.33	1.20	1.44			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D - Anson Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	4.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1624	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1320	100.000
D - Anson Rd East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	58	1201	364
	B - Eagle Way West	90	0	54	19
	C - A12 South	1120	7	0	193
	D - Anson Rd East	176	2	119	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	10	0	0	5
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.66	3.89	1.9	3.9	A	1490	2236
B - Eagle Way West	0.31	9.05	0.4	1.7	A	150	225
C - A12 South	0.65	4.50	1.8	3.3	A	1211	1816
D - Anson Rd East	0.33	5.31	0.5	2.0	A	273	409

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1223	306	200	2772	0.441	1220	1041	0.0	0.8	2.314	A
B - Eagle Way West	123	31	1118	844	0.146	122	50	0.0	0.2	4.983	A
C - A12 South	993	248	178	2307	0.431	990	1032	0.0	0.8	2.729	A
D - Anson Rd East	224	56	987	1236	0.181	223	432	0.0	0.2	3.549	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1460	365	239	2748	0.531	1459	1245	0.8	1.1	2.790	A
B - Eagle Way West	147	37	1338	732	0.200	146	60	0.2	0.2	6.146	A
C - A12 South	1186	297	213	2284	0.519	1185	1235	0.8	1.1	3.271	A
D - Anson Rd East	267	67	1180	1139	0.235	267	517	0.2	0.3	4.126	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1788	447	292	2715	0.659	1785	1524	1.1	1.9	3.858	A
B - Eagle Way West	180	45	1637	579	0.310	179	73	0.2	0.4	8.979	A
C - A12 South	1453	363	260	2252	0.645	1450	1511	1.1	1.8	4.471	A
D - Anson Rd East	327	82	1445	1006	0.325	327	633	0.3	0.5	5.292	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1788	447	293	2715	0.659	1788	1527	1.9	1.9	3.885	A
B - Eagle Way West	180	45	1640	578	0.311	180	73	0.4	0.4	9.047	A
C - A12 South	1453	363	261	2252	0.645	1453	1514	1.8	1.8	4.504	A
D - Anson Rd East	327	82	1447	1005	0.326	327	634	0.5	0.5	5.313	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1460	365	240	2747	0.532	1463	1250	1.9	1.1	2.810	A
B - Eagle Way West	147	37	1342	730	0.201	148	60	0.4	0.3	6.192	A
C - A12 South	1186	297	213	2283	0.520	1189	1239	1.8	1.1	3.298	A
D - Anson Rd East	267	67	1184	1137	0.235	268	519	0.5	0.3	4.145	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1223	306	201	2771	0.441	1224	1046	1.1	0.8	2.330	A
B - Eagle Way West	123	31	1123	842	0.146	123	50	0.3	0.2	5.013	A
C - A12 South	993	248	178	2306	0.431	995	1036	1.1	0.8	2.749	A
D - Anson Rd East	224	56	991	1234	0.181	224	434	0.3	0.2	3.564	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.75	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.05	0.49	2.64	3.92			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.07	0.06	0.65	2.30	3.29			N/A	N/A
D - Anson Rd East	0.30	0.00	0.00	0.30	0.30			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.03	0.26	1.91	1.91			N/A	N/A
B - Eagle Way West	0.44	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.79	0.03	0.26	1.79	1.79			N/A	N/A
D - Anson Rd East	0.48	0.03	0.25	0.48	0.48			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.92	0.03	0.26	1.92	1.92			N/A	N/A
B - Eagle Way West	0.45	0.03	0.33	1.39	1.70			N/A	N/A
C - A12 South	1.81	0.03	0.26	1.81	1.81			N/A	N/A
D - Anson Rd East	0.48	0.03	0.32	1.44	1.98			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.37	1.10	1.57	1.82			N/A	N/A
B - Eagle Way West	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C - A12 South	1.09	0.27	1.07	1.51	1.79			N/A	N/A
D - Anson Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.08	0.82	1.41	1.41			N/A	N/A
B - Eagle Way West	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C - A12 South	0.76	0.08	0.78	1.35	1.35			N/A	N/A
D - Anson Rd East	0.22	0.00	0.00	0.22	0.22			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	8.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2000	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1571	100.000
D - Anson Rd East		ONE HOUR	✓	336	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	167	1174	659
	B - Eagle Way West	142	0	32	43
	C - A12 South	1385	22	0	164
	D - Anson Rd East	207	21	107	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	10	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	10	5	0	5
	D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	7.28	4.4	14.4	A	1835	2753
B - Eagle Way West	0.57	20.03	1.3	6.4	C	200	300
C - A12 South	0.82	9.17	4.3	17.4	A	1442	2162
D - Anson Rd East	0.39	6.24	0.6	3.0	A	308	463

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1506	376	180	2747	0.548	1501	1300	0.0	1.2	2.879	A
B - Eagle Way West	164	41	1318	736	0.223	163	157	0.0	0.3	6.263	A
C - A12 South	1183	296	297	2213	0.534	1178	985	0.0	1.1	3.462	A
D - Anson Rd East	253	63	1030	1194	0.212	252	651	0.0	0.3	3.817	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1798	450	216	2725	0.660	1795	1556	1.2	1.9	3.859	A
B - Eagle Way West	196	49	1577	603	0.325	195	188	0.3	0.5	8.809	A
C - A12 South	1412	353	356	2174	0.650	1410	1178	1.1	1.8	4.690	A
D - Anson Rd East	302	76	1232	1091	0.277	302	779	0.3	0.4	4.562	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2202	551	263	2697	0.817	2193	1899	1.9	4.3	7.016	A
B - Eagle Way West	240	60	1925	424	0.566	237	230	0.5	1.2	18.951	C
C - A12 South	1730	432	435	2121	0.815	1720	1439	1.8	4.2	8.769	A
D - Anson Rd East	370	93	1505	950	0.389	369	951	0.4	0.6	6.182	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2202	551	265	2695	0.817	2202	1909	4.3	4.4	7.278	A
B - Eagle Way West	240	60	1934	419	0.572	239	231	1.2	1.3	20.034	C
C - A12 South	1730	432	436	2121	0.816	1729	1445	4.2	4.3	9.172	A
D - Anson Rd East	370	93	1511	947	0.391	370	955	0.6	0.6	6.237	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1798	450	218	2724	0.660	1808	1570	4.4	2.0	3.972	A
B - Eagle Way West	196	49	1590	596	0.328	199	190	1.3	0.5	9.136	A
C - A12 South	1412	353	358	2173	0.650	1422	1187	4.3	1.9	4.855	A
D - Anson Rd East	302	76	1241	1086	0.278	303	785	0.6	0.4	4.604	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1506	376	182	2746	0.548	1509	1309	2.0	1.2	2.916	A
B - Eagle Way West	164	41	1326	732	0.224	165	158	0.5	0.3	6.357	A
C - A12 South	1183	296	299	2212	0.535	1186	991	1.9	1.2	3.515	A
D - Anson Rd East	253	63	1036	1191	0.212	254	655	0.4	0.3	3.840	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.56	1.06	1.20	1.53			N/A	N/A
B - Eagle Way West	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C - A12 South	1.14	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.92	0.04	0.40	5.12	9.35			N/A	N/A
B - Eagle Way West	0.47	0.04	0.40	1.24	1.37			N/A	N/A
C - A12 South	1.83	0.04	0.43	4.91	8.41			N/A	N/A
D - Anson Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.27	0.03	0.29	4.27	14.42			N/A	N/A
B - Eagle Way West	1.24	0.03	0.27	1.24	2.97			N/A	N/A
C - A12 South	4.20	0.03	0.30	4.20	17.39			N/A	N/A
D - Anson Rd East	0.63	0.03	0.25	0.63	0.63			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.37	0.03	0.27	4.37	4.37			N/A	N/A
B - Eagle Way West	1.30	0.03	0.30	1.92	6.44			N/A	N/A
C - A12 South	4.31	0.03	0.27	4.31	5.93			N/A	N/A
D - Anson Rd East	0.64	0.03	0.30	1.42	2.99			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.97	0.07	1.01	4.80	6.95			N/A	N/A
B - Eagle Way West	0.50	0.04	0.43	1.27	1.39			N/A	N/A
C - A12 South	1.88	0.06	0.84	4.74	7.02			N/A	N/A
D - Anson Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.04	0.40	3.11	5.30			N/A	N/A
B - Eagle Way West	0.29	0.03	0.30	0.93	1.22			N/A	N/A
C - A12 South	1.16	0.04	0.38	2.92	5.22			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	13.23	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1742	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1559	100.000
D - Anson Rd East		ONE HOUR	✓	846	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	160	1025	557
	B - Eagle Way West	134	0	27	67
	C - A12 South	1262	42	1	253
	D - Anson Rd East	488	72	286	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	9	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	7	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	4.85	2.6	5.7	A	1599	2398
B - Eagle Way West	0.77	45.83	3.0	15.8	E	208	312
C - A12 South	0.88	14.53	6.6	34.0	B	1430	2145
D - Anson Rd East	0.84	19.84	4.9	25.2	C	777	1165

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1312	328	260	2733	0.480	1308	1412	0.0	0.9	2.520	A
B - Eagle Way West	171	43	1502	676	0.253	170	206	0.0	0.3	7.083	A
C - A12 South	1173	293	540	2124	0.553	1169	1004	0.0	1.2	3.752	A
D - Anson Rd East	637	159	910	1337	0.476	634	658	0.0	0.9	5.090	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1566	392	311	2702	0.580	1564	1689	0.9	1.4	3.159	A
B - Eagle Way West	204	51	1797	528	0.386	203	247	0.3	0.6	11.020	B
C - A12 South	1401	350	646	2054	0.682	1398	1201	1.2	2.1	5.453	A
D - Anson Rd East	761	190	1089	1242	0.613	758	787	0.9	1.6	7.408	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1918	480	377	2663	0.720	1914	2050	1.4	2.5	4.777	A
B - Eagle Way West	250	62	2184	334	0.748	242	301	0.6	2.5	36.529	E
C - A12 South	1716	429	785	1964	0.874	1700	1466	2.1	6.2	12.908	B
D - Anson Rd East	932	233	1331	1111	0.838	920	959	1.6	4.6	17.739	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1918	480	382	2660	0.721	1918	2072	2.5	2.6	4.853	A
B - Eagle Way West	250	62	2205	324	0.772	248	302	2.5	3.0	45.832	E
C - A12 South	1716	429	793	1959	0.876	1715	1473	6.2	6.6	14.530	B
D - Anson Rd East	932	233	1335	1109	0.840	931	965	4.6	4.9	19.839	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1566	392	319	2697	0.581	1571	1721	2.6	1.4	3.210	A
B - Eagle Way West	204	51	1827	514	0.397	213	249	3.0	0.7	12.339	B
C - A12 South	1401	350	657	2047	0.685	1419	1211	6.6	2.2	5.885	A
D - Anson Rd East	761	190	1094	1239	0.614	774	796	4.9	1.6	7.959	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1312	328	263	2731	0.480	1314	1424	1.4	0.9	2.542	A
B - Eagle Way West	171	43	1515	670	0.255	172	207	0.7	0.3	7.247	A
C - A12 South	1173	293	545	2121	0.553	1177	1010	2.2	1.3	3.831	A
D - Anson Rd East	637	159	914	1335	0.477	640	662	1.6	0.9	5.200	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.22	0.56	1.12	1.51	1.76			N/A	N/A
D - Anson Rd East	0.90	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.37	0.04	0.44	3.53	5.73			N/A	N/A
B - Eagle Way West	0.62	0.05	0.53	1.39	1.50			N/A	N/A
C - A12 South	2.11	0.04	0.42	5.72	10.09			N/A	N/A
D - Anson Rd East	1.55	0.05	0.48	3.95	6.21			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.03	0.27	2.53	2.53			N/A	N/A
B - Eagle Way West	2.54	0.04	0.36	6.31	13.47			N/A	N/A
C - A12 South	6.22	0.04	0.35	13.29	33.98			N/A	N/A
D - Anson Rd East	4.62	0.04	0.36	10.62	25.19			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.56	0.03	0.26	2.56	2.56			N/A	N/A
B - Eagle Way West	2.98	0.04	0.37	7.55	15.83			N/A	N/A
C - A12 South	6.63	0.03	0.30	6.63	27.22			N/A	N/A
D - Anson Rd East	4.91	0.03	0.31	5.08	22.50			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.40	0.14	1.20	2.39	2.95			N/A	N/A
B - Eagle Way West	0.67	0.04	0.39	1.48	2.30			N/A	N/A
C - A12 South	2.21	0.05	0.48	6.00	9.84			N/A	N/A
D - Anson Rd East	1.63	0.04	0.45	4.30	7.03			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.06	0.70	1.77	2.45			N/A	N/A
B - Eagle Way West	0.35	0.03	0.30	1.11	1.44			N/A	N/A
C - A12 South	1.25	0.03	0.33	2.77	6.37			N/A	N/A
D - Anson Rd East	0.92	0.03	0.32	1.94	4.57			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	11.17	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1669	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1534	100.000
D - Anson Rd East		ONE HOUR	✓	919	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	91	1094	484
	B - Eagle Way West	96	0	29	36
	C - A12 South	1250	41	0	242
	D - Anson Rd East	523	77	319	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	4	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	3.89	2.0	4.1	A	1531	2297
B - Eagle Way West	0.50	20.60	1.0	4.9	C	147	221
C - A12 South	0.82	9.93	4.5	19.2	A	1407	2111
D - Anson Rd East	0.88	25.14	6.7	35.7	D	843	1265

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1256	314	231	2828	0.444	1253	1401	0.0	0.8	2.280	A
B - Eagle Way West	121	30	1511	698	0.173	120	157	0.0	0.2	6.213	A
C - A12 South	1155	289	518	2211	0.522	1150	1081	0.0	1.1	3.381	A
D - Anson Rd East	692	173	911	1369	0.505	688	572	0.0	1.0	5.252	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1500	375	276	2801	0.536	1499	1676	0.8	1.1	2.762	A
B - Eagle Way West	144	36	1808	552	0.261	143	188	0.2	0.3	8.792	A
C - A12 South	1379	345	620	2143	0.644	1376	1293	1.1	1.8	4.679	A
D - Anson Rd East	826	207	1090	1276	0.647	823	684	1.0	1.8	7.888	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1837	459	336	2764	0.665	1834	2038	1.1	2.0	3.858	A
B - Eagle Way West	176	44	2200	359	0.491	174	228	0.3	0.9	19.205	C
C - A12 South	1689	422	750	2056	0.822	1678	1578	1.8	4.4	9.303	A
D - Anson Rd East	1012	253	1334	1149	0.880	994	836	1.8	6.1	21.256	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1837	459	339	2763	0.665	1837	2056	2.0	2.0	3.889	A
B - Eagle Way West	176	44	2218	351	0.503	176	230	0.9	1.0	20.601	C
C - A12 South	1689	422	760	2049	0.824	1688	1586	4.4	4.5	9.934	A
D - Anson Rd East	1012	253	1336	1148	0.881	1010	839	6.1	6.7	25.143	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1500	375	279	2799	0.536	1503	1701	2.0	1.2	2.785	A
B - Eagle Way West	144	36	1834	540	0.267	147	190	1.0	0.4	9.210	A
C - A12 South	1379	345	635	2133	0.647	1390	1305	4.5	1.9	4.913	A
D - Anson Rd East	826	207	1094	1274	0.648	845	689	6.7	1.9	8.748	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1256	314	232	2827	0.444	1258	1412	1.2	0.8	2.295	A
B - Eagle Way West	121	30	1523	693	0.174	121	158	0.4	0.2	6.307	A
C - A12 South	1155	289	523	2207	0.523	1158	1087	1.9	1.1	3.441	A
D - Anson Rd East	692	173	915	1368	0.506	695	575	1.9	1.0	5.382	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.08	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	1.01	0.55	1.01	1.42	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.05	0.48	2.73	4.10			N/A	N/A
B - Eagle Way West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A12 South	1.78	0.04	0.42	4.78	8.23			N/A	N/A
D - Anson Rd East	1.79	0.05	0.47	4.76	7.69			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.03	0.26	1.96	1.96			N/A	N/A
B - Eagle Way West	0.93	0.03	0.27	0.93	1.23			N/A	N/A
C - A12 South	4.36	0.03	0.30	4.36	19.22			N/A	N/A
D - Anson Rd East	6.13	0.04	0.43	16.86	32.58			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.97	0.03	0.26	1.97	1.97			N/A	N/A
B - Eagle Way West	0.98	0.03	0.32	1.99	4.88			N/A	N/A
C - A12 South	4.53	0.03	0.28	4.53	8.30			N/A	N/A
D - Anson Rd East	6.68	0.03	0.34	12.49	35.69			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.35	1.11	1.62	1.86			N/A	N/A
B - Eagle Way West	0.37	0.03	0.30	0.85	1.17			N/A	N/A
C - A12 South	1.86	0.06	0.80	4.69	6.99			N/A	N/A
D - Anson Rd East	1.89	0.04	0.41	5.07	8.89			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.08	0.82	1.49	1.49			N/A	N/A
B - Eagle Way West	0.21	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.11	0.04	0.37	2.78	5.09			N/A	N/A
D - Anson Rd East	1.04	0.03	0.31	1.82	5.21			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	922	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	652	100.000
D - Anson Rd East		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	723	194
	B - Eagle Way West	30	0	18	9
	C - A12 South	565	1	0	86
	D - Anson Rd East	68	0	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	12	0	0	14
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	1.99	0.6	2.6	A	846	1269
B - Eagle Way West	0.06	3.92	0.1	0.5	A	52	78
C - A12 South	0.31	2.28	0.5	1.8	A	599	898
D - Anson Rd East	0.12	3.11	0.1	0.5	A	135	203

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	694	174	84	2852	0.243	693	498	0.0	0.3	1.667	A
B - Eagle Way West	43	11	540	1111	0.038	42	4	0.0	0.0	3.370	A
C - A12 South	491	123	55	2313	0.212	490	616	0.0	0.3	1.973	A
D - Anson Rd East	111	28	560	1452	0.077	111	217	0.0	0.1	2.684	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	829	207	101	2841	0.292	828	596	0.3	0.4	1.788	A
B - Eagle Way West	51	13	647	1056	0.048	51	5	0.0	0.1	3.582	A
C - A12 South	586	147	65	2306	0.254	586	737	0.3	0.3	2.093	A
D - Anson Rd East	133	33	670	1397	0.095	133	260	0.1	0.1	2.847	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1015	254	124	2826	0.359	1015	730	0.4	0.6	1.987	A
B - Eagle Way West	62	16	792	980	0.064	62	6	0.1	0.1	3.921	A
C - A12 South	718	180	80	2296	0.313	718	903	0.3	0.5	2.281	A
D - Anson Rd East	162	41	820	1321	0.123	162	318	0.1	0.1	3.106	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1015	254	124	2826	0.359	1015	731	0.6	0.6	1.987	A
B - Eagle Way West	62	16	792	980	0.064	62	6	0.1	0.1	3.922	A
C - A12 South	718	180	80	2296	0.313	718	903	0.5	0.5	2.281	A
D - Anson Rd East	162	41	821	1321	0.123	162	318	0.1	0.1	3.107	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	829	207	101	2841	0.292	829	597	0.6	0.4	1.789	A
B - Eagle Way West	51	13	647	1055	0.048	51	5	0.1	0.1	3.584	A
C - A12 South	586	147	66	2306	0.254	587	738	0.5	0.3	2.096	A
D - Anson Rd East	133	33	671	1396	0.095	133	260	0.1	0.1	2.851	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	694	174	85	2852	0.243	694	500	0.4	0.3	1.668	A
B - Eagle Way West	43	11	542	1110	0.038	43	4	0.1	0.0	3.375	A
C - A12 South	491	123	55	2313	0.212	491	618	0.3	0.3	1.977	A
D - Anson Rd East	111	28	562	1451	0.077	111	218	0.1	0.1	2.686	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Anson Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.25	0.56	0.56			N/A	N/A
B - Eagle Way West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.45	0.03	0.25	0.45	0.48			N/A	N/A
D - Anson Rd East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.30	1.40	2.63			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.45	0.03	0.32	1.40	1.81			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	5.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1659	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1448	100.000
D - Anson Rd East		ONE HOUR	✓	303	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	58	1242	358
	B - Eagle Way West	90	0	54	19
	C - A12 South	1242	7	0	199
	D - Anson Rd East	179	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	8	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	14	0	0	4
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.17	2.1	4.5	A	1522	2284
B - Eagle Way West	0.38	12.11	0.6	2.7	B	150	225
C - A12 South	0.73	6.16	2.7	5.7	A	1328	1992
D - Anson Rd East	0.34	5.60	0.5	2.3	A	278	417

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1249	312	204	2747	0.455	1246	1134	0.0	0.8	2.393	A
B - Eagle Way West	123	31	1216	776	0.158	122	50	0.0	0.2	5.502	A
C - A12 South	1090	272	180	2232	0.488	1086	1065	0.0	0.9	3.131	A
D - Anson Rd East	228	57	1018	1218	0.188	227	432	0.0	0.2	3.632	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1492	373	244	2723	0.548	1490	1357	0.8	1.2	2.916	A
B - Eagle Way West	147	37	1455	650	0.226	146	60	0.2	0.3	7.139	A
C - A12 South	1301	325	216	2209	0.589	1299	1274	0.9	1.4	3.949	A
D - Anson Rd East	273	68	1217	1116	0.244	272	517	0.2	0.3	4.264	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1827	457	298	2690	0.679	1823	1660	1.2	2.1	4.138	A
B - Eagle Way West	180	45	1779	480	0.375	179	73	0.3	0.6	11.905	B
C - A12 South	1594	398	264	2178	0.732	1589	1559	1.4	2.7	6.056	A
D - Anson Rd East	334	83	1489	978	0.341	333	632	0.3	0.5	5.576	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1827	457	299	2689	0.679	1827	1665	2.1	2.1	4.174	A
B - Eagle Way West	180	45	1785	477	0.377	180	73	0.6	0.6	12.105	B
C - A12 South	1594	398	264	2178	0.732	1594	1562	2.7	2.7	6.156	A
D - Anson Rd East	334	83	1492	976	0.342	334	634	0.5	0.5	5.602	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1492	373	246	2722	0.548	1495	1365	2.1	1.2	2.942	A
B - Eagle Way West	147	37	1463	646	0.227	148	60	0.6	0.3	7.244	A
C - A12 South	1301	325	216	2209	0.589	1306	1279	2.7	1.4	4.010	A
D - Anson Rd East	273	68	1222	1114	0.245	273	519	0.5	0.3	4.288	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1249	312	205	2746	0.455	1251	1141	1.2	0.8	2.408	A
B - Eagle Way West	123	31	1223	772	0.159	123	50	0.3	0.2	5.551	A
C - A12 South	1090	272	181	2231	0.488	1092	1069	1.4	1.0	3.163	A
D - Anson Rd East	228	57	1022	1215	0.188	229	434	0.3	0.2	3.648	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	0.95	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.05	0.47	2.90	4.52			N/A	N/A
B - Eagle Way West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - A12 South	1.42	0.05	0.47	3.62	5.70			N/A	N/A
D - Anson Rd East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.09	0.03	0.26	2.09	2.09			N/A	N/A
B - Eagle Way West	0.59	0.03	0.26	0.59	0.59			N/A	N/A
C - A12 South	2.66	0.03	0.27	2.66	3.58			N/A	N/A
D - Anson Rd East	0.51	0.03	0.25	0.51	0.51			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.10	0.03	0.26	2.10	2.10			N/A	N/A
B - Eagle Way West	0.60	0.03	0.32	1.24	2.71			N/A	N/A
C - A12 South	2.69	0.03	0.26	2.69	2.69			N/A	N/A
D - Anson Rd East	0.52	0.03	0.31	1.47	2.31			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.25	1.15	1.77	1.98			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.45	0.10	1.14	2.79	3.71			N/A	N/A
D - Anson Rd East	0.33	0.00	0.00	0.33	0.33			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.84	0.07	0.80	1.27	1.72			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	0.96	0.05	0.53	1.98	2.93			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	10.34	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1994	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1602	100.000
D - Anson Rd East		ONE HOUR	✓	338	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	167	1168	659
	B - Eagle Way West	142	0	32	43
	C - A12 South	1417	22	0	162
	D - Anson Rd East	210	21	106	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	12	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	14	5	0	5
	D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	7.43	4.4	15.1	A	1830	2745
B - Eagle Way West	0.65	27.49	1.8	9.1	D	200	300
C - A12 South	0.86	12.47	5.9	29.8	B	1470	2205
D - Anson Rd East	0.39	6.30	0.6	3.0	A	310	465

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1501	375	179	2729	0.550	1496	1326	0.0	1.2	2.909	A
B - Eagle Way West	164	41	1342	702	0.233	163	157	0.0	0.3	6.654	A
C - A12 South	1206	302	299	2139	0.564	1201	980	0.0	1.3	3.816	A
D - Anson Rd East	255	64	1026	1192	0.214	253	650	0.0	0.3	3.832	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1793	448	214	2708	0.662	1790	1587	1.2	1.9	3.907	A
B - Eagle Way West	196	49	1606	563	0.348	195	188	0.3	0.5	9.766	A
C - A12 South	1440	360	358	2101	0.685	1437	1173	1.3	2.1	5.389	A
D - Anson Rd East	304	76	1227	1088	0.279	304	777	0.3	0.4	4.588	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2196	549	260	2680	0.819	2186	1932	1.9	4.3	7.144	A
B - Eagle Way West	240	60	1957	376	0.637	235	230	0.5	1.6	24.796	C
C - A12 South	1764	441	437	2050	0.860	1750	1432	2.1	5.7	11.492	B
D - Anson Rd East	372	93	1498	947	0.393	371	948	0.4	0.6	6.241	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2196	549	263	2679	0.820	2195	1947	4.3	4.4	7.427	A
B - Eagle Way West	240	60	1971	369	0.649	239	231	1.6	1.8	27.489	D
C - A12 South	1764	441	439	2049	0.861	1763	1438	5.7	5.9	12.471	B
D - Anson Rd East	372	93	1505	943	0.395	372	953	0.6	0.6	6.301	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1793	448	218	2706	0.662	1802	1608	4.4	2.0	4.028	A
B - Eagle Way West	196	49	1625	553	0.354	200	190	1.8	0.6	10.358	B
C - A12 South	1440	360	360	2100	0.686	1455	1181	5.9	2.2	5.705	A
D - Anson Rd East	304	76	1236	1083	0.281	305	784	0.6	0.4	4.633	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1501	375	180	2728	0.550	1504	1336	2.0	1.2	2.949	A
B - Eagle Way West	164	41	1352	697	0.235	165	158	0.6	0.3	6.772	A
C - A12 South	1206	302	301	2138	0.564	1210	986	2.2	1.3	3.894	A
D - Anson Rd East	255	64	1031	1189	0.214	255	653	0.4	0.3	3.857	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.56	1.07	1.21	1.58			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.28	0.56	1.16	1.58	1.80			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.93	0.04	0.40	5.18	9.44			N/A	N/A
B - Eagle Way West	0.52	0.05	0.50	1.30	1.40			N/A	N/A
C - A12 South	2.14	0.04	0.43	5.82	10.12			N/A	N/A
D - Anson Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.34	0.03	0.29	4.34	15.13			N/A	N/A
B - Eagle Way West	1.63	0.03	0.29	1.63	7.28			N/A	N/A
C - A12 South	5.65	0.03	0.33	9.93	29.76			N/A	N/A
D - Anson Rd East	0.64	0.03	0.25	0.64	0.64			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.44	0.03	0.27	4.44	4.44			N/A	N/A
B - Eagle Way West	1.76	0.03	0.32	3.21	9.13			N/A	N/A
C - A12 South	5.90	0.03	0.29	5.90	19.16			N/A	N/A
D - Anson Rd East	0.65	0.03	0.30	1.41	3.04			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.06	1.00	4.87	7.10			N/A	N/A
B - Eagle Way West	0.56	0.04	0.43	1.15	1.15			N/A	N/A
C - A12 South	2.22	0.05	0.50	6.00	9.66			N/A	N/A
D - Anson Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.04	0.40	3.15	5.41			N/A	N/A
B - Eagle Way West	0.31	0.03	0.31	1.09	1.38			N/A	N/A
C - A12 South	1.31	0.03	0.34	3.13	6.59			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	16.06	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1730	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1572	100.000
D - Anson Rd East		ONE HOUR	✓	842	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	160	1013	557
	B - Eagle Way West	134	0	27	67
	C - A12 South	1273	42	1	256
	D - Anson Rd East	499	72	271	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	12	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	10	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	5.07	2.7	5.9	A	1588	2382
B - Eagle Way West	0.85	67.49	4.3	21.4	F	208	312
C - A12 South	0.90	18.80	8.6	43.9	C	1442	2163
D - Anson Rd East	0.84	20.47	5.0	25.7	C	773	1159

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1303	326	262	2686	0.485	1299	1427	0.0	0.9	2.589	A
B - Eagle Way West	171	43	1520	656	0.261	170	206	0.0	0.3	7.381	A
C - A12 South	1183	296	548	2077	0.570	1178	984	0.0	1.3	3.983	A
D - Anson Rd East	634	159	901	1330	0.477	631	660	0.0	0.9	5.120	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1556	389	314	2656	0.586	1554	1707	0.9	1.4	3.261	A
B - Eagle Way West	204	51	1818	504	0.405	203	247	0.3	0.7	11.903	B
C - A12 South	1413	353	656	2008	0.704	1409	1177	1.3	2.3	5.970	A
D - Anson Rd East	757	189	1078	1233	0.614	755	789	0.9	1.6	7.482	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1905	476	377	2618	0.728	1900	2066	1.4	2.6	4.984	A
B - Eagle Way West	250	62	2204	307	0.814	239	300	0.7	3.4	47.368	E
C - A12 South	1731	433	796	1918	0.902	1709	1436	2.3	7.8	15.791	C
D - Anson Rd East	927	232	1318	1101	0.842	915	960	1.6	4.7	18.193	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1905	476	383	2614	0.729	1905	2092	2.6	2.7	5.074	A
B - Eagle Way West	250	62	2230	294	0.850	246	302	3.4	4.3	67.492	F
C - A12 South	1731	433	804	1913	0.905	1728	1443	7.8	8.6	18.802	C
D - Anson Rd East	927	232	1322	1099	0.844	926	967	4.7	5.0	20.471	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1556	389	325	2649	0.587	1560	1749	2.7	1.4	3.323	A
B - Eagle Way West	204	51	1855	485	0.421	218	249	4.3	0.7	14.199	B
C - A12 South	1413	353	667	2000	0.706	1437	1188	8.6	2.5	6.659	A
D - Anson Rd East	757	189	1085	1230	0.616	771	800	5.0	1.6	8.069	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1303	326	265	2684	0.485	1305	1441	1.4	0.9	2.614	A
B - Eagle Way West	171	43	1533	649	0.263	172	207	0.7	0.4	7.577	A
C - A12 South	1183	296	553	2074	0.571	1188	990	2.5	1.3	4.085	A
D - Anson Rd East	634	159	906	1328	0.478	637	664	1.6	0.9	5.232	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A12 South	1.31	0.55	1.22	1.72	1.89			N/A	N/A
D - Anson Rd East	0.90	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.40	0.04	0.44	3.64	5.92			N/A	N/A
B - Eagle Way West	0.67	0.05	0.48	1.01	1.63			N/A	N/A
C - A12 South	2.32	0.04	0.42	6.36	11.30			N/A	N/A
D - Anson Rd East	1.56	0.05	0.48	3.98	6.28			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.62	0.03	0.27	2.62	2.62			N/A	N/A
B - Eagle Way West	3.37	0.05	0.46	9.47	16.38			N/A	N/A
C - A12 South	7.81	0.04	0.42	20.74	42.50			N/A	N/A
D - Anson Rd East	4.73	0.04	0.36	11.14	25.72			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.66	0.03	0.26	2.66	2.66			N/A	N/A
B - Eagle Way West	4.33	0.05	0.48	12.32	21.39			N/A	N/A
C - A12 South	8.56	0.03	0.33	13.53	43.94			N/A	N/A
D - Anson Rd East	5.04	0.03	0.31	5.69	23.61			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.13	1.20	2.56	3.24			N/A	N/A
B - Eagle Way West	0.74	0.04	0.36	1.75	2.98			N/A	N/A
C - A12 South	2.46	0.04	0.45	6.79	11.65			N/A	N/A
D - Anson Rd East	1.64	0.04	0.44	4.34	7.15			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.06	0.66	1.86	2.66			N/A	N/A
B - Eagle Way West	0.36	0.03	0.28	0.86	1.54			N/A	N/A
C - A12 South	1.34	0.03	0.32	2.59	6.91			N/A	N/A
D - Anson Rd East	0.92	0.03	0.32	1.91	4.58			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	11.63	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1643	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1550	100.000
D - Anson Rd East		ONE HOUR	✓	915	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	91	1068	483
	B - Eagle Way West	96	0	29	36
	C - A12 South	1266	41	0	243
	D - Anson Rd East	529	77	308	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	7	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.01	2.0	4.2	A	1507	2261
B - Eagle Way West	0.53	22.68	1.1	5.4	C	147	221
C - A12 South	0.84	10.89	5.0	22.8	B	1422	2133
D - Anson Rd East	0.88	25.23	6.7	35.7	D	840	1259

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1237	309	231	2770	0.446	1233	1416	0.0	0.8	2.338	A
B - Eagle Way West	121	30	1528	687	0.176	120	157	0.0	0.2	6.334	A
C - A12 South	1167	292	523	2196	0.531	1162	1054	0.0	1.1	3.468	A
D - Anson Rd East	689	172	892	1366	0.504	685	573	0.0	1.0	5.254	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1477	369	277	2743	0.538	1475	1695	0.8	1.2	2.838	A
B - Eagle Way West	144	36	1828	539	0.267	143	188	0.2	0.4	9.084	A
C - A12 South	1393	348	625	2128	0.655	1390	1261	1.1	1.9	4.859	A
D - Anson Rd East	823	206	1067	1272	0.647	819	685	1.0	1.8	7.895	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1809	452	337	2707	0.668	1805	2060	1.2	2.0	3.978	A
B - Eagle Way West	176	44	2223	344	0.513	174	228	0.4	1.0	20.875	C
C - A12 South	1706	427	757	2041	0.836	1695	1539	1.9	4.8	10.082	B
D - Anson Rd East	1007	252	1305	1144	0.880	990	837	1.8	6.1	21.317	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1809	452	340	2705	0.669	1808	2079	2.0	2.0	4.013	A
B - Eagle Way West	176	44	2242	334	0.528	176	230	1.0	1.1	22.681	C
C - A12 South	1706	427	767	2034	0.839	1706	1546	4.8	5.0	10.892	B
D - Anson Rd East	1007	252	1308	1143	0.881	1005	840	6.1	6.7	25.233	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1477	369	281	2741	0.539	1480	1722	2.0	1.2	2.864	A
B - Eagle Way West	144	36	1856	526	0.274	147	190	1.1	0.4	9.574	A
C - A12 South	1393	348	640	2118	0.658	1405	1272	5.0	2.0	5.134	A
D - Anson Rd East	823	206	1071	1270	0.648	842	690	6.7	1.9	8.761	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1237	309	233	2769	0.447	1238	1428	1.2	0.8	2.355	A
B - Eagle Way West	121	30	1540	682	0.177	121	158	0.4	0.2	6.435	A
C - A12 South	1167	292	528	2193	0.532	1170	1060	2.0	1.1	3.531	A
D - Anson Rd East	689	172	896	1364	0.505	692	576	1.9	1.0	5.386	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.12	0.55	1.03	1.12	1.12			N/A	N/A
D - Anson Rd East	1.01	0.55	1.01	1.42	1.47			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.05	0.48	2.76	4.18			N/A	N/A
B - Eagle Way West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.87	0.04	0.42	5.01	8.74			N/A	N/A
D - Anson Rd East	1.79	0.05	0.47	4.75	7.65			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.03	0.26	1.99	1.99			N/A	N/A
B - Eagle Way West	1.01	0.03	0.27	1.01	1.41			N/A	N/A
C - A12 South	4.78	0.03	0.31	5.82	22.84			N/A	N/A
D - Anson Rd East	6.12	0.04	0.43	16.84	32.52			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.00	0.03	0.26	2.00	2.00			N/A	N/A
B - Eagle Way West	1.08	0.03	0.32	2.26	5.43			N/A	N/A
C - A12 South	5.00	0.03	0.28	5.00	11.95			N/A	N/A
D - Anson Rd East	6.67	0.03	0.34	12.52	35.68			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.31	1.12	1.66	1.89			N/A	N/A
B - Eagle Way West	0.38	0.03	0.32	1.03	1.26			N/A	N/A
C - A12 South	1.95	0.05	0.70	5.05	7.77			N/A	N/A
D - Anson Rd East	1.88	0.04	0.41	5.05	8.86			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.08	0.81	1.03	1.57			N/A	N/A
B - Eagle Way West	0.22	0.03	0.26	0.48	0.56			N/A	N/A
C - A12 South	1.15	0.04	0.36	2.83	5.50			N/A	N/A
D - Anson Rd East	1.03	0.03	0.31	1.81	5.19			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	926	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	598	100.000
D - Anson Rd East		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	727	195
	B - Eagle Way West	32	0	19	9
	C - A12 South	507	1	0	90
	D - Anson Rd East	68	0	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	13
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.00	0.6	2.7	A	850	1275
B - Eagle Way West	0.06	3.77	0.1	0.5	A	55	82
C - A12 South	0.28	2.13	0.4	1.1	A	549	824
D - Anson Rd East	0.12	3.12	0.1	0.5	A	135	203

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	697	174	89	2847	0.245	696	456	0.0	0.3	1.673	A
B - Eagle Way West	45	11	500	1137	0.039	45	4	0.0	0.0	3.295	A
C - A12 South	450	113	55	2368	0.190	450	620	0.0	0.2	1.876	A
D - Anson Rd East	111	28	564	1449	0.077	111	221	0.0	0.1	2.689	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	833	208	106	2835	0.294	832	545	0.3	0.4	1.796	A
B - Eagle Way West	53	13	598	1087	0.049	53	5	0.0	0.1	3.481	A
C - A12 South	538	134	65	2361	0.228	538	741	0.2	0.3	1.974	A
D - Anson Rd East	133	33	674	1394	0.095	133	264	0.1	0.1	2.853	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1020	255	130	2820	0.362	1019	667	0.4	0.6	1.999	A
B - Eagle Way West	66	16	732	1019	0.064	65	6	0.1	0.1	3.774	A
C - A12 South	659	165	80	2350	0.280	658	908	0.3	0.4	2.127	A
D - Anson Rd East	162	41	826	1318	0.123	162	324	0.1	0.1	3.114	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1020	255	130	2820	0.362	1020	668	0.6	0.6	1.999	A
B - Eagle Way West	66	16	733	1019	0.064	66	6	0.1	0.1	3.775	A
C - A12 South	659	165	80	2350	0.280	659	908	0.4	0.4	2.127	A
D - Anson Rd East	162	41	826	1318	0.123	162	324	0.1	0.1	3.115	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	833	208	107	2835	0.294	833	546	0.6	0.4	1.797	A
B - Eagle Way West	53	13	599	1087	0.049	54	5	0.1	0.1	3.486	A
C - A12 South	538	134	66	2361	0.228	538	742	0.4	0.3	1.977	A
D - Anson Rd East	133	33	675	1394	0.095	133	265	0.1	0.1	2.855	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	697	174	89	2847	0.245	698	457	0.4	0.3	1.674	A
B - Eagle Way West	45	11	501	1136	0.039	45	4	0.1	0.0	3.300	A
C - A12 South	450	113	55	2368	0.190	451	622	0.3	0.2	1.879	A
D - Anson Rd East	111	28	565	1449	0.077	111	222	0.1	0.1	2.691	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - Eagle Way West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.29	0.00	0.00	0.29	0.29			N/A	N/A
D - Anson Rd East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.03	0.25	0.56	0.56			N/A	N/A
B - Eagle Way West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.39	0.03	0.25	0.45	0.48			N/A	N/A
D - Anson Rd East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.39	2.66			N/A	N/A
B - Eagle Way West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C - A12 South	0.39	0.03	0.33	1.07	1.07			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C - A12 South	0.30	0.00	0.00	0.30	0.30			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	5.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1660	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1441	100.000
D - Anson Rd East		ONE HOUR	✓	303	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	61	1239	359
	B - Eagle Way West	95	0	57	20
	C - A12 South	1213	7	0	220
	D - Anson Rd East	183	2	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	9	0	0	4
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	4.15	2.1	4.5	A	1523	2285
B - Eagle Way West	0.37	11.20	0.6	2.6	B	157	236
C - A12 South	0.70	5.36	2.3	4.8	A	1322	1983
D - Anson Rd East	0.34	5.55	0.5	2.3	A	278	418

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1250	312	223	2759	0.453	1247	1119	0.0	0.8	2.375	A
B - Eagle Way West	129	32	1214	798	0.162	128	53	0.0	0.2	5.369	A
C - A12 South	1085	271	185	2315	0.469	1081	1061	0.0	0.9	2.909	A
D - Anson Rd East	228	57	1019	1222	0.187	227	450	0.0	0.2	3.618	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1492	373	267	2732	0.546	1491	1339	0.8	1.2	2.895	A
B - Eagle Way West	154	39	1453	677	0.228	154	63	0.2	0.3	6.880	A
C - A12 South	1295	324	222	2291	0.565	1294	1270	0.9	1.3	3.604	A
D - Anson Rd East	273	68	1219	1121	0.243	272	539	0.2	0.3	4.240	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1828	457	326	2696	0.678	1824	1638	1.2	2.1	4.113	A
B - Eagle Way West	189	47	1777	512	0.369	188	77	0.3	0.6	11.051	B
C - A12 South	1586	397	271	2258	0.703	1582	1554	1.3	2.3	5.298	A
D - Anson Rd East	334	83	1492	984	0.339	333	659	0.3	0.5	5.527	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1828	457	327	2695	0.678	1828	1643	2.1	2.1	4.149	A
B - Eagle Way West	189	47	1781	510	0.370	189	77	0.6	0.6	11.203	B
C - A12 South	1586	397	272	2257	0.703	1586	1557	2.3	2.3	5.364	A
D - Anson Rd East	334	83	1495	983	0.340	334	660	0.5	0.5	5.550	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1492	373	269	2731	0.546	1496	1346	2.1	1.2	2.921	A
B - Eagle Way West	154	39	1459	674	0.229	155	63	0.6	0.3	6.957	A
C - A12 South	1295	324	223	2290	0.566	1299	1274	2.3	1.3	3.651	A
D - Anson Rd East	273	68	1224	1119	0.244	273	541	0.5	0.3	4.263	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1250	312	224	2758	0.453	1251	1125	1.2	0.8	2.392	A
B - Eagle Way West	129	32	1220	795	0.162	130	53	0.3	0.2	5.413	A
C - A12 South	1085	271	186	2314	0.469	1086	1066	1.3	0.9	2.937	A
D - Anson Rd East	228	57	1024	1219	0.187	229	452	0.3	0.2	3.637	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C - A12 South	0.88	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.05	0.47	2.88	4.47			N/A	N/A
B - Eagle Way West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - A12 South	1.29	0.05	0.48	3.14	4.85			N/A	N/A
D - Anson Rd East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.08	0.03	0.26	2.08	2.08			N/A	N/A
B - Eagle Way West	0.57	0.03	0.26	0.57	0.57			N/A	N/A
C - A12 South	2.32	0.03	0.27	2.32	2.32			N/A	N/A
D - Anson Rd East	0.51	0.03	0.25	0.51	0.51			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.09	0.03	0.26	2.09	2.09			N/A	N/A
B - Eagle Way West	0.58	0.03	0.32	1.18	2.64			N/A	N/A
C - A12 South	2.34	0.03	0.26	2.34	2.34			N/A	N/A
D - Anson Rd East	0.51	0.03	0.31	1.46	2.27			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.25	1.14	1.75	1.97			N/A	N/A
B - Eagle Way West	0.30	0.00	0.00	0.30	0.30			N/A	N/A
C - A12 South	1.31	0.13	1.15	2.17	2.81			N/A	N/A
D - Anson Rd East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.07	0.80	1.23	1.70			N/A	N/A
B - Eagle Way West	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C - A12 South	0.89	0.06	0.68	1.68	2.24			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	14.55	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2047	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1769	100.000
D - Anson Rd East		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1212	660
	B - Eagle Way West	149	0	34	46
	C - A12 South	1539	23	0	207
	D - Anson Rd East	206	22	116	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	10	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	9	5	0	4
	D - Anson Rd East	10	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	8.56	5.2	21.9	A	1878	2817
B - Eagle Way West	0.79	50.52	3.3	17.4	F	210	315
C - A12 South	0.91	18.47	9.5	49.4	C	1623	2435
D - Anson Rd East	0.41	6.61	0.7	3.2	A	317	475

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	385	215	2732	0.564	1536	1420	0.0	1.3	2.997	A
B - Eagle Way West	172	43	1464	667	0.258	171	165	0.0	0.3	7.237	A
C - A12 South	1332	333	303	2228	0.598	1326	1021	0.0	1.5	3.964	A
D - Anson Rd East	260	65	1066	1180	0.220	259	685	0.0	0.3	3.904	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1840	460	257	2706	0.680	1837	1698	1.3	2.1	4.123	A
B - Eagle Way West	206	51	1751	520	0.395	204	198	0.3	0.6	11.364	B
C - A12 South	1590	398	363	2188	0.727	1586	1221	1.5	2.6	5.931	A
D - Anson Rd East	310	78	1275	1073	0.289	310	819	0.3	0.4	4.716	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2253	563	311	2674	0.843	2241	2059	2.1	5.1	8.103	A
B - Eagle Way West	252	63	2126	329	0.766	243	241	0.6	2.8	39.072	E
C - A12 South	1948	487	444	2134	0.913	1923	1490	2.6	8.7	15.573	C
D - Anson Rd East	380	95	1555	929	0.409	379	997	0.4	0.7	6.530	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2253	563	315	2671	0.844	2253	2082	5.1	5.2	8.564	A
B - Eagle Way West	252	63	2147	317	0.793	250	243	2.8	3.3	50.518	F
C - A12 South	1948	487	445	2133	0.913	1945	1498	8.7	9.5	18.467	C
D - Anson Rd East	380	95	1563	925	0.411	380	1005	0.7	0.7	6.608	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1840	460	265	2702	0.681	1852	1734	5.2	2.2	4.297	A
B - Eagle Way West	206	51	1783	504	0.408	216	200	3.3	0.7	12.940	B
C - A12 South	1590	398	366	2187	0.727	1617	1233	9.5	2.7	6.611	A
D - Anson Rd East	310	78	1287	1066	0.291	311	830	0.7	0.4	4.774	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1541	385	217	2731	0.564	1544	1432	2.2	1.3	3.044	A
B - Eagle Way West	172	43	1476	661	0.261	174	166	0.7	0.4	7.408	A
C - A12 South	1332	333	305	2227	0.598	1337	1027	2.7	1.5	4.066	A
D - Anson Rd East	260	65	1072	1177	0.221	260	690	0.4	0.3	3.933	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.56	1.16	1.58	1.79			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.47	0.55	1.37	1.90	2.22			N/A	N/A
D - Anson Rd East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.09	0.04	0.39	5.61	10.40			N/A	N/A
B - Eagle Way West	0.64	0.05	0.53	1.30	1.30			N/A	N/A
C - A12 South	2.60	0.04	0.42	7.14	12.84			N/A	N/A
D - Anson Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.07	0.03	0.30	5.07	21.86			N/A	N/A
B - Eagle Way West	2.75	0.04	0.38	7.22	14.40			N/A	N/A
C - A12 South	8.70	0.04	0.43	23.67	47.15			N/A	N/A
D - Anson Rd East	0.68	0.03	0.25	0.68	0.68			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.23	0.03	0.28	5.23	7.59			N/A	N/A
B - Eagle Way West	3.29	0.04	0.39	8.70	17.37			N/A	N/A
C - A12 South	9.46	0.03	0.34	15.91	49.42			N/A	N/A
D - Anson Rd East	0.69	0.03	0.29	1.37	3.22			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.17	0.06	0.86	5.61	8.46			N/A	N/A
B - Eagle Way West	0.71	0.04	0.39	1.60	2.57			N/A	N/A
C - A12 South	2.73	0.04	0.45	7.58	13.10			N/A	N/A
D - Anson Rd East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.04	0.37	3.36	6.17			N/A	N/A
B - Eagle Way West	0.36	0.03	0.29	1.08	1.53			N/A	N/A
C - A12 South	1.50	0.03	0.32	2.91	7.81			N/A	N/A
D - Anson Rd East	0.29	0.00	0.00	0.29	0.29			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	24.34	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1866	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1708	100.000
D - Anson Rd East		ONE HOUR	✓	828	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	169	1139	558
	B - Eagle Way West	141	0	28	70
	C - A12 South	1397	45	1	266
	D - Anson Rd East	461	76	291	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	8	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	7	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	5.91	3.3	7.5	A	1712	2568
B - Eagle Way West	0.99	129.29	9.5	32.9	F	219	329
C - A12 South	0.95	29.26	14.4	77.4	D	1567	2351
D - Anson Rd East	0.88	26.27	6.3	33.7	D	760	1140

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1405	351	273	2736	0.513	1400	1496	0.0	1.0	2.688	A
B - Eagle Way West	180	45	1591	634	0.284	178	217	0.0	0.4	7.876	A
C - A12 South	1286	321	528	2141	0.600	1280	1095	0.0	1.5	4.151	A
D - Anson Rd East	623	156	1003	1291	0.483	620	671	0.0	0.9	5.337	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1677	419	327	2704	0.620	1675	1789	1.0	1.6	3.492	A
B - Eagle Way West	215	54	1903	478	0.449	213	259	0.4	0.8	13.519	B
C - A12 South	1535	384	632	2073	0.741	1530	1310	1.5	2.8	6.567	A
D - Anson Rd East	745	186	1200	1186	0.628	742	802	0.9	1.6	8.051	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2054	514	388	2666	0.770	2048	2148	1.6	3.3	5.756	A
B - Eagle Way West	263	66	2293	282	0.932	243	315	0.8	5.8	71.886	F
C - A12 South	1880	470	765	1986	0.947	1843	1595	2.8	12.1	21.305	C
D - Anson Rd East	912	228	1465	1045	0.873	895	971	1.6	5.7	22.102	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2054	514	395	2663	0.771	2054	2182	3.3	3.3	5.908	A
B - Eagle Way West	263	66	2328	265	0.993	248	318	5.8	9.5	129.287	F
C - A12 South	1880	470	775	1979	0.950	1871	1605	12.1	14.4	29.257	D
D - Anson Rd East	912	228	1470	1042	0.875	910	979	5.7	6.3	26.271	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1677	419	350	2690	0.623	1684	1863	3.3	1.7	3.599	A
B - Eagle Way West	215	54	1964	447	0.480	249	263	9.5	1.0	21.197	C
C - A12 South	1535	384	646	2064	0.744	1581	1327	14.4	3.0	8.131	A
D - Anson Rd East	745	186	1210	1180	0.631	763	823	6.3	1.8	8.972	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1405	351	277	2734	0.514	1407	1512	1.7	1.1	2.717	A
B - Eagle Way West	180	45	1607	626	0.287	182	218	1.0	0.4	8.145	A
C - A12 South	1286	321	533	2138	0.601	1292	1102	3.0	1.5	4.282	A
D - Anson Rd East	623	156	1008	1288	0.484	627	675	1.8	0.9	5.471	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C - A12 South	1.49	0.45	1.35	2.03	2.63			N/A	N/A
D - Anson Rd East	0.92	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.04	0.41	4.30	7.45			N/A	N/A
B - Eagle Way West	0.79	0.04	0.44	1.73	2.62			N/A	N/A
C - A12 South	2.78	0.04	0.42	7.67	13.80			N/A	N/A
D - Anson Rd East	1.65	0.05	0.47	4.31	6.85			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.27	0.03	0.28	3.27	5.69			N/A	N/A
B - Eagle Way West	5.75	0.11	2.25	14.89	21.19			N/A	N/A
C - A12 South	12.05	0.07	1.47	35.31	57.47			N/A	N/A
D - Anson Rd East	5.73	0.04	0.43	15.73	30.48			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.32	0.03	0.26	3.32	3.32			N/A	N/A
B - Eagle Way West	9.47	0.20	4.71	23.83	32.90			N/A	N/A
C - A12 South	14.36	0.05	0.48	40.37	77.37			N/A	N/A
D - Anson Rd East	6.28	0.03	0.34	11.95	33.68			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.67	0.09	1.19	3.51	4.74			N/A	N/A
B - Eagle Way West	0.96	0.03	0.34	2.22	4.65			N/A	N/A
C - A12 South	3.00	0.04	0.42	8.26	15.06			N/A	N/A
D - Anson Rd East	1.75	0.04	0.41	4.69	8.13			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.05	0.47	2.49	3.76			N/A	N/A
B - Eagle Way West	0.41	0.03	0.27	0.49	1.46			N/A	N/A
C - A12 South	1.53	0.03	0.30	2.07	7.46			N/A	N/A
D - Anson Rd East	0.95	0.03	0.31	1.66	4.74			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	16.12	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1779	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1686	100.000
D - Anson Rd East		ONE HOUR	✓	902	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	96	1199	484
	B - Eagle Way West	101	0	30	37
	C - A12 South	1388	43	0	255
	D - Anson Rd East	504	81	316	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	4	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	3	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.51	2.4	5.5	A	1633	2449
B - Eagle Way West	0.66	36.36	1.8	9.3	E	155	232
C - A12 South	0.90	16.84	8.2	41.1	C	1547	2321
D - Anson Rd East	0.92	34.30	8.9	48.4	D	828	1242

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1340	335	242	2825	0.474	1336	1493	0.0	0.9	2.411	A
B - Eagle Way West	127	32	1609	651	0.195	126	165	0.0	0.2	6.844	A
C - A12 South	1269	317	510	2220	0.572	1264	1160	0.0	1.3	3.746	A
D - Anson Rd East	679	170	995	1327	0.512	675	583	0.0	1.0	5.490	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1600	400	290	2796	0.572	1598	1786	0.9	1.3	3.001	A
B - Eagle Way West	152	38	1925	496	0.306	151	197	0.2	0.4	10.409	B
C - A12 South	1516	379	611	2153	0.704	1512	1387	1.3	2.3	5.575	A
D - Anson Rd East	811	203	1190	1225	0.662	807	698	1.0	1.9	8.545	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1959	490	351	2759	0.710	1955	2161	1.3	2.4	4.455	A
B - Eagle Way West	186	46	2331	296	0.627	181	240	0.4	1.5	30.307	D
C - A12 South	1856	464	735	2070	0.897	1836	1690	2.3	7.5	14.267	B
D - Anson Rd East	993	248	1455	1087	0.913	970	851	1.9	7.7	26.624	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1959	490	355	2756	0.711	1959	2189	2.4	2.4	4.515	A
B - Eagle Way West	186	46	2359	282	0.658	185	242	1.5	1.8	36.362	E
C - A12 South	1856	464	748	2061	0.901	1853	1700	7.5	8.2	16.836	C
D - Anson Rd East	993	248	1459	1085	0.915	989	855	7.7	8.9	34.298	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1600	400	296	2792	0.573	1604	1829	2.4	1.4	3.042	A
B - Eagle Way West	152	38	1968	475	0.319	157	201	1.8	0.5	11.508	B
C - A12 South	1516	379	631	2140	0.708	1539	1403	8.2	2.5	6.211	A
D - Anson Rd East	811	203	1196	1222	0.663	838	705	8.9	2.0	10.004	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1340	335	245	2824	0.474	1341	1507	1.4	0.9	2.431	A
B - Eagle Way West	127	32	1623	644	0.197	128	166	0.5	0.2	6.984	A
C - A12 South	1269	317	516	2217	0.573	1274	1166	2.5	1.4	3.838	A
D - Anson Rd East	679	170	999	1325	0.513	683	587	2.0	1.1	5.645	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.32	0.55	1.23	1.73	1.89			N/A	N/A
D - Anson Rd East	1.04	0.54	1.03	1.27	1.27			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.33	0.04	0.44	3.39	5.48			N/A	N/A
B - Eagle Way West	0.43	0.03	0.35	1.14	1.32			N/A	N/A
C - A12 South	2.33	0.04	0.41	6.36	11.47			N/A	N/A
D - Anson Rd East	1.90	0.05	0.46	5.11	8.38			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.41	0.03	0.27	2.41	2.41			N/A	N/A
B - Eagle Way West	1.54	0.03	0.30	1.68	7.11			N/A	N/A
C - A12 South	7.53	0.04	0.39	18.75	41.06			N/A	N/A
D - Anson Rd East	7.75	0.06	1.07	22.55	37.76			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.44	0.03	0.26	2.44	2.44			N/A	N/A
B - Eagle Way West	1.78	0.03	0.35	4.24	9.26			N/A	N/A
C - A12 South	8.24	0.03	0.32	10.63	40.03			N/A	N/A
D - Anson Rd East	8.85	0.04	0.42	23.27	48.39			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.17	1.20	2.11	2.74			N/A	N/A
B - Eagle Way West	0.48	0.04	0.39	1.29	1.44			N/A	N/A
C - A12 South	2.48	0.05	0.46	6.86	11.52			N/A	N/A
D - Anson Rd East	2.03	0.04	0.39	5.42	10.05			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.91	0.06	0.75	1.65	2.12			N/A	N/A
B - Eagle Way West	0.25	0.03	0.30	0.89	1.26			N/A	N/A
C - A12 South	1.35	0.03	0.32	2.75	6.97			N/A	N/A
D - Anson Rd East	1.07	0.03	0.30	1.37	5.06			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	928	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	747	100.000
D - Anson Rd East		ONE HOUR	✓	150	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	729	195
	B - Eagle Way West	32	0	19	9
	C - A12 South	655	1	0	91
	D - Anson Rd East	70	0	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	10	0	0	13
	D - Anson Rd East	11	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	2.00	0.6	2.7	A	852	1278
B - Eagle Way West	0.07	4.16	0.1	0.5	A	55	82
C - A12 South	0.35	2.39	0.5	2.5	A	685	1028
D - Anson Rd East	0.12	3.12	0.1	0.5	A	137	206

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	699	175	89	2847	0.245	697	568	0.0	0.3	1.674	A
B - Eagle Way West	45	11	613	1077	0.042	45	4	0.0	0.0	3.485	A
C - A12 South	562	141	56	2347	0.240	561	622	0.0	0.3	2.015	A
D - Anson Rd East	113	28	565	1450	0.078	112	221	0.0	0.1	2.691	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	834	209	107	2836	0.294	834	680	0.3	0.4	1.798	A
B - Eagle Way West	53	13	733	1016	0.053	53	5	0.0	0.1	3.739	A
C - A12 South	671	168	67	2339	0.287	671	743	0.3	0.4	2.158	A
D - Anson Rd East	134	34	676	1394	0.096	134	265	0.1	0.1	2.856	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1022	255	130	2820	0.362	1021	832	0.4	0.6	2.001	A
B - Eagle Way West	66	16	897	932	0.070	65	6	0.1	0.1	4.155	A
C - A12 South	822	206	82	2329	0.353	822	910	0.4	0.5	2.389	A
D - Anson Rd East	165	41	828	1318	0.125	165	324	0.1	0.1	3.120	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1022	255	131	2820	0.362	1022	833	0.6	0.6	2.002	A
B - Eagle Way West	66	16	898	931	0.070	66	6	0.1	0.1	4.157	A
C - A12 South	822	206	82	2329	0.353	822	911	0.5	0.5	2.389	A
D - Anson Rd East	165	41	828	1318	0.125	165	324	0.1	0.1	3.121	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	834	209	107	2836	0.294	835	681	0.6	0.4	1.799	A
B - Eagle Way West	53	13	734	1015	0.053	54	5	0.1	0.1	3.742	A
C - A12 South	671	168	67	2339	0.287	672	744	0.5	0.4	2.161	A
D - Anson Rd East	134	34	677	1394	0.096	135	265	0.1	0.1	2.858	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	699	175	89	2847	0.245	699	570	0.4	0.3	1.678	A
B - Eagle Way West	45	11	614	1076	0.042	45	4	0.1	0.0	3.489	A
C - A12 South	562	141	56	2347	0.240	563	623	0.4	0.3	2.018	A
D - Anson Rd East	113	28	567	1449	0.078	113	222	0.1	0.1	2.694	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.32	0.00	0.00	0.32	0.32			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.31	0.00	0.00	0.31	0.31			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.40	0.00	0.00	0.40	0.40			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.25	0.57	0.57			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.54	0.03	0.25	0.54	0.54			N/A	N/A
D - Anson Rd East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.03	0.30	1.38	2.67			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.54	0.03	0.30	1.38	2.55			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.40	0.00	0.00	0.40	0.40			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.33	0.00	0.00	0.33	0.33			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.32	0.00	0.00	0.32	0.32			N/A	N/A
D - Anson Rd East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	6.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1629	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1553	100.000
D - Anson Rd East		ONE HOUR	✓	302	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	61	1208	359
	B - Eagle Way West	95	0	57	20
	C - A12 South	1327	7	0	219
	D - Anson Rd East	175	2	125	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	12	0	0	4
	D - Anson Rd East	7	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	4.01	2.0	4.1	A	1495	2242
B - Eagle Way West	0.44	14.99	0.8	3.8	B	157	236
C - A12 South	0.78	7.26	3.4	8.9	A	1425	2137
D - Anson Rd East	0.33	5.42	0.5	2.1	A	277	416

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1227	307	222	2754	0.445	1223	1198	0.0	0.8	2.347	A
B - Eagle Way West	129	32	1291	743	0.174	128	53	0.0	0.2	5.850	A
C - A12 South	1169	292	179	2259	0.518	1165	1044	0.0	1.1	3.279	A
D - Anson Rd East	228	57	996	1231	0.185	227	449	0.0	0.2	3.580	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1465	366	266	2727	0.537	1463	1433	0.8	1.2	2.846	A
B - Eagle Way West	154	39	1545	611	0.252	154	63	0.2	0.3	7.865	A
C - A12 South	1396	349	214	2236	0.624	1394	1249	1.1	1.6	4.262	A
D - Anson Rd East	272	68	1192	1133	0.240	271	537	0.2	0.3	4.177	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1794	448	324	2691	0.666	1790	1751	1.2	2.0	3.981	A
B - Eagle Way West	189	47	1888	432	0.437	187	77	0.3	0.8	14.585	B
C - A12 South	1710	427	262	2205	0.775	1703	1528	1.6	3.3	7.077	A
D - Anson Rd East	333	83	1458	999	0.333	332	657	0.3	0.5	5.396	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1794	448	326	2690	0.667	1794	1758	2.0	2.0	4.014	A
B - Eagle Way West	189	47	1895	429	0.441	189	77	0.8	0.8	14.993	B
C - A12 South	1710	427	263	2204	0.776	1709	1531	3.3	3.4	7.264	A
D - Anson Rd East	333	83	1461	997	0.334	333	659	0.5	0.5	5.419	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1465	366	268	2726	0.537	1468	1443	2.0	1.2	2.868	A
B - Eagle Way West	154	39	1555	606	0.255	156	63	0.8	0.3	8.031	A
C - A12 South	1396	349	215	2235	0.624	1403	1254	3.4	1.7	4.358	A
D - Anson Rd East	272	68	1196	1131	0.240	273	540	0.5	0.3	4.198	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1227	307	223	2753	0.446	1228	1205	1.2	0.8	2.362	A
B - Eagle Way West	129	32	1298	739	0.175	130	53	0.3	0.2	5.911	A
C - A12 South	1169	292	180	2258	0.518	1171	1048	1.7	1.1	3.322	A
D - Anson Rd East	228	57	1000	1229	0.185	228	451	0.3	0.2	3.598	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C - A12 South	1.06	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.05	0.48	2.74	4.11			N/A	N/A
B - Eagle Way West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - A12 South	1.64	0.04	0.44	4.35	7.18			N/A	N/A
D - Anson Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.97	0.03	0.26	1.97	1.97			N/A	N/A
B - Eagle Way West	0.75	0.03	0.26	0.75	0.75			N/A	N/A
C - A12 South	3.34	0.03	0.28	3.34	8.93			N/A	N/A
D - Anson Rd East	0.50	0.03	0.25	0.50	0.50			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.03	0.26	1.99	1.99			N/A	N/A
B - Eagle Way West	0.77	0.03	0.31	1.52	3.76			N/A	N/A
C - A12 South	3.39	0.03	0.27	3.39	3.39			N/A	N/A
D - Anson Rd East	0.50	0.03	0.31	1.45	2.13			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.31	1.12	1.65	1.88			N/A	N/A
B - Eagle Way West	0.35	0.03	0.26	0.46	0.49			N/A	N/A
C - A12 South	1.68	0.07	1.06	3.80	5.33			N/A	N/A
D - Anson Rd East	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.08	0.81	1.50	1.55			N/A	N/A
B - Eagle Way West	0.21	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.08	0.04	0.44	2.65	4.14			N/A	N/A
D - Anson Rd East	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	14.16	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2035	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1711	100.000
D - Anson Rd East		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1200	660
	B - Eagle Way West	149	0	34	46
	C - A12 South	1518	23	0	170
	D - Anson Rd East	202	22	115	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	11	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	13	5	0	5
	D - Anson Rd East	10	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	8.20	5.0	19.8	A	1868	2802
B - Eagle Way West	0.78	47.58	3.1	16.5	E	210	315
C - A12 South	0.91	18.29	9.1	46.7	C	1571	2356
D - Anson Rd East	0.41	6.56	0.7	3.2	A	312	468

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1532	383	188	2731	0.561	1527	1400	0.0	1.3	2.979	A
B - Eagle Way West	172	43	1417	670	0.257	171	165	0.0	0.3	7.190	A
C - A12 South	1289	322	300	2164	0.596	1283	1012	0.0	1.5	4.060	A
D - Anson Rd East	256	64	1057	1178	0.217	255	658	0.0	0.3	3.896	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1830	457	225	2709	0.676	1827	1675	1.3	2.1	4.067	A
B - Eagle Way West	206	51	1695	524	0.392	204	198	0.3	0.6	11.219	B
C - A12 South	1539	385	359	2125	0.724	1534	1211	1.5	2.6	6.046	A
D - Anson Rd East	306	76	1265	1071	0.286	305	787	0.3	0.4	4.700	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2241	560	271	2680	0.836	2230	2031	2.1	4.8	7.801	A
B - Eagle Way West	252	63	2058	333	0.755	244	241	0.6	2.6	37.425	E
C - A12 South	1884	471	439	2073	0.909	1861	1478	2.6	8.4	15.539	C
D - Anson Rd East	375	94	1543	927	0.404	373	958	0.4	0.7	6.490	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2241	560	275	2678	0.837	2240	2054	4.8	5.0	8.202	A
B - Eagle Way West	252	63	2079	322	0.781	250	243	2.6	3.1	47.583	E
C - A12 South	1884	471	440	2072	0.909	1882	1485	8.4	9.1	18.294	C
D - Anson Rd East	375	94	1551	923	0.406	375	965	0.7	0.7	6.565	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1830	457	231	2704	0.677	1841	1710	5.0	2.1	4.224	A
B - Eagle Way West	206	51	1726	508	0.405	215	200	3.1	0.7	12.677	B
C - A12 South	1539	385	361	2124	0.725	1564	1222	9.1	2.7	6.717	A
D - Anson Rd East	306	76	1276	1065	0.287	307	796	0.7	0.4	4.757	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1532	383	190	2730	0.561	1536	1412	2.1	1.3	3.025	A
B - Eagle Way West	172	43	1429	664	0.259	174	166	0.7	0.4	7.359	A
C - A12 South	1289	322	302	2162	0.596	1293	1018	2.7	1.5	4.164	A
D - Anson Rd East	256	64	1063	1175	0.218	257	662	0.4	0.3	3.922	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.56	1.13	1.53	1.77			N/A	N/A
B - Eagle Way West	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C - A12 South	1.46	0.56	1.35	1.87	2.06			N/A	N/A
D - Anson Rd East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.05	0.04	0.40	5.51	10.16			N/A	N/A
B - Eagle Way West	0.63	0.05	0.54	1.16	1.16			N/A	N/A
C - A12 South	2.56	0.04	0.43	7.05	12.55			N/A	N/A
D - Anson Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.85	0.03	0.30	4.85	19.83			N/A	N/A
B - Eagle Way West	2.63	0.04	0.37	6.70	13.87			N/A	N/A
C - A12 South	8.37	0.04	0.42	22.51	45.52			N/A	N/A
D - Anson Rd East	0.67	0.03	0.25	0.67	0.67			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.99	0.03	0.27	4.99	6.01			N/A	N/A
B - Eagle Way West	3.11	0.04	0.38	8.00	16.51			N/A	N/A
C - A12 South	9.07	0.03	0.33	14.50	46.75			N/A	N/A
D - Anson Rd East	0.68	0.03	0.29	1.39	3.17			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.06	0.91	5.44	8.10			N/A	N/A
B - Eagle Way West	0.69	0.04	0.39	1.55	2.45			N/A	N/A
C - A12 South	2.70	0.04	0.45	7.47	12.89			N/A	N/A
D - Anson Rd East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.04	0.38	3.32	5.95			N/A	N/A
B - Eagle Way West	0.35	0.03	0.30	1.11	1.50			N/A	N/A
C - A12 South	1.49	0.03	0.32	2.93	7.75			N/A	N/A
D - Anson Rd East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	26.99	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1835	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1690	100.000
D - Anson Rd East		ONE HOUR	✓	825	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	169	1108	558
	B - Eagle Way West	141	0	28	70
	C - A12 South	1377	45	1	267
	D - Anson Rd East	454	76	295	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	11	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	10	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	5.98	3.3	7.4	A	1684	2525
B - Eagle Way West	1.02	147.70	11.1	35.0	F	219	329
C - A12 South	0.96	34.03	16.6	85.1	D	1551	2326
D - Anson Rd East	0.87	25.56	6.1	32.4	D	757	1136

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1381	345	275	2693	0.513	1377	1476	0.0	1.0	2.727	A
B - Eagle Way West	180	45	1572	627	0.287	178	217	0.0	0.4	7.988	A
C - A12 South	1272	318	523	2093	0.608	1266	1075	0.0	1.5	4.323	A
D - Anson Rd East	621	155	980	1291	0.481	618	671	0.0	0.9	5.316	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1649	412	328	2661	0.620	1647	1765	1.0	1.6	3.545	A
B - Eagle Way West	215	54	1880	470	0.457	213	259	0.4	0.8	13.912	B
C - A12 South	1519	380	626	2027	0.750	1514	1285	1.5	2.9	6.940	A
D - Anson Rd East	742	185	1172	1186	0.625	739	803	0.9	1.6	7.993	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2020	505	388	2625	0.770	2013	2114	1.6	3.2	5.825	A
B - Eagle Way West	263	66	2261	276	0.954	241	315	0.8	6.4	78.280	F
C - A12 South	1861	465	758	1942	0.958	1818	1565	2.9	13.5	23.644	C
D - Anson Rd East	909	227	1431	1045	0.869	893	971	1.6	5.6	21.660	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2020	505	394	2621	0.771	2020	2148	3.2	3.3	5.979	A
B - Eagle Way West	263	66	2298	257	1.024	244	318	6.4	11.1	147.700	F
C - A12 South	1861	465	768	1936	0.961	1848	1574	13.5	16.6	34.026	D
D - Anson Rd East	909	227	1436	1043	0.871	906	978	5.6	6.1	25.555	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1649	412	355	2645	0.624	1656	1849	3.3	1.7	3.666	A
B - Eagle Way West	215	54	1949	435	0.494	255	264	11.1	1.0	24.498	C
C - A12 South	1519	380	640	2018	0.753	1573	1303	16.6	3.2	9.036	A
D - Anson Rd East	742	185	1183	1181	0.628	759	827	6.1	1.7	8.883	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1381	345	278	2690	0.513	1384	1492	1.7	1.1	2.761	A
B - Eagle Way West	180	45	1588	619	0.290	182	218	1.0	0.4	8.282	A
C - A12 South	1272	318	528	2090	0.609	1279	1082	3.2	1.6	4.474	A
D - Anson Rd East	621	155	985	1288	0.482	624	677	1.7	0.9	5.446	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - A12 South	1.53	0.39	1.38	2.27	2.78			N/A	N/A
D - Anson Rd East	0.92	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.04	0.41	4.30	7.40			N/A	N/A
B - Eagle Way West	0.82	0.04	0.43	1.82	2.80			N/A	N/A
C - A12 South	2.90	0.04	0.43	8.05	14.38			N/A	N/A
D - Anson Rd East	1.63	0.05	0.47	4.25	6.75			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.25	0.03	0.28	3.25	5.78			N/A	N/A
B - Eagle Way West	6.36	0.15	2.98	15.84	21.94			N/A	N/A
C - A12 South	13.50	0.09	2.82	38.94	60.37			N/A	N/A
D - Anson Rd East	5.59	0.04	0.42	15.15	29.89			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.31	0.03	0.26	3.31	3.31			N/A	N/A
B - Eagle Way West	11.10	0.37	6.62	26.23	35.00			N/A	N/A
C - A12 South	16.62	0.06	1.37	48.83	85.10			N/A	N/A
D - Anson Rd East	6.10	0.03	0.34	11.06	32.35			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.67	0.09	1.19	3.52	4.74			N/A	N/A
B - Eagle Way West	1.02	0.03	0.34	2.36	4.98			N/A	N/A
C - A12 South	3.15	0.04	0.42	8.65	16.00			N/A	N/A
D - Anson Rd East	1.73	0.04	0.42	4.65	7.99			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.05	0.47	2.49	3.76			N/A	N/A
B - Eagle Way West	0.41	0.03	0.27	0.48	1.33			N/A	N/A
C - A12 South	1.58	0.03	0.30	1.92	7.50			N/A	N/A
D - Anson Rd East	0.94	0.03	0.31	1.69	4.71			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	15.79	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1724	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1686	100.000
D - Anson Rd East		ONE HOUR	✓	898	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	96	1144	484
	B - Eagle Way West	101	0	30	37
	C - A12 South	1386	43	0	257
	D - Anson Rd East	501	81	315	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	7	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	4.46	2.3	5.2	A	1582	2373
B - Eagle Way West	0.67	38.35	1.9	9.8	E	155	232
C - A12 South	0.91	17.87	8.7	44.2	C	1547	2321
D - Anson Rd East	0.90	30.09	7.8	42.7	D	824	1236

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1298	325	244	2773	0.468	1295	1489	0.0	0.9	2.429	A
B - Eagle Way West	127	32	1608	648	0.196	126	165	0.0	0.2	6.890	A
C - A12 South	1270	317	508	2206	0.575	1264	1118	0.0	1.3	3.801	A
D - Anson Rd East	676	169	954	1336	0.506	672	585	0.0	1.0	5.393	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1550	388	292	2744	0.565	1548	1781	0.9	1.3	3.007	A
B - Eagle Way West	152	38	1923	492	0.308	151	197	0.2	0.4	10.537	B
C - A12 South	1516	379	608	2140	0.709	1512	1337	1.3	2.4	5.697	A
D - Anson Rd East	807	202	1141	1236	0.653	804	700	1.0	1.8	8.272	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1898	475	354	2707	0.701	1894	2156	1.3	2.3	4.407	A
B - Eagle Way West	186	46	2329	291	0.639	181	240	0.4	1.6	31.595	D
C - A12 South	1857	464	734	2056	0.903	1834	1629	2.4	7.9	14.971	B
D - Anson Rd East	989	247	1395	1100	0.899	968	853	1.8	6.9	24.281	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1898	475	358	2705	0.702	1898	2183	2.3	2.3	4.463	A
B - Eagle Way West	186	46	2357	277	0.671	185	242	1.6	1.9	38.350	E
C - A12 South	1857	464	746	2048	0.906	1853	1639	7.9	8.7	17.871	C
D - Anson Rd East	989	247	1399	1098	0.900	985	858	6.9	7.8	30.088	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1550	388	299	2740	0.566	1554	1823	2.3	1.3	3.045	A
B - Eagle Way West	152	38	1966	470	0.322	157	201	1.9	0.5	11.684	B
C - A12 South	1516	379	626	2128	0.712	1541	1351	8.7	2.5	6.379	A
D - Anson Rd East	807	202	1146	1233	0.655	831	707	7.8	1.9	9.432	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1298	325	247	2771	0.468	1300	1503	1.3	0.9	2.450	A
B - Eagle Way West	127	32	1622	641	0.198	128	166	0.5	0.2	7.033	A
C - A12 South	1270	317	514	2202	0.576	1274	1124	2.5	1.4	3.896	A
D - Anson Rd East	676	169	958	1333	0.507	680	588	1.9	1.0	5.535	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.24	0.00	0.00	0.24	0.24			N/A	N/A
C - A12 South	1.34	0.55	1.25	1.76	1.92			N/A	N/A
D - Anson Rd East	1.01	0.54	1.02	1.44	1.49			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.29	0.04	0.45	3.25	5.16			N/A	N/A
B - Eagle Way West	0.44	0.04	0.36	1.17	1.34			N/A	N/A
C - A12 South	2.38	0.04	0.41	6.51	11.73			N/A	N/A
D - Anson Rd East	1.84	0.05	0.46	4.90	7.96			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.31	0.03	0.26	2.31	2.31			N/A	N/A
B - Eagle Way West	1.61	0.03	0.30	2.03	7.74			N/A	N/A
C - A12 South	7.93	0.04	0.41	20.70	43.31			N/A	N/A
D - Anson Rd East	6.94	0.05	0.50	19.96	35.37			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.33	0.03	0.26	2.33	2.33			N/A	N/A
B - Eagle Way West	1.87	0.04	0.35	4.57	9.75			N/A	N/A
C - A12 South	8.73	0.03	0.33	13.09	44.18			N/A	N/A
D - Anson Rd East	7.75	0.04	0.38	18.20	42.68			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.31	0.18	1.19	1.96	2.58			N/A	N/A
B - Eagle Way West	0.48	0.04	0.39	1.31	1.47			N/A	N/A
C - A12 South	2.53	0.05	0.45	7.00	11.91			N/A	N/A
D - Anson Rd East	1.95	0.04	0.40	5.23	9.49			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.07	0.77	1.56	1.95			N/A	N/A
B - Eagle Way West	0.25	0.03	0.30	0.91	1.28			N/A	N/A
C - A12 South	1.37	0.03	0.32	2.70	7.09			N/A	N/A
D - Anson Rd East	1.04	0.03	0.30	1.56	5.10			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1025	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	672	100.000
D - Anson Rd East		ONE HOUR	✓	187	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	751	270
	B - Eagle Way West	33	0	19	10
	C - A12 South	527	1	0	144
	D - Anson Rd East	105	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	8
	D - Anson Rd East	8	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.16	0.7	2.7	A	941	1411
B - Eagle Way West	0.07	4.03	0.1	0.5	A	57	85
C - A12 South	0.32	2.25	0.5	1.9	A	617	925
D - Anson Rd East	0.16	3.22	0.2	0.5	A	171	257

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	772	193	130	2832	0.273	770	499	0.0	0.4	1.746	A
B - Eagle Way West	46	12	583	1098	0.042	46	5	0.0	0.0	3.422	A
C - A12 South	506	127	82	2369	0.214	505	640	0.0	0.3	1.930	A
D - Anson Rd East	140	35	582	1460	0.096	140	318	0.0	0.1	2.726	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	922	230	155	2816	0.327	921	597	0.4	0.5	1.899	A
B - Eagle Way West	56	14	697	1041	0.053	55	5	0.0	0.1	3.653	A
C - A12 South	604	151	99	2358	0.256	604	765	0.3	0.3	2.052	A
D - Anson Rd East	168	42	696	1402	0.120	168	380	0.1	0.1	2.915	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1129	282	190	2794	0.404	1128	732	0.5	0.7	2.160	A
B - Eagle Way West	68	17	854	962	0.071	68	7	0.1	0.1	4.026	A
C - A12 South	740	185	121	2343	0.316	740	937	0.3	0.5	2.246	A
D - Anson Rd East	205	51	853	1323	0.155	205	466	0.1	0.2	3.221	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1129	282	190	2794	0.404	1129	732	0.7	0.7	2.162	A
B - Eagle Way West	68	17	854	962	0.071	68	7	0.1	0.1	4.027	A
C - A12 South	740	185	121	2343	0.316	740	938	0.5	0.5	2.246	A
D - Anson Rd East	205	51	853	1322	0.155	205	466	0.2	0.2	3.222	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	922	230	155	2816	0.327	923	598	0.7	0.5	1.901	A
B - Eagle Way West	56	14	698	1040	0.053	56	5	0.1	0.1	3.655	A
C - A12 South	604	151	99	2358	0.256	605	767	0.5	0.3	2.054	A
D - Anson Rd East	168	42	697	1402	0.120	168	381	0.2	0.1	2.919	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	772	193	130	2832	0.273	772	501	0.5	0.4	1.750	A
B - Eagle Way West	46	12	585	1097	0.042	47	5	0.1	0.0	3.425	A
C - A12 South	506	127	83	2369	0.214	506	642	0.3	0.3	1.934	A
D - Anson Rd East	140	35	584	1460	0.096	141	319	0.1	0.1	2.731	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.37	0.00	0.00	0.37	0.37			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.49	0.00	0.00	0.49	0.49			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.68	0.03	0.25	0.68	0.68			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.46	0.03	0.25	0.46	0.48			N/A	N/A
D - Anson Rd East	0.18	0.03	0.25	0.46	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.68	0.03	0.28	0.86	2.67			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.46	0.03	0.32	1.41	1.86			N/A	N/A
D - Anson Rd East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.49	0.00	0.00	0.49	0.49			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.38	0.00	0.00	0.38	0.38			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	8.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2020	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1617	100.000
D - Anson Rd East		ONE HOUR	✓	382	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	63	1283	673
	B - Eagle Way West	98	0	59	21
	C - A12 South	1314	7	0	296
	D - Anson Rd East	258	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	7	0	0	3
	D - Anson Rd East	4	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	7.77	4.7	17.4	A	1854	2781
B - Eagle Way West	0.51	18.93	1.0	5.1	C	163	245
C - A12 South	0.80	7.89	3.8	12.6	A	1484	2226
D - Anson Rd East	0.43	6.48	0.8	3.3	A	351	526

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1521	380	282	2767	0.550	1516	1253	0.0	1.2	2.867	A
B - Eagle Way West	134	33	1402	714	0.188	133	55	0.0	0.2	6.181	A
C - A12 South	1217	304	243	2311	0.527	1213	1099	0.0	1.1	3.264	A
D - Anson Rd East	288	72	1055	1226	0.235	287	742	0.0	0.3	3.829	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1816	454	337	2733	0.665	1813	1500	1.2	2.0	3.901	A
B - Eagle Way West	160	40	1677	576	0.278	159	65	0.2	0.4	8.632	A
C - A12 South	1454	363	291	2279	0.638	1451	1314	1.1	1.7	4.334	A
D - Anson Rd East	344	86	1262	1121	0.307	343	888	0.3	0.4	4.625	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2224	556	411	2687	0.828	2214	1831	2.0	4.6	7.442	A
B - Eagle Way West	196	49	2049	390	0.502	194	80	0.4	1.0	18.119	C
C - A12 South	1780	445	356	2236	0.796	1772	1605	1.7	3.8	7.635	A
D - Anson Rd East	421	105	1541	981	0.429	420	1084	0.4	0.7	6.404	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2224	556	414	2686	0.828	2224	1840	4.6	4.7	7.773	A
B - Eagle Way West	196	49	2057	386	0.508	196	80	1.0	1.0	18.926	C
C - A12 South	1780	445	357	2235	0.797	1780	1612	3.8	3.8	7.894	A
D - Anson Rd East	421	105	1548	977	0.431	421	1089	0.7	0.8	6.476	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1816	454	340	2731	0.665	1827	1511	4.7	2.0	4.028	A
B - Eagle Way West	160	40	1689	570	0.281	162	66	1.0	0.4	8.887	A
C - A12 South	1454	363	293	2278	0.638	1462	1325	3.8	1.8	4.454	A
D - Anson Rd East	344	86	1273	1116	0.308	345	895	0.8	0.4	4.675	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1521	380	284	2766	0.550	1524	1261	2.0	1.2	2.905	A
B - Eagle Way West	134	33	1410	710	0.189	135	55	0.4	0.2	6.268	A
C - A12 South	1217	304	245	2310	0.527	1220	1105	1.8	1.1	3.311	A
D - Anson Rd East	288	72	1061	1223	0.235	288	746	0.4	0.3	3.857	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.56	1.08	1.27	1.64			N/A	N/A
B - Eagle Way West	0.23	0.00	0.00	0.23	0.23			N/A	N/A
C - A12 South	1.10	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.96	0.04	0.39	5.22	9.65			N/A	N/A
B - Eagle Way West	0.38	0.00	0.00	0.38	0.38			N/A	N/A
C - A12 South	1.74	0.04	0.43	4.67	7.90			N/A	N/A
D - Anson Rd East	0.44	0.00	0.00	0.44	0.44			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.59	0.03	0.29	4.59	17.42			N/A	N/A
B - Eagle Way West	0.97	0.03	0.27	0.97	1.31			N/A	N/A
C - A12 South	3.75	0.03	0.29	3.75	12.56			N/A	N/A
D - Anson Rd East	0.74	0.03	0.26	0.74	0.74			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.70	0.03	0.27	4.70	4.70			N/A	N/A
B - Eagle Way West	1.01	0.03	0.31	1.85	5.06			N/A	N/A
C - A12 South	3.83	0.03	0.27	3.83	3.83			N/A	N/A
D - Anson Rd East	0.75	0.03	0.29	1.20	3.26			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.01	0.06	0.95	5.00	7.42			N/A	N/A
B - Eagle Way West	0.40	0.03	0.32	1.05	1.28			N/A	N/A
C - A12 South	1.79	0.07	0.98	4.25	6.10			N/A	N/A
D - Anson Rd East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.04	0.39	3.15	5.56			N/A	N/A
B - Eagle Way West	0.23	0.03	0.26	0.47	0.51			N/A	N/A
C - A12 South	1.12	0.04	0.41	2.82	4.71			N/A	N/A
D - Anson Rd East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	13.09	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2042	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1685	100.000
D - Anson Rd East		ONE HOUR	✓	447	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	182	1161	700
	B - Eagle Way West	155	0	35	47
	C - A12 South	1453	24	0	207
	D - Anson Rd East	295	23	128	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	9	2
	B - Eagle Way West	4	0	0	8
	C - A12 South	8	5	0	4
	D - Anson Rd East	7	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	8.05	4.9	19.1	A	1874	2811
B - Eagle Way West	0.80	51.03	3.4	18.2	F	218	327
C - A12 South	0.89	15.41	7.6	39.1	C	1546	2319
D - Anson Rd East	0.51	7.49	1.0	3.2	A	410	615

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1537	384	218	2756	0.558	1532	1426	0.0	1.3	2.931	A
B - Eagle Way West	179	45	1467	673	0.265	177	172	0.0	0.4	7.241	A
C - A12 South	1269	317	375	2200	0.577	1263	993	0.0	1.3	3.819	A
D - Anson Rd East	337	84	1033	1221	0.276	335	717	0.0	0.4	4.055	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1836	459	260	2729	0.673	1833	1706	1.3	2.0	4.001	A
B - Eagle Way West	213	53	1755	527	0.405	212	205	0.4	0.7	11.382	B
C - A12 South	1515	379	449	2151	0.704	1511	1188	1.3	2.3	5.590	A
D - Anson Rd East	402	100	1236	1117	0.360	401	857	0.4	0.6	5.023	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2248	562	315	2696	0.834	2237	2072	2.0	4.8	7.665	A
B - Eagle Way West	261	65	2134	335	0.779	252	251	0.7	2.9	39.795	E
C - A12 South	1855	464	549	2084	0.890	1836	1450	2.3	7.1	13.587	B
D - Anson Rd East	492	123	1508	977	0.504	490	1044	0.6	1.0	7.374	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2248	562	319	2694	0.835	2248	2092	4.8	4.9	8.051	A
B - Eagle Way West	261	65	2152	326	0.801	259	252	2.9	3.4	51.026	F
C - A12 South	1855	464	551	2082	0.891	1853	1457	7.1	7.6	15.410	C
D - Anson Rd East	492	123	1516	973	0.506	492	1051	1.0	1.0	7.486	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1836	459	268	2725	0.674	1847	1737	4.9	2.1	4.151	A
B - Eagle Way West	213	53	1780	514	0.415	224	207	3.4	0.7	12.853	B
C - A12 South	1515	379	452	2149	0.705	1535	1199	7.6	2.4	6.057	A
D - Anson Rd East	402	100	1247	1111	0.362	404	868	1.0	0.6	5.101	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1537	384	220	2754	0.558	1541	1438	2.1	1.3	2.976	A
B - Eagle Way West	179	45	1478	667	0.268	180	173	0.7	0.4	7.409	A
C - A12 South	1269	317	378	2199	0.577	1273	999	2.4	1.4	3.906	A
D - Anson Rd East	337	84	1039	1218	0.276	337	721	0.6	0.4	4.088	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.25	0.56	1.12	1.48	1.74			N/A	N/A
B - Eagle Way West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - A12 South	1.35	0.56	1.25	1.74	1.90			N/A	N/A
D - Anson Rd East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.03	0.04	0.39	5.43	10.02			N/A	N/A
B - Eagle Way West	0.67	0.05	0.53	1.47	1.49			N/A	N/A
C - A12 South	2.33	0.04	0.42	6.39	11.41			N/A	N/A
D - Anson Rd East	0.56	0.07	0.71	1.34	1.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.78	0.03	0.30	4.78	19.10			N/A	N/A
B - Eagle Way West	2.92	0.04	0.40	7.82	15.07			N/A	N/A
C - A12 South	7.12	0.04	0.38	16.89	39.12			N/A	N/A
D - Anson Rd East	1.00	0.03	0.26	1.00	1.00			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.91	0.03	0.27	4.91	5.54			N/A	N/A
B - Eagle Way West	3.45	0.04	0.39	9.13	18.22			N/A	N/A
C - A12 South	7.58	0.03	0.31	7.58	34.23			N/A	N/A
D - Anson Rd East	1.01	0.03	0.28	1.01	3.24			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.09	0.06	0.92	5.32	7.90			N/A	N/A
B - Eagle Way West	0.73	0.04	0.38	1.68	2.74			N/A	N/A
C - A12 South	2.44	0.05	0.46	6.74	11.29			N/A	N/A
D - Anson Rd East	0.57	0.08	0.78	1.36	1.43			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.04	0.38	3.27	5.83			N/A	N/A
B - Eagle Way West	0.37	0.03	0.29	1.08	1.60			N/A	N/A
C - A12 South	1.38	0.03	0.33	2.93	7.08			N/A	N/A
D - Anson Rd East	0.38	0.03	0.30	0.88	1.19			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	65.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2232	100.000
B - Eagle Way West		ONE HOUR	✓	248	100.000
C - A12 South		ONE HOUR	✓	1924	100.000
D - Anson Rd East		ONE HOUR	✓	790	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1311	746
	B - Eagle Way West	146	0	29	73
	C - A12 South	1540	46	1	337
	D - Anson Rd East	433	79	278	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	6	1
	B - Eagle Way West	4	0	0	2
	C - A12 South	6	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	16.33	10.6	54.4	C	2048	3072
B - Eagle Way West	1.23	336.46	26.5	52.1	F	228	342
C - A12 South	1.05	99.93	65.7	147.6	F	1765	2648
D - Anson Rd East	0.91	37.74	8.5	46.3	E	725	1088

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1681	420	329	2737	0.614	1674	1586	0.0	1.6	3.370	A
B - Eagle Way West	187	47	1730	571	0.327	185	225	0.0	0.5	9.270	A
C - A12 South	1448	362	515	2174	0.666	1440	1214	0.0	2.0	4.857	A
D - Anson Rd East	595	149	1137	1227	0.485	591	866	0.0	0.9	5.633	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	2007	502	392	2698	0.744	2002	1894	1.6	2.8	5.131	A
B - Eagle Way West	223	56	2066	404	0.552	220	269	0.5	1.2	19.270	C
C - A12 South	1729	432	615	2107	0.821	1720	1451	2.0	4.3	9.079	A
D - Anson Rd East	710	178	1359	1110	0.640	707	1035	0.9	1.7	8.870	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2458	614	441	2669	0.921	2430	2185	2.8	9.7	13.756	B
B - Eagle Way West	273	68	2401	238	1.147	225	323	1.2	13.3	147.287	F
C - A12 South	2118	530	740	2024	1.046	1984	1753	4.3	37.8	47.311	E
D - Anson Rd East	870	217	1645	959	0.907	848	1225	1.7	7.2	28.215	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2458	614	443	2667	0.921	2454	2210	9.7	10.6	16.333	C
B - Eagle Way West	273	68	2432	223	1.227	221	327	13.3	26.5	336.457	F
C - A12 South	2118	530	753	2016	1.051	2007	1773	37.8	65.7	99.928	F
D - Anson Rd East	870	217	1661	951	0.915	865	1236	7.2	8.5	37.742	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2007	502	455	2660	0.754	2036	2137	10.6	3.1	6.036	A
B - Eagle Way West	223	56	2327	275	0.812	265	281	26.5	16.1	279.092	F
C - A12 South	1729	432	637	2092	0.826	1970	1487	65.7	5.5	51.601	F
D - Anson Rd East	710	178	1388	1095	0.649	737	1103	8.5	1.9	10.761	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1681	420	359	2718	0.618	1687	1645	3.1	1.6	3.510	A
B - Eagle Way West	187	47	1755	559	0.334	249	227	16.1	0.5	14.230	B
C - A12 South	1448	362	520	2170	0.667	1462	1231	5.5	2.0	5.178	A
D - Anson Rd East	595	149	1153	1218	0.488	599	893	1.9	1.0	5.843	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.52	1.44	2.24	2.74			N/A	N/A
B - Eagle Way West	0.48	0.04	0.41	1.26	1.39			N/A	N/A
C - A12 South	1.96	0.14	1.46	3.86	5.02			N/A	N/A
D - Anson Rd East	0.93	0.54	1.00	1.41	1.46			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.84	0.04	0.40	7.65	14.51			N/A	N/A
B - Eagle Way West	1.17	0.04	0.40	2.96	5.09			N/A	N/A
C - A12 South	4.34	0.05	0.49	12.35	21.09			N/A	N/A
D - Anson Rd East	1.73	0.05	0.47	4.59	7.39			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.72	0.04	0.43	26.09	53.07			N/A	N/A
B - Eagle Way West	13.33	2.31	10.99	24.55	29.69			N/A	N/A
C - A12 South	37.85	5.63	30.85	74.39	91.39			N/A	N/A
D - Anson Rd East	7.18	0.06	1.02	20.85	34.88			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.56	0.03	0.34	16.81	54.40			N/A	N/A
B - Eagle Way West	26.48	8.00	23.63	44.55	52.09			N/A	N/A
C - A12 South	65.66	13.60	56.13	122.50	147.62			N/A	N/A
D - Anson Rd East	8.52	0.04	0.43	23.11	46.26			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.15	0.05	0.49	8.83	14.69			N/A	N/A
B - Eagle Way West	16.10	7.35	14.92	23.37	26.21			N/A	N/A
C - A12 South	5.46	0.05	0.46	15.44	28.14			N/A	N/A
D - Anson Rd East	1.90	0.04	0.40	5.08	9.29			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.03	0.32	3.28	8.55			N/A	N/A
B - Eagle Way West	0.51	0.03	0.26	0.51	0.51			N/A	N/A
C - A12 South	2.04	0.03	0.29	2.04	7.31			N/A	N/A
D - Anson Rd East	0.97	0.03	0.30	1.15	4.55			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	34.88	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1978	100.000
B - Eagle Way West		ONE HOUR	✓	175	100.000
C - A12 South		ONE HOUR	✓	1811	100.000
D - Anson Rd East		ONE HOUR	✓	866	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	100	1376	502
	B - Eagle Way West	105	0	32	39
	C - A12 South	1423	45	0	343
	D - Anson Rd East	592	84	190	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	2	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	2	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	6.52	3.9	9.8	A	1815	2723
B - Eagle Way West	0.99	144.71	7.8	26.2	F	161	241
C - A12 South	0.99	46.44	25.4	105.6	E	1662	2492
D - Anson Rd East	0.96	53.50	13.5	62.9	F	795	1192

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1489	372	310	2812	0.530	1485	1587	0.0	1.1	2.703	A
B - Eagle Way West	132	33	1766	581	0.227	131	171	0.0	0.3	7.968	A
C - A12 South	1363	341	581	2195	0.621	1357	1198	0.0	1.6	4.262	A
D - Anson Rd East	652	163	1131	1265	0.515	648	664	0.0	1.0	5.793	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1778	445	371	2775	0.641	1776	1897	1.1	1.8	3.594	A
B - Eagle Way West	157	39	2111	413	0.381	156	205	0.3	0.6	13.946	B
C - A12 South	1628	407	695	2118	0.768	1621	1433	1.6	3.2	7.155	A
D - Anson Rd East	779	195	1353	1151	0.676	775	793	1.0	2.0	9.462	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2178	544	439	2733	0.797	2170	2254	1.8	3.8	6.302	A
B - Eagle Way West	193	48	2515	216	0.891	178	247	0.6	4.3	76.083	F
C - A12 South	1994	498	827	2029	0.983	1934	1743	3.2	18.2	28.108	D
D - Anson Rd East	954	238	1651	998	0.955	919	958	2.0	10.6	35.982	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2178	544	445	2729	0.798	2178	2295	3.8	3.9	6.518	A
B - Eagle Way West	193	48	2561	194	0.995	179	250	4.3	7.8	144.710	F
C - A12 South	1994	498	846	2016	0.989	1965	1753	18.2	25.4	46.443	E
D - Anson Rd East	954	238	1657	995	0.958	942	966	10.6	13.5	53.504	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1778	445	400	2757	0.645	1786	2021	3.9	1.8	3.739	A
B - Eagle Way West	157	39	2235	352	0.447	185	212	7.8	0.8	24.986	C
C - A12 South	1628	407	733	2092	0.778	1715	1456	25.4	3.7	11.694	B
D - Anson Rd East	779	195	1366	1144	0.680	824	820	13.5	2.2	12.742	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1489	372	314	2810	0.530	1492	1606	1.8	1.1	2.739	A
B - Eagle Way West	132	33	1786	572	0.231	134	173	0.8	0.3	8.267	A
C - A12 South	1363	341	588	2190	0.622	1371	1206	3.7	1.7	4.436	A
D - Anson Rd East	652	163	1137	1262	0.517	657	669	2.2	1.1	5.987	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C - A12 South	1.62	0.24	1.40	2.67	3.28			N/A	N/A
D - Anson Rd East	1.05	0.47	1.05	1.24	1.63			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.77	0.04	0.40	4.71	8.48			N/A	N/A
B - Eagle Way West	0.60	0.04	0.42	1.49	1.65			N/A	N/A
C - A12 South	3.21	0.04	0.43	8.93	16.06			N/A	N/A
D - Anson Rd East	2.03	0.05	0.45	5.49	9.08			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.79	0.03	0.28	3.79	9.79			N/A	N/A
B - Eagle Way West	4.34	0.08	1.15	11.64	17.21			N/A	N/A
C - A12 South	18.18	0.19	7.69	48.76	69.52			N/A	N/A
D - Anson Rd East	10.63	0.11	3.50	29.29	43.05			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.88	0.03	0.27	3.88	3.88			N/A	N/A
B - Eagle Way West	7.82	0.20	4.04	19.15	26.16			N/A	N/A
C - A12 South	25.36	0.15	8.37	71.34	105.61			N/A	N/A
D - Anson Rd East	13.46	0.08	2.03	39.37	62.95			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.84	0.08	1.14	4.16	5.83			N/A	N/A
B - Eagle Way West	0.84	0.04	0.36	1.98	3.65			N/A	N/A
C - A12 South	3.66	0.04	0.43	10.13	18.70			N/A	N/A
D - Anson Rd East	2.21	0.04	0.37	5.72	11.40			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.14	0.04	0.43	2.82	4.55			N/A	N/A
B - Eagle Way West	0.30	0.03	0.27	0.49	1.28			N/A	N/A
C - A12 South	1.67	0.03	0.29	1.67	7.41			N/A	N/A
D - Anson Rd East	1.08	0.03	0.29	1.25	4.48			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	2.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	950	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	673	100.000
D - Anson Rd East		ONE HOUR	✓	187	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	751	194
	B - Eagle Way West	33	0	19	10
	C - A12 South	528	1	0	144
	D - Anson Rd East	105	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	8
	D - Anson Rd East	8	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.07	0.6	2.8	A	872	1308
B - Eagle Way West	0.07	4.03	0.1	0.5	A	57	85
C - A12 South	0.32	2.25	0.5	1.9	A	618	927
D - Anson Rd East	0.16	3.22	0.2	0.5	A	171	257

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	715	179	130	2821	0.254	714	500	0.0	0.3	1.708	A
B - Eagle Way West	46	12	584	1098	0.042	46	5	0.0	0.0	3.423	A
C - A12 South	507	127	82	2369	0.214	506	640	0.0	0.3	1.931	A
D - Anson Rd East	140	35	583	1460	0.096	140	261	0.0	0.1	2.727	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	854	214	155	2805	0.305	854	598	0.3	0.4	1.844	A
B - Eagle Way West	56	14	698	1040	0.053	55	5	0.0	0.1	3.655	A
C - A12 South	605	151	99	2358	0.257	605	766	0.3	0.3	2.053	A
D - Anson Rd East	168	42	697	1402	0.120	168	313	0.1	0.1	2.915	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1046	262	190	2783	0.376	1046	733	0.4	0.6	2.072	A
B - Eagle Way West	68	17	855	961	0.071	68	7	0.1	0.1	4.029	A
C - A12 South	741	185	121	2343	0.316	741	938	0.3	0.5	2.247	A
D - Anson Rd East	205	51	853	1322	0.155	205	383	0.1	0.2	3.222	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1046	262	190	2783	0.376	1046	733	0.6	0.6	2.072	A
B - Eagle Way West	68	17	855	961	0.071	68	7	0.1	0.1	4.030	A
C - A12 South	741	185	121	2343	0.316	741	938	0.5	0.5	2.247	A
D - Anson Rd East	205	51	854	1322	0.155	205	383	0.2	0.2	3.222	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	854	214	156	2805	0.305	855	599	0.6	0.4	1.845	A
B - Eagle Way West	56	14	699	1040	0.053	56	5	0.1	0.1	3.657	A
C - A12 South	605	151	99	2358	0.257	606	767	0.5	0.3	2.056	A
D - Anson Rd East	168	42	698	1402	0.120	168	313	0.2	0.1	2.917	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	715	179	130	2821	0.254	716	502	0.4	0.3	1.709	A
B - Eagle Way West	46	12	585	1097	0.042	47	5	0.1	0.0	3.426	A
C - A12 South	507	127	83	2369	0.214	507	642	0.3	0.3	1.933	A
D - Anson Rd East	140	35	584	1460	0.096	141	262	0.1	0.1	2.729	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Eagle Way West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	0.34	0.00	0.00	0.34	0.34			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.25	0.60	0.60			N/A	N/A
B - Eagle Way West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C - A12 South	0.46	0.03	0.25	0.46	0.48			N/A	N/A
D - Anson Rd East	0.18	0.03	0.25	0.46	0.48			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.03	0.29	1.28	2.77			N/A	N/A
B - Eagle Way West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C - A12 South	0.46	0.03	0.32	1.41	1.86			N/A	N/A
D - Anson Rd East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - Eagle Way West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C - A12 South	0.35	0.00	0.00	0.35	0.35			N/A	N/A
D - Anson Rd East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.34	0.00	0.00	0.34	0.34			N/A	N/A
B - Eagle Way West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C - A12 South	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D - Anson Rd East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	6.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1727	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1607	100.000
D - Anson Rd East		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	63	1307	357
	B - Eagle Way West	98	0	59	21
	C - A12 South	1316	7	0	284
	D - Anson Rd East	190	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	3
	B - Eagle Way West	5	0	2	6
	C - A12 South	8	0	0	3
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	4.66	2.4	5.4	A	1585	2378
B - Eagle Way West	0.46	15.70	0.8	4.1	C	163	245
C - A12 South	0.78	7.04	3.4	8.6	A	1475	2212
D - Anson Rd East	0.36	5.94	0.6	2.6	A	289	433

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1300	325	272	2752	0.473	1297	1204	0.0	0.9	2.468	A
B - Eagle Way West	134	33	1343	740	0.181	133	55	0.0	0.2	5.919	A
C - A12 South	1210	302	192	2340	0.517	1206	1117	0.0	1.1	3.161	A
D - Anson Rd East	237	59	1074	1202	0.197	236	496	0.0	0.2	3.722	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1553	388	326	2719	0.571	1551	1441	0.9	1.3	3.078	A
B - Eagle Way West	160	40	1607	608	0.263	159	65	0.2	0.4	8.019	A
C - A12 South	1445	361	230	2315	0.624	1442	1336	1.1	1.6	4.116	A
D - Anson Rd East	283	71	1284	1097	0.258	282	593	0.2	0.3	4.416	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1902	475	398	2675	0.711	1898	1760	1.3	2.4	4.604	A
B - Eagle Way West	196	49	1964	429	0.457	194	80	0.4	0.8	15.233	C
C - A12 South	1769	442	282	2280	0.776	1763	1634	1.6	3.4	6.865	A
D - Anson Rd East	346	87	1570	954	0.363	345	725	0.3	0.6	5.903	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1902	475	400	2674	0.711	1902	1767	2.4	2.4	4.661	A
B - Eagle Way West	196	49	1972	425	0.461	196	80	0.8	0.8	15.696	C
C - A12 South	1769	442	282	2280	0.776	1769	1638	3.4	3.4	7.042	A
D - Anson Rd East	346	87	1574	952	0.364	346	727	0.6	0.6	5.938	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1553	388	329	2718	0.571	1557	1450	2.4	1.3	3.116	A
B - Eagle Way West	160	40	1617	603	0.265	162	66	0.8	0.4	8.199	A
C - A12 South	1445	361	231	2314	0.624	1452	1342	3.4	1.7	4.206	A
D - Anson Rd East	283	71	1290	1094	0.258	284	596	0.6	0.4	4.446	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1300	325	274	2751	0.473	1302	1211	1.3	0.9	2.487	A
B - Eagle Way West	134	33	1351	737	0.182	135	55	0.4	0.2	5.984	A
C - A12 South	1210	302	193	2340	0.517	1212	1122	1.7	1.1	3.201	A
D - Anson Rd East	237	59	1078	1200	0.197	237	498	0.4	0.2	3.740	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.55	1.00	1.40	1.45			N/A	N/A
B - Eagle Way West	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C - A12 South	1.06	0.55	1.00	1.40	1.45			N/A	N/A
D - Anson Rd East	0.24	0.00	0.00	0.24	0.24			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.04	0.44	3.37	5.41			N/A	N/A
B - Eagle Way West	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C - A12 South	1.64	0.04	0.43	4.36	7.26			N/A	N/A
D - Anson Rd East	0.34	0.00	0.00	0.34	0.34			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.42	0.03	0.27	2.42	2.42			N/A	N/A
B - Eagle Way West	0.82	0.03	0.26	0.82	0.82			N/A	N/A
C - A12 South	3.35	0.03	0.28	3.35	8.59			N/A	N/A
D - Anson Rd East	0.56	0.03	0.25	0.56	0.56			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.44	0.03	0.26	2.44	2.44			N/A	N/A
B - Eagle Way West	0.84	0.03	0.31	1.59	4.14			N/A	N/A
C - A12 South	3.41	0.03	0.27	3.41	3.41			N/A	N/A
D - Anson Rd East	0.57	0.03	0.31	1.47	2.65			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.34	0.16	1.19	2.13	2.77			N/A	N/A
B - Eagle Way West	0.37	0.03	0.27	0.49	0.90			N/A	N/A
C - A12 South	1.68	0.07	1.07	3.76	5.25			N/A	N/A
D - Anson Rd East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.06	0.73	1.66	2.17			N/A	N/A
B - Eagle Way West	0.22	0.03	0.25	0.45	0.48			N/A	N/A
C - A12 South	1.08	0.04	0.44	2.63	4.09			N/A	N/A
D - Anson Rd East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout	A, D, C, B	17.24	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2044	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1835	100.000
D - Anson Rd East		ONE HOUR	✓	335	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	182	1213	649
	B - Eagle Way West	155	0	35	47
	C - A12 South	1602	24	0	209
	D - Anson Rd East	184	23	127	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	9	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	8	5	0	4
	D - Anson Rd East	12	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	8.23	5.0	20.0	A	1876	2814
B - Eagle Way West	0.86	69.06	4.6	22.7	F	218	327
C - A12 South	0.93	22.66	12.0	66.2	C	1684	2526
D - Anson Rd East	0.40	6.48	0.7	3.1	A	307	461

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	385	219	2747	0.560	1534	1454	0.0	1.3	2.955	A
B - Eagle Way West	179	45	1495	656	0.272	177	172	0.0	0.4	7.488	A
C - A12 South	1381	345	292	2257	0.612	1375	1032	0.0	1.6	4.056	A
D - Anson Rd East	252	63	1073	1178	0.214	251	680	0.0	0.3	3.881	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

A - A12 North	1838	459	262	2721	0.675	1834	1739	1.3	2.1	4.045	A
B - Eagle Way West	213	53	1789	508	0.420	212	205	0.4	0.7	12.111	B
C - A12 South	1650	412	349	2217	0.744	1645	1235	1.6	2.8	6.227	A
D - Anson Rd East	301	75	1283	1071	0.281	301	813	0.3	0.4	4.668	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2251	563	314	2689	0.837	2239	2101	2.1	4.9	7.811	A
B - Eagle Way West	261	65	2165	317	0.825	250	250	0.7	3.6	47.773	E
C - A12 South	2020	505	427	2165	0.933	1989	1506	2.8	10.7	17.989	C
D - Anson Rd East	369	92	1565	929	0.397	368	989	0.4	0.7	6.408	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	2251	563	320	2686	0.838	2250	2129	4.9	5.0	8.231	A
B - Eagle Way West	261	65	2192	303	0.861	257	252	3.6	4.6	69.062	F
C - A12 South	2020	505	428	2164	0.934	2015	1514	10.7	12.0	22.662	C
D - Anson Rd East	369	92	1573	924	0.399	369	996	0.7	0.7	6.479	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1838	459	272	2715	0.677	1849	1786	5.0	2.1	4.212	A
B - Eagle Way West	213	53	1830	487	0.438	229	207	4.6	0.8	14.724	B
C - A12 South	1650	412	352	2216	0.744	1685	1246	12.0	3.0	7.223	A
D - Anson Rd East	301	75	1296	1065	0.283	302	826	0.7	0.4	4.725	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
A - A12 North	1539	385	221	2746	0.560	1542	1467	2.1	1.3	3.001	A
B - Eagle Way West	179	45	1508	650	0.275	180	173	0.8	0.4	7.690	A
C - A12 South	1381	345	294	2255	0.613	1387	1038	3.0	1.6	4.171	A
D - Anson Rd East	252	63	1079	1175	0.215	253	684	0.4	0.3	3.908	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.56	1.13	1.52	1.76			N/A	N/A
B - Eagle Way West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - A12 South	1.56	0.53	1.43	2.15	2.68			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.05	0.04	0.39	5.50	10.16			N/A	N/A
B - Eagle Way West	0.71	0.05	0.49	1.24	1.79			N/A	N/A
C - A12 South	2.83	0.04	0.42	7.82	14.08			N/A	N/A
D - Anson Rd East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.88	0.03	0.30	4.88	20.04			N/A	N/A
B - Eagle Way West	3.57	0.05	0.48	10.07	17.10			N/A	N/A
C - A12 South	10.65	0.05	0.83	30.96	54.80			N/A	N/A
D - Anson Rd East	0.65	0.03	0.25	0.65	0.65			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.02	0.03	0.27	5.02	6.21			N/A	N/A
B - Eagle Way West	4.64	0.05	0.49	13.22	22.68			N/A	N/A
C - A12 South	11.95	0.04	0.39	28.30	66.19			N/A	N/A
D - Anson Rd East	0.66	0.03	0.30	1.41	3.10			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.12	0.06	0.91	5.44	8.10			N/A	N/A
B - Eagle Way West	0.80	0.04	0.37	1.89	3.35			N/A	N/A
C - A12 South	2.99	0.04	0.43	8.32	14.85			N/A	N/A
D - Anson Rd East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.28	0.04	0.38	3.31	5.95			N/A	N/A
B - Eagle Way West	0.38	0.03	0.28	0.85	1.63			N/A	N/A
C - A12 South	1.60	0.03	0.31	2.73	8.19			N/A	N/A
D - Anson Rd East	0.27	0.00	0.00	0.27	0.27			N/A	N/A